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Implementation of Corporate Social Responsibility in Spanish Marinas: An Analysis of Drivers and Barriers

La Implementación de la Responsabilidad
Social Corporativa en las Marinas Españolas:
Un Análisis de Impulsores y Barreras

I. INTRODUCTION

The present study analyses the drivers and barriers to implementing corporate social responsibility (CSR) in marinas. Marinas are infrastructures located in part of a sea or water area and coast specially built to meet the needs of tourists for docking, accommodation, and other services (Jugović et al., 2022). These infrastructures are essential for recreational navigation activities, being considered the most critical component in nautical tourism (Martínez-Vázquez et al., 2021). Marinas play a fundamental role in the present and future of coastal areas due to the various economic activities that take place there and their excellent growth potential (Pace & Saritas, 2023). However, using coastal and marine ecosystems is considered unsustainable since it exceeds their resource generation capacity. For this reason, many actions, such as the Rio+20 Conference in 2012, promote the need to manage the seas and oceans. Sustainability was already highlighted based on the premise that healthy ocean ecosystems are fundamental to a sustainable resource-based economy. The 2030 Agenda for Sustainable Development also included conserving and sustainably



EXECUTIVE SUMMARY

Marinas are coastal infrastructures designed for tourist docking, lodging, and services. Their future is at risk, and corporate social responsibility (CSR) strategies can ensure sustainable development. This study analyzes knowledge, intention, and implementation of CSR in 85 Spanish marinas using Partial Least Squares Structural Equation Modeling. Results show lack of knowledge and absent regulations hinder CSR adoption, while economic benefits and stakeholder pressure are not key drivers. Findings offer insights for policymakers and managers to design sustainable strategies.

RESUMEN DEL ARTÍCULO

Las marinas son infraestructuras costeras para el atraque, alojamiento y servicios turísticos. Su futuro está en riesgo, y las estrategias de responsabilidad social corporativa (RSC) pueden garantizar un desarrollo sostenible. Este estudio analiza el conocimiento, la intención y la implementación de la RSC en 85 marinas españolas utilizando Modelado de Ecuaciones Estructurales de Mínimos Cuadrados Parciales. Los resultados muestran que la falta de conocimiento y la ausencia de regulación dificultan la adopción de la RSC, mientras que los beneficios económicos y la presión de los stakeholders no son impulsores clave.

using the oceans, seas, and marine resources (United Nations, 2015).

In the context of concern for the sustainable development of the blue economy, corporate social responsibility (CSR) strategies have taken on particular importance (González-Espinosa et al., 2025). From the perspective of CSR, it is understood that all organizations, public or private, play a crucial role in preserving the Earth's natural resources and the well-being of communities (McElhaney, 2009). A growing number of companies are adopting responsible innovation to develop safe, profitable products and services with strong governance. This approach integrates a sustainable strategy aimed

The core of the blue economy model is to separate socioeconomic development from environmental degradation.

at conserving natural resources. Such practices enhance reputation, ensure compliance, and improve efficiency over time. For instance, a Finnish maritime company that adopted responsible innovation achieved a 15% reduction in fuel expenditures compared to its competitors, achieving economic and environmental benefits (Cuesta Romero et al., 2025). Within the maritime industry, organizations must contribute to the protection of marine resources and, at the same time, promote economic growth related to activities in the oceans, seas, and coasts. The core of the blue economy model is to separate socioeconomic development from environmental degradation (Ivanova et al., 2017). In this sense, the blue economy and navies are interested in sustainability and responsible management of marine resources, so the relationship between CSR and marine is close. Marinas significantly impacts the aquatic ecosystem through gas emissions, water pollution, and the health of the region's inhabitants (Stein & Acciaro, 2020). Therefore, it is vital that marinas reduce the community's negative perception of them, and the inclusion of CSR in their strategies is one way to achieve this (López-Morales, 2020). However, adopting a CSR policy, measurement program, and reporting is not a simple process, facing various factors and barriers that affect its implementation (Agudo-Valiente et al., 2017). The lack of a strategic management commitment to carry out CSR, the scarcity of resources, insufficient knowledge, and regulatory deficiencies discourage its application (Filimon, 2023; Gligor-Cimpoieru & Munteanu, 2015). Even so, it is recognized that commitment to CSR is stimulated by improving relationships with stakeholders and employees, strengthening the company's image,

reducing operating costs, and optimizing efficiency (Timane, 2012). Furthermore, companies that consider social and environmental factors have employees with greater innovation and learning capabilities, indicating that prioritizing social responsibility can positively influence stakeholders (Abrini et al., 2024).

Although the importance of CSR strategies in marinas has been highlighted in previous literature for decades (Liao et al., 2010), few studies still address their implementation from a comprehensive perspective. As Biondi (2014) states, in marinas' planning, design, construction, management, and operations, attention is paid only to the environmental dimension, neglecting the social dimension of sustainability. Possibly, the lack of specific studies is due to the opacity of the activities carried out in the marinas, the absence of associations, and the scarcity of data on the sector offered by its managing entities. Therefore, the existing literature demands new studies that analyze the sustainable development of marinas and how their CSR strategies will collaborate with said sustainability (Martínez-Vázquez et al., 2022; Spinelli & Benevolo, 2024). The present study analyzes the state of knowledge, intention, and implementation of CSR strategies in the marina sector by examining the elements that represent drivers and barriers to said implementation.

In particular, this research focuses on one of the most prominent marine sectors worldwide, Spain, one of Europe's largest blue economies. Few regions in Europe have the condition of bordering two seas or oceans, representing an essential part of employment within Europe's blue economy (Giner, 2021). Furthermore, the economic impact of the nautical sector on the entire Spanish economy stands at 12,000 million euros, creating 82,345 direct, indirect, and induced jobs (ANEN, 2018). For the proposed research, a sample of 85 marinas located in Spanish territory has been available, and they have provided information through a questionnaire on CSR in 2024. Subsequently, using Partial Least Squares Structural Equation Modeling (PLS-SEM) for data analysis, it has been possible to test various hypotheses about the drivers and barriers that affect the implementation of CSR.

KEYWORDS

Marinas, Blue Economy, Corporate Social Responsibility, Maritime Tourism, Sustainable Development.

PALABRAS CLAVE

Marinas, Economía Azul, Responsabilidad Social Corporativa, Turismo Marítimo, Desarrollo Sostenible.

2. LITERATURE REVIEW AND RESEARCH HYPOTHESES

A company and the ethical norms in which it operates are socially constructed within a normative context to have moral agency and be responsible to its stakeholders (Freeman, 1984). In this sense, CSR is a complex issue within organizations' strategies. In line with the stakeholder model, CSR is a concept through which companies incorporate social and environmental concerns into their business operations and interaction with stakeholders (Aras and Crowther, 2008).

Despite the recognized positive impact of CSR on organizational function, various factors motivate or discourage companies from establishing CSR policies, measurement, and reporting programs. Firstly, it is argued that the basis for implementing CSR principles in the company's strategic objectives is the corporate culture and the commitment or intention of senior management (Emezi, 2014). Therefore, adequate knowledge and education among managers who recognize the values of CSR and its long-term benefits become a key factor for its implementation (Hakala, 2015; Hutchinson and Chaston, 1994; Laudal, 2011; Longo et al., 2005). Secondly, increased organizational costs and lack of financial support should be considered barriers to CSR implementation (Shen et al., 2015). Likewise, the absence of a mandatory regulatory regime is another factor hindering CSR implementation since, despite the interest and collaboration in CSR issues between various instruments and institutions, these maintain a voluntary and recommendatory nature without forcing companies to implement CSR (Steurer, 2010). And thirdly, different organizational aspects promote CSR implementation. In this sense, the belief that a CSR program improves the company's ethics, economic transparency, and efficiency is argued (Gligor-Cimpoieru and Munteanu, 2015). Other studies consider CSR as a strategic tool that facilitates stakeholder management. In a multilateral and constantly changing business environment, CSR can ensure the company's viability through increased trust, improved image, and stakeholder relationships (Mbogoh and Ogutu, 2017). From another perspective, CSR is also expected to sustain corporate legitimacy, enhancing the firm's ability to comply with regulatory requirements and avoid sanctions (Kurucz et al., 2008). Furthermore, company employees respond

positively to CSR activities, increasing their trust in the organization, which is expected to positively affect individual and organizational performance (West et al., 2015).

As mentioned, only some studies still address CSR in the port sector, and even fewer in the marina sector. Although it is possible to point out the majority relationship with sustainability issues as a common denominator, there are differences between them since they are facilities with different purposes. Globally, only a portion of commercial ports have a high level of CSR implementation, and many still need a positive perception of CSR benefits. Consequently, there is a need to involve port entrepreneurs in the most valuable CSR actions to ensure the sustainable development of commercial ports. Some previous studies have confirmed this situation. For example, Lam and Li (2019) used a sample of 30 commercial ports worldwide and found that only just over half of them actively participate in environmental actions. López-Morales (2020) analyzed the presence of CSR in the main ports of Central and South America, and his results indicate that most of these ports do not apply CSR strategies. Boza et al. (2014) found that 37% of Spanish port entrepreneurs negatively perceive the current CSR model. Likewise, studies by Terebinska (2017) and Klimek and Dabrowski (2018) concluded that, although Polish commercial ports undertake CSR policies with positive effects, they lack uniform strategies.

The poor implementation of CSR in the commercial port sector encounters specific barriers related to the need for more training in environmental and social actions, assessing the benefits generated by CSR and relations with public authorities. Fasoulis and Emek (2018) investigated the barriers associated with the implementation of CSR in maritime transport. Based on a study carried out in 50 companies, their results indicated that a poor assessment of the benefits that CSR can bring to an organization constitutes a barrier when implementing it. Likewise, González-Morales et al. (2021) studied the CSR strategy of maritime tourism companies in the island territory of Tenerife (Spain). Applying quantitative and qualitative methods, the study reveals that relations with public authorities are perceived as an obstacle to CSR actions, mainly due to the lack of dialogue and collaboration between the parties.

In addition to the above, some factors positively impact the

implementation of CSR actions in commercial ports, part of them related to the demand for CSR actions by stakeholders. Fasoulis and Emek (2018) argued that increased trust and improved company image drive such implementation. González-Morales et al. (2023), in a study with 121 maritime tourism companies on the island of Fuerteventura (Spain), found that economic reasons and pressure from stakeholders contribute to increasing companies' intention to implement CSR strategies. Likewise, Kaya and Mansuroglu (2020) indicated that Turkish ports are improving their CSR strategies to gain greater competitiveness by showing stakeholders transparent and responsible management.

In the marina sector, previous studies that have addressed the implementation of CSR have done so in a limited way, focusing only on environmental impacts, the need for more knowledge about CSR by marinas and some of the benefits derived from CSR. Martínez-Vázquez et al. (2021) performed a bibliometric analysis on ecosystem changes resulting from marine environments. Their results showed that pollution, antifouling paints and invasive species are the terms of the most significant concern in previous literature on marinas. Cruz-Perez et al. (2021) studied the environmental impact of 12 marinas in the European Atlantic and Mediterranean islands. Using a questionnaire completed in 2019 by marina managers, they detected a significant environmental impact resulting from the numerous movements of workers and tourists. Biondi (2014) proposed the basis of social sustainability criteria for planning, presenting as a case study “Marina Puerto Los Cabos” in San José del Cabo (Mexico). This study concluded that, although environmental guidelines for planning and operations are well developed, the social dimension of sustainability is not available and is not an objective considered for marina planning.

Studies focused on the Mediterranean Sea area have also addressed the barriers to CSR implementation in marinas. Klaric et al. (2015) analyzed the implementation of CSR in Croatian marinas. Their results indicated that many marinas see the need to involve their employees in educational programmes related to CSR, but only 3.3% of them have Environmental Management Systems such as ISO 14001. Poletan et al. (2022) provided information on the application of sustainability principles and the green port concept

in 35 marinas in Croatia. This research revealed that further efforts are needed in the area of CSR. However, progress has been made in acquiring different certifications in sustainability practices in the last decade. Filimon (2023) assessed the sustainable practices of 4 marinas in Romania through a qualitative and quantitative approach. The study revealed gaps in sustainability and suggested improvements, highlighting the lack of certifications in services and facilities as a critical weakness. Spinelli and Benevolo (2024) have also evaluated the adoption of environmental and social certifications by 225 marinas in the Mediterranean. Their results also revealed limited adoption, with only half of the marinas having at least one certification. Marušić et al. (2024) analyzed the CSR practices of marinas in Croatia. Through a survey of the local community, they detected that legal barriers prevent a compelling connection between the socially responsible activities of the community and the marina. In addition, it is necessary to bring this awareness of social responsibility to higher levels, including government, politics and administration. Finally, other previous studies have highlighted the importance of specific drivers that encourage the implementation of CSR in marinas. Their results showed that, although implementation is insufficient, there is awareness that implementing CSR in business strategy is the only way to be competitive (Klaric et al., 2015).

From the conclusions obtained by previous literature, it is deduced that CSR implementation is constituted through a process in which knowledge about CSR determines the company's intention to adopt it among its strategic objectives (Emezi, 2014). Laudal (2011), Hutchinson and Chaston (1994) and Longo et al. (2005) point out the significant relationship between the level of adequate knowledge and training on CSR of managers and the degree of implementation of CSR strategies. In this sense, knowledge generates an educational level that affects the formation of intentions and, consequently, translates into CSR implementation behaviour (Hakala, 2015; Klaric et al., 2015). Fishbein and Ajzen (1975) argue that human behaviour is affected by behavioural intentions. This association was supported by some studies related to consumer behaviour and social psychology (Shimp and Kavas, 1984; Sheppard et al., 1988). Furthermore, intentions about CSR

can be an explanatory variable of its current implementation (Ham et al., 2018). Consequently, it's about verifying whether, in the case of marinas, more excellent knowledge about CSR is related to the intention to implement CSR strategies. Also, if the intention to implement CSR is subsequently translated into actual behaviour of assuming the principles of CSR. To do this, the first two hypotheses are formulated in the following terms:

Hypothesis 1 (H1): Knowledge about CSR positively relates to the intention to apply CSR in marinas.

Hypothesis 2 (H2): The intention to apply CSR in marinas positively relates to their implementation.

On the other hand, considering different drivers identified in the general literature on CSR, it is of interest to check if such drivers are also verified in the marina sector. Among them are factors that provide business benefits in the medium and long term, such as the belief that a CSR program improves the company's efficiency (Gligor-Cimpoieru and Munteanu, 2015; Kaya and Mansuroglu, 2020; Klaric et al., 2015). Also, CSR should be considered as a strategic tool to facilitate the relationship with stakeholders (Mbogoh and Ogutu, 2017; Fasoulis and Emek, 2018; González-Morales et al., 2023), comply with regulatory requirements, and avoid sanctions (Kurucz et al., 2008). In this sense, the third research hypothesis is established as follows:

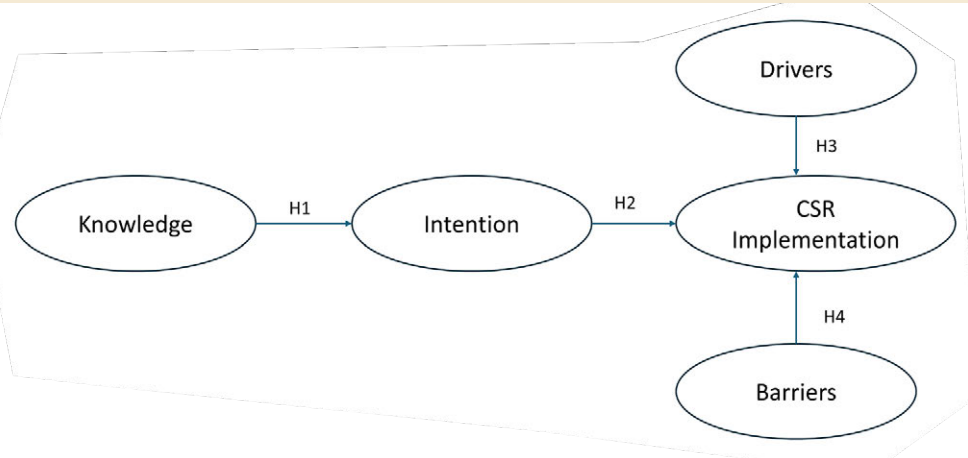
Hypothesis 3 (H3): Beliefs about the benefits provided by CSR promote its implementation in marinas.

Finally, previous literature on CSR highlights different barriers hindering its implementation (Martínez-Vázquez et al., 2021; Shen et al., 2015; Steurer, 2010). Consequently, it is intended to verify whether, in the marina sector, barriers related to organizational costs (Spinelli and Benevolo, 2024; Fasoulis and Emek, 2018), the lack of financial support (Filimon, 2023; Klaric et al., 2015; Poletan et al., 2022), and the absence of a regulatory regime (Marušić et al., 2024; González-Morales et al., 2021) hurt CSR implementation. To this end, the fourth research hypothesis is postulated as follows:

Hypothesis 4 (H4): Organizational costs, lack of financial support, and the absence of a regulatory regime are negatively related to the levels of CSR implementation in marinas.

Figure 1 illustrates the conceptual framework and research hypotheses proposed in the present study.

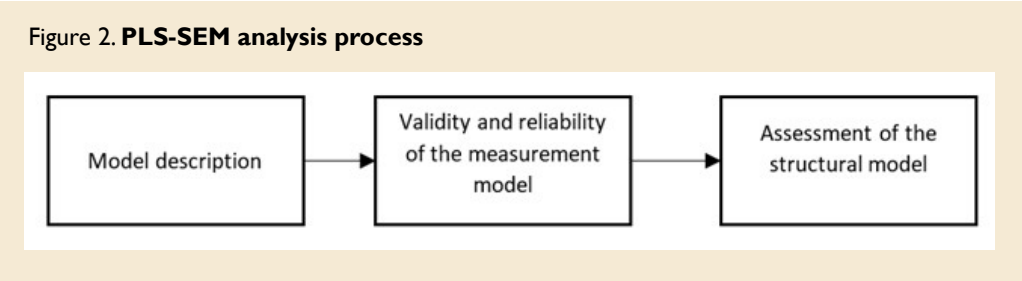
Figure 1. Conceptual framework and research hypotheses



Source: Author's Creation

3. METHODOLOGY

The previously formulated hypotheses have been subjected to evaluation using the PLS-SEM method. This analysis was carried out using SmartPLS software version 3.3.3. PLS-SEM is a statistical method utilized for analyzing structural equations and modelling intricate relationships among variables. To assess the reliability and robustness of the research model, the standard procedure in PLS-SEM is typically adhered to, which involves validating the measurement model and proceeding to the structural model (Hair et al., 2017). The initial step in applying this methodology involves graphical representation, wherein the measurement model is depicted. PLS-SEM examines a causal model encompassing various variables with multiple observed items. It concurrently assesses the structural model (establishing causality between independent and dependent constructs) and the measurement model (determining the load or weight on the designated items relative to their respective constructs). **Figure 2** illustrates the general sequence of steps in this approach.



Hair et al. (2017) consider that the evaluations of the measurement models include convergent validity, the assessment of collinearity problems, and the review of the significance and relevance of the weights of the indicators. In addition, in the evaluation of the structural model, it is necessary to know if the amount of the variance of the endogenous variable is explained by the constructs that predict it. R^2 (explained variance) is used (Falk & Miller, 1992). On the other hand, through the analysis of the path coefficients (β), we contrast the hypotheses raised through the resampling process called bootstrapping (it is recommended that the number of bootstrap samples be 5,000). When the hypotheses indicate the direction relationship (positive or negative) in a model, it is necessary to use a one-tailed t-distribution (Hair et al., 2017). The results obtained from bootstrapping make it possible to determine whether the relationships between the latent variables are statistically significant by comparing the Student's t value. It can be affirmed that there is a causal relationship between two latent variables of the model if the β value between them is greater than or equal to 0.2 and it is statistically significant (Chin, 1998).

To evaluate the predictive relevance, researchers commonly employ the Stone-Geisser Q^2 value (Geisser, 1974; Stone, 1974). Unlike R^2 values, which indicate predictive accuracy within the sample, Q^2 values assess the model's performance on data not utilized during model estimation, namely out-of-sample data. This evaluation is achieved through blindfolding, which iteratively excludes each data point for model re-estimation (Chin, 2010; Evermann & Tate, 2012). Moreover, cross-validation redundancy is scrutinized, involving estimates of both background latent variable factor scores and dependent latent variable measures (Hair et al., 2017). Assessing the overall model fit is crucial. Henseler et al. (2015) propose evaluating model fit using the standardized mean square residual (*SRMR*) efficiency, quantifying the mean square discrepancy

between observed correlations and those implied by the model. An *SRMR* value of zero denotes a good fit. Regarding the threshold for determining adequate fit, Hu & Bentler (1998) suggest an *SRMR* value below 0.08, but since it is a value deemed low to PLS-SEM, Williams et al. (2009) propose a threshold of 0.10. Additionally, verifying that values do not surpass the upper confidence interval limits of 95% (*HI95*) or 99% (*HI99*) is essential. Dijkstra and Henseler (2015) propose expressing discrepancies in terms of distances, such as Euclidean distance or unweighted least squares (*dULS*) and geodesic distance (*dG*), as alternatives to residuals. While *SRMR* provides a rough measure of overall model fit, *dULS* and *dG* offer precise assessments (Henseler et al., 2015). Albort-Morant et al. (2018) advocate evaluating global model fit using *SRMR*, *dULS*, and *dG* metrics.

4. DATA, SAMPLE AND MEASURING INSTRUMENT

There are 350 marinas in Spain with a global capacity of 131,100 berths (Spanish Federation of Associations of Sports and Tourist Ports, 2022). Almost two-thirds of the Spanish marinas are located in the Mediterranean (214), while the remaining 136 are in the Spanish communities bathed by the Atlantic (Observatorio Sectorial DBK, 2020). Given that no statistical sources provide information on the CSR activities of marinas in Spain, this study has built an unpublished database based on a questionnaire designed for this purpose. This questionnaire was emailed to the Spanish marinas managers with the help of the different port associations between March and September 2024. We obtained a response rate of 40.85% (143 questionnaires), and after eliminating the incomplete cases, a total of 85 valid cases finally remained. **Tables 1 and 2** offer information on the distribution of the sample marinas in the different Spanish regions and the size of their facilities, respectively. The measurement instrument was a CSR questionnaire adapted from Fasoulis and Emek (2018). The questionnaire includes sections related to knowledge, intentions, level of implementation, barriers, and drivers of CSR implementation in marinas. Each question was rated on a Likert-type scale from 1 (very low) to 5 (very high) for the sections related to knowledge, intention, and implementation. Likewise, from 1 (strongly disagree) to 5 (strongly agree) for the barrier and driver sections. The questionnaire's specifications

Table 1. Sample distribution by Spanish regions

SPANISH REGION	MARITIME ZONE	NUMBER OF MARINAS	%
Andalucía	Atlantic/Mediterranean	14	16.47
Asturias	Atlantic	4	4.70
Cataluña	Mediterranean	15	17.67
Valencia	Mediterranean	11	12.94
Galicia	Atlantic	10	11.76
Baleares	Mediterranean	13	15.29
Canarias	Atlantic	10	11.76
Murcia	Mediterranean	8	9.41

Table 2. Size of the marinas in the sample

NUMBER OF BERTHING	NUMBER OF MARINAS	%
Less than 300	27	31.76
Between 301 and 600	37	43.54
More than 600	21	24.70

appear in **Table 3**. The questionnaire was administered through an online platform chosen for its convenience and ability to reach participants across a wide geographical area. This method reduced logistical expenses and enabled quick dissemination and collection of responses. Invitations to complete the questionnaire were emailed to managers of the 350 marinas registered in Spain, using contact information sourced from official registries and industry databases. The emails concisely explained the study's objectives, assured respondents confidentiality, and included clear instructions for completing the questionnaire. Features for automatic data validation were incorporated to enhance data accuracy and minimize errors such as unanswered questions or inconsistent responses. Additionally, personalized follow-up emails were sent to non-respondents two weeks after the initial invitation, and this process was repeated up to two more times to maximize participation and ensure respondents had ample opportunity to complete the questionnaire.

Table 3. **Questionnaire**

CODE	ITEM
<i>Knowledge</i>	
KNW1	Knowledge of the ISO 9000 management tool.
KNW2	Knowledge of the ISO 14001 management tool.
KNW3	Knowledge of the EMAS management tool.
<i>Intention</i>	
INT1	Intention to implement an environmental management program to reduce environmental risks as part of a company CSR program.
INT2	Intention to establish behavioural indicators to analyze and measure the efficient use of resources as part of a CSR program in the company.
INT3	Intention to implement sustainability reporting standards as part of a CSR program in the company.
<i>Implementation</i>	
IMP1	My company publishes its CSR policy in annual reports, press and brochures.
IMP2	My company provides a budget exclusively for CSR actions.
IMP3	In my company, there is a senior position responsible for CSR.
<i>Drivers</i>	
DRV1	Implementing environmentally and socially responsible behaviour increases the organisation's efficiency.
DRV2	The benefits derived from the CSR strategies drive their implementation.
DRV3	Investor relations promote the adoption of CSR practices.
DRV4	Relationships with stakeholders promote the adoption of CSR practices.
<i>Barriers</i>	
BAR1	The absence of regulations makes it difficult for CSR to develop in my company.
BAR2	The lack of mandatory regulations constitutes a challenge to developing CSR initiatives in our organization.
BAR3	The need for more technical and economic means prevents the implementation of CSR.
BAR4	The scarcity of financial resources restricts the CSR development in my company.

5. RESULTS

The measurement model has examined indicator reliability (indicator loadings), internal consistency reliability (composite reliability and Cronbach's alpha), and convergent validity (average variance extracted, AVE) (Hair et al., 2017). The results of this evaluation appear in **Table 4**. The constructs have convergent validity since AVE are greater than 0.50, and the measures are adequate because the composite reliability and Cronbach's alpha exceed the value of

0.7 (Fornell & Larcker, 1981). All indicator loadings are also above 0.7 and are significant (Hair et al., 2017).

Table 4. Reliability and convergent validity

CONSTRUCT/ INDICATORS	LOADING	SD*	RELIABILITY (CRONBACH'S ALPHA)	COMPOSITE RELIABILITY	AVE
Knowledge (KNW)			0.729	0.850	0.658
KNW1	0.863	0.087			
KNW2	0.884	0.076			
KNW3	0.709	0.095			
Intention (INT)			0.707	0.764	0.621
INT1	0.787	0.075			
INT2	0.715	0.090			
INT3	0.725	0.093			
Implementation (IMP)			0.897	0.935	0.828
IMP1	0.911	0.022			
IMP2	0.919	0.021			
IMP3	0.899	0.031			
Drivers (DRV)			0.862	0.893	0.679
DRV1	0.929	0.262			
DRV2	0.900	0.211			
DRV3	0.765	0.233			
DRV4	0.856	0.242			
Barriers (BAR)			0.842	0.895	0.683
BAR1	0.851	0.043			
BAR2	0.914	0.017			
BAR3	0.840	0.053			
BAR4	0.834	0.078			

Note: Significance and standard deviations (SD) were performed using the 5,000 repetitions Bootstrapping procedure; AVE: Average Variance Extracted; *: All loadings were significant at 0.001 level.

Next, the discriminant validity of the reflective measures is evaluated in three possible ways: examining the cross-loadings to check whether the values of the indicators load more on their construct, using the Fornell-Larcker criterion, and observing the heterotrait-monotrait relationship (HTMT) (Hair et al., 2017). It is verified that each indicator loaded more on its construct than on the rest. The Fornell-Larcker criterion also showed discriminant validity, as the square root of the AVE for each reflective construct was greater than its correlations with other constructs (Chin, 1998). Finally, the

HTMT ratios are shown below the conservative threshold of 0.85 (Henseler et al., 2015), thus confirming the discriminant validity of the constructs reflected in the model (**Table 5**).

Table 5. **Divergent validity**

	KNW	INT	IMP	DRV	BAR
KNW	0.811	0.811	0.216	0.118	0.349
INT	0.542	0.788	0.382	0.171	0.296
IMP	0.154	0.271	0.810	0.181	0.529
DRV	-0.040	-0.114	0.209	0.824	0.282
BAR	-0.270	-0.200	-0.477	-0.265	0.826

Note: HTMT ratio over the diagonal (italics). Fornell–Lacker criterion: square root of AVE in diagonal (bold) and construct correlations below the diagonal.

Once the reliability and validity of the construct measurements have been confirmed, the results of the structural model are evaluated by analyzing the proposed hypotheses and the predictive capabilities. Following the recommendation of Hair et al. (2019), the structural model must be verified before assess these criteria in search of possible collinearity problems. All VIF values are less than 3.3, so collinearity is not an issue in the internal model.

For their part, the path coefficients and their significance are examined for each hypothesis (**Table 6**). Hypotheses H1 and H2 are confirmed. Knowledge is directly and positively related to intention (H1: $\beta=0.542$, $p<0.001$) and intention and implementation are also directly and positively related (H2: $\beta=0.203$, $p<0.05$). Regarding the relationships of the drivers and barriers, the results reveal that there is no significant relationship between drivers and implementation (H3: $\beta=0.127$; $p>0.05$), while the direct and negative relationship of barriers on implementation is confirmed (H4: $\beta=-0.432$; $p<0.001$).

Table 6. **Standardized structural estimates and tests of the main hypotheses**

	β	P-VALUES	CONFIDENCE INTERVAL		
			5.0%	95.0%	
H1: KNW $\rightarrow$ INT	0.542	0.000	[0.420;	0.636]	Supported
H2: INT $\rightarrow$ IMP	0.203	0.049	[-0.029;	0.344]	Supported
H3: DRV $\rightarrow$ IMP	0.127	0.157	[-0.267;	0.211]	Not supported
H4: BAR $\rightarrow$ IMP	-0.432	0.000	[-0.573;	-0.273]	Supported

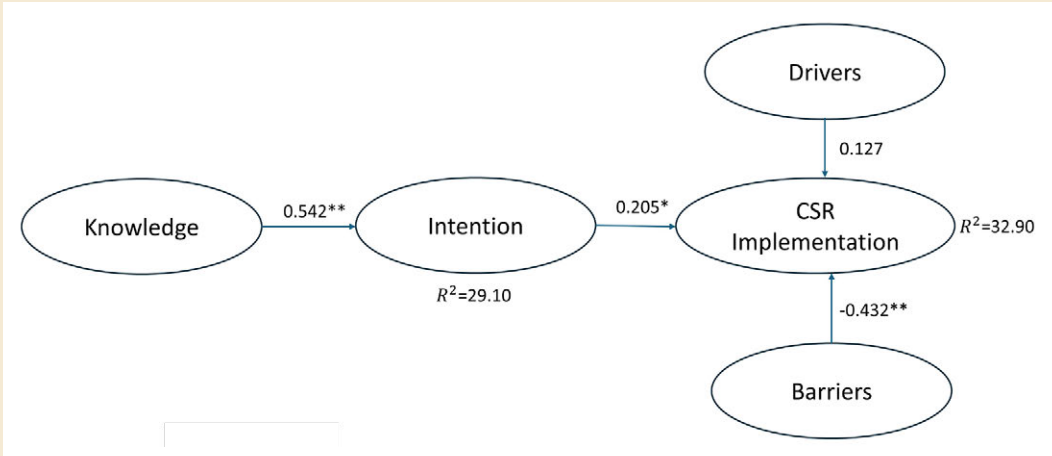
The R^2 values exceed the minimum recommended value of 0.10 (Chin, 1998; Falk & Miller, 1992). The model explains 29.1% of the variance associated with intention and 32.9% of the variance related to implementation. Regarding the predictive capacity, the Q^2 values are greater than zero, which shows predictive relevance for the endogenous variables (Chin et al., 2008). The Q^2 values for intention and implementation are 0.267 and 0.238, respectively, so the predictive relevance of the model is acceptable (Table 7).

Table 7. Coefficient of determination and predictive relevance

	R^2	Q^2
Intention	0.291	0.267
Implementation	0.329	0.238

Figure 3 illustrates the results of the developed structural model. These results confirm that the implementation of CSR in marines responds to a process in which knowledge about CSR is related to the intention to implement it among its strategic objectives. Also, this intention positively influences the behaviour of the implementation. Therefore, it is confirmed that the “Knowledge-Intention-Behavior” model (Emezi, 2014; Hakala, 2015; Klaric, 2015) is valid for the analysis of the implementation of CSR in marines. Likewise, it is confirmed that specific drivers that could influence the more excellent implementation of CSR have not been significant. On the one hand, these refer to beliefs about the positive impacts of CSR on the company's profits and efficiency. On the other hand, relationships with stakeholders promote the implementation of CSR. Additionally, it has been found that certain factors related to the absence of regulatory standards and the scarcity of technical and financial resources stand as barriers that negatively affect the implementation of CSR.

Figure 3. **Structural model results**



Note: * $p<0.05$; ** $p>0.001$.
Source: Author's Creation

6. CONCLUSION AND IMPLICATIONS

The objective of this study has been to analyze the state of CSR implementation in marinas, relating the elements that represent drivers and barriers. In this way, the results can serve as a basis for the CSR practices analysis carried out in marinas and help provide a situation of the sector and its alignment with sustainable development and blue growth.

The results show that the degree of CSR implementation in marinas depends on the intentions of their managers to undertake CSR actions, and these intentions are conditioned by the degree of knowledge that the managers have about the processes of CSR. Therefore, knowledge about CSR practices is positioned as the primary antecedent of the behaviour of implementing CSR strategies in marinas. In this sense, only a sufficient educational level in terms of capabilities for developing and applying CSR standards guarantees adequate implementation of actions that promote the alignment of marinas with sustainable development and blue growth. Likewise, it has been found that there is no significant relationship between the drivers that could promote CSR implementation in marinas. This indicates that managers do not consider both the economic benefits derived from CSR and the pressure that stakeholders can exert for its implementation when

establishing social and environmental impact strategies. However, the results confirm the existence of specific barriers that are preventing more excellent implementation of CSR in marinas. Thus, the absence of mandatory regulations and the scarcity of material and financial resources allocated to sustainability issues reduce the possibilities of implementing CSR in its strategic objectives.

The findings of this study present essential theoretical and practical implications. Theoretically, this study expands our understanding of the stakeholder model. It provides valuable insights into SCR initiatives within organizational contexts by delving deeper into the complex dynamics between institutional pressures, available organizational resources, and stakeholder expectations. Besides, the findings of this research add to the expanding body of knowledge on CSR by highlighting the challenges associated with its implementation, mainly through the analysis of its drivers and barriers. This study also makes a theoretical contribution by demonstrating that economic benefits and stakeholder pressure are not considered critical motivators for adopting CSR practices. Instead, obstacles such as the lack of enforceable regulations and limited access to financial and material resources are more prominently recognized. Consequently, this research enriches the scarce literature on CSR drivers and barriers by providing deeper insights into these dynamics. From a practical standpoint, the study offers valuable recommendations for public policymakers and marina managers in developing effective CSR strategies. Based on the findings, policymakers are encouraged to focus on creating targeted policies and providing support mechanisms to help marinas enhance their CSR initiatives. For example, economic and technical resources could be made more accessible alongside training programs to educate managers and employees in the marina sector about CSR practices. These programs could address gaps in understanding and familiarize stakeholders with the significance of adopting sustainable and socially responsible actions. Recognizing the importance of ecological and social practices is essential for gaining a competitive edge, improving financial stability, and enhancing corporate performance. Moreover, the results emphasize the growing importance of environmental and social concerns within the marina sector, urging organizations to prioritize sustainability as part of their operational framework in response to the ongoing ecological crisis. For marina managers, the findings can serve as a guide to better understanding the drivers and barriers to CSR implementation, helping them appreciate the long-term advantages of such initiatives. Strengthening stakeholder relationships and

improving the company's image are essential benefits that should be actively promoted. To achieve this, marinas should work to make their sustainability efforts more visible, leveraging marketing strategies to raise awareness of their CSR actions among critical audiences. This could involve utilizing company websites and social media platforms to showcase their sustainable practices, providing an opportunity for differentiation and meaningful engagement with stakeholders who value environmental stewardship and social responsibility.

As limitations to this study, it is worth mentioning the lack of previous data, statistical sources, or studies that provide information, all due to the great opacity that has existed in the organizations under analysis, possibly due to the absence of associations and a business culture that get used to providing data, as happens in other sectors. All of this has made it challenging to collect information for research, which has also been a common cause in other studies in the industry. Furthermore, there is a lack of previous studies that allow comparison of results, so this article makes, at the same time, a fundamental contribution to the literature on CSR in marinas, providing new knowledge on its implementation. These limitations are an opportunity for future research to compare CSR development and evolution in marinas and its contribution to blue growth. Other possible lines of research could analyze how these policies are communicated or study cases in marinas worldwide. Furthermore, and taking into account that, at present, there are numerous administrative concessions through which the marina infrastructures are exploited, and that they will soon go through extension processes that require significant investments, it would be interesting for new studies to quantify the economic impact and social of the CSR strategies adoption, which could help understand that the future of the sector is linked to its sustainable development.

REFERENCES

Abrini, Z. B., Reinders, J. G., & Gómez, R. C. (2024). Maximizing Economic Benefits or Being Conscious? A Comparative Analysis of Organizational Learning Capability, Innovation and Wellbeing. *UCJC Business and Society Review (formerly known as Universia Business Review)*, 21(83).

Agudo-Valiente, J. M., Garcés-Ayerbe, C., & Salvador, M. (2017). Corporate Social Responsibility Drivers and Barriers According to Managers' Perception; Evidence from Spanish Firms. *Sustainability*, 9 (10), 1821.

Albort-Morant, G., Henseler, J., Cepeda-Carrión, G., & Leal-Rodríguez, A. L. (2018). Potential and realized absorptive capacity as complementary drivers of green product and process innovation performance. *Sustainability*, 10 (2), 381.

Alhaddi, H. (2015). Triple Bottom Line and Sustainability: A Literature Review. *Business and Management Studies*, 1 (2), 6-10.

Aras, G., & Crowther, D. (2008). Evaluating sustainability: a need for standards. *Issues in Social and Environmental Accounting*, 2 (1), 19-35.

ANEN. (2018). Impacto Económico del Sector de la Náutica de Recreo. https://www.anen.es/download/general/Presentacion-del-proyecto_Impacto-economico_080318.pdf.

Bhagwat, P. (2011). Corporate Social Responsibility and Sustainable Development. In *Proceedings of the Articles and Case Studies: Inclusive & Sustainable Growth Conference*, 1 (1), 15-16.

Biondi, E. (2014). Planning sustainable Marinas: The social dimensions of sustainability. PIANC World Congress San Francisco, USA. 1-16

Boza J., González, M. M., & De León, J. (2014). La ley de puertos 33/2010 y la responsabilidad social. *Criterio Libre*, 12 (21), 199-218.

Brown, J. A., & Forster, W. R. (2013). CSR and Stakeholder Theory: A Tale of Adam Smith. *Journal of Business Ethics*, 112 (2), 301-312.

CEA (2019). La economía Azul de Andalucía. <https://almeria2030.es/wp-content/uploads/2021/06/La-Economia-Azul-en-Andalucia.pdf>.

Chin, W. (1998). The partial least squares approach to structural equation modeling. In: *Marcoulides, G. (Ed). Modern methods for business research*. Lawrence Erlbaum Associates, Mahwah, NJ, 295-358.

Chin, W. W. (2010). Bootstrap cross-validation indices for PLS path model assessment. In Esposito Vinzi, V., Chin, W.W., Henseler, J. & Wang, H. (Eds), *Handbook of Partial Least Squares: Concepts, Methods and Applications*, 2, Springer, Heidelberg, 83-97.

Chin, W. W., Peterson, R. A., & Brown, P. S. (2008). Structural equation modelling in marketing: Some practical reminders. *Journal of Marketing Theory and Practice*, 16 (4), 287-298.

Cruz-Pérez, N., Rodríguez-Martín, J., García, C., Ioras, F., Christofides, N., Vieira, M., Bruccoleri, M., & Santamarta, J. C. (2021). Comparative study of the environmental footprints of marinas on European Islands. *Scientific Reports*, 11, 9410.

Cuesta Romero, A., Delgado Márquez, B., & Aguilera Caracuel, J. (2025). Global Challenges: Sustainable Recommendations and Practices in the European Business Environment. *UCJC Business & Society Review*, 22(85).

Davis, K. (1973). The Case for and against Business Assumption of Social Responsibilities. *Academy of Management Journal*, 16 (2), 312-322.

- Dijkstra, T. K., & Henseler, J. (2015). Computational statistics and data analysis consistent and asymptotically normal PLS estimators for linear structural equations. *Computational Statistics & Data Analysis*, 81, 10-23.
- Emezi, C. N. (2014). Corporate Social Responsibility: A Strategic Tool to Achieve Corporate Objective. *Responsibility & Sustainability*, 2 (3), 43-56.
- Evermann, J., & Tate, M. (2012). Comparing the predictive ability of PLS and covariance analysis. International Conference on Information Systems (ICIS). Orlando, FL, December.
- Falk, R. F., & Miller, N. B. (1992). *A Primer for Soft Modeling*. The University of Akron Press, Akron, Ohio.
- Fasoulis, I., & Emek, R. (2018). Determinants to the implementation of corporate social responsibility in the maritime industry: a quantitative study. *Journal of International Maritime Safety, Environmental Affairs, and Shipping*, 3, 10-20.
- Filimon, D. (2023). Status of the Marinas' Development in the Southern Region of the Romanian Sea Coast: Implications for Sustainable Recreational Transport in the Black Sea. *Sustainability*, 15, 7979.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior*. Reading, Addison-Wesley.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18 (1), 39-50.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman, Boston, MA.
- Geisser, S. (1974). A predictive approach to the random effects model. *Biometrika*, 61 (1), 101-107.
- Giner, J. M. (2021). Innovación en la economía azul de la Comunidad Valenciana. https://labora.gva.es/documents/166000883/175160492/3_3_INFOR ME+ECONOMIA+AZUL+DE+LA+COMUNIDAD+VALENCIANA+UA+2021.pdf.
- Gligor-Cimpoieru, D. C., & Munteanu, V. P. (2015). CSR Benefits and Costs in a Strategic Approach. Annals of the University of Craiova. *Economic Sciences Series*, 1 (43), 93-103.
- González-Espinosa, P. C., Singh, G. G., & Cisneros-Montemayor, A. M. (2025). "Implementing the Blue Economy: Analysis of indicator interrelationships across countries and over time. *Ocean & Coastal Management*, 262, 107589.
- González-Morales, O., Santana Talavera, A., & Domínguez González, D. (2021). The involvement of marine tourism companies in CSR: the case of the island of Tenerife. *Environment, Development and Sustainability*, 23, 11427-11450.
- González-Morales, O., Santana, A., & Calero, F. J. (2023). Factors influencing the level of Social Responsibility of marine tourism companies and restaurants: The island of Fuerteventura. *Island Studies Journal*, 18 (1), 264-284.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM)*. Sage, Thousand Oaks, CA.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31 (1), 2-24.
- Hakala, S. (2015). *Corporate Social Responsibility and Organizational Culture in Corporate Restructuring - The Case of an Insurance Sector Acquisition*. Uppsala. Sweden.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43 (1), 115-135.
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling:

- Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3 (4), 424-453.
- Ivanova, A., Cariño, M. M., Monteforte-Sánchez, M., Ramírez, E. A., & Domínguez, W. (2017). The blue economy as sustainability Pathway for coastal regions: the case of Baja California Sur, Mexico. *Sociedad y Ambiente*, 14, 75-98.
- Jugović, T. P., Agatić, A., Gračan, D., & Šekularac-Ivošević, S. (2022). Sustainable activities in Croatian marinas—towards the “green port” concept. *Pomorstvo*, 36 (2), 318-327.
- Kaya, G., & Mansuroglu, E. (2020). Corporate social responsibility; an analysis of ports’ websites. *Turkish Journal of Maritime and Marine Sciences*, 6, 51-65.
- Klaric S, Afric, K., & Trost, K. (2015). Corporate social responsibility of Croatian marinas. *Ekonomika Misao i Praksa*, 1, 81-101.
- Klimek, H., & Dabrowski, J. (2018). Corporate social responsibility of the port of Gdynia. *SHS Web of Conferences*, 57, 01017.
- Lam J. S. L., & Li, K. X. (2019). Green port marketing for sustainable growth and development. *Transport Policy*, 84, 73-81.
- Laudal, T. (2011). Drivers and barriers of CSR and the size and internationalization of firms. *Social Responsibility Journal*, 7 (2), 234-256.
- Liao, Ch., Tseng, K., Cullinae, K., & Lu, C. (2010). The impact of an emerging port on the carbon dioxide emissions of inland container transport: an empirical study of Taipei port. *Energy Policy*, 38 (9), 5251-5257.
- Longo, M., Mura, M., & Bonoli, A. (2005). Corporate social responsibility and corporate performance: the case of Italian SMEs. Corporate Governance. *The International Journal of Business in Society*, 5 (4), 28-42.
- López-Morales, J. S. (2020). Social responsibility internationalization. An analysis of the mission and the vision of the major ports in Latin America. *Revista El Colegio de San Luis*, 10 (21), 00023.
- Martínez-Vázquez, R. M., De Pablo, J., & Caparrós, J. L. (2021). Marinas and sustainability: Directions for future reseach. *Marine Pollution Bulletin*, 164, 112035.
- Martínez-Vázquez, R. M., De Pablo, J., & Milán-García, J. (2022). Impact analysis of marinas on nautical tourism in Andalusia. *Marine Science and Engineering*, 10, 780.
- Mbogoh, E., & Ogutu, M. (2017). Challenges of Implementing Corporate Social Responsibility Strategies by Commercial Banks in Kenya. *Journal of Business and Strategic Management*, 2 (2), 1-16.
- McElhaney, K. (2009). A Strategic Approach to Corporate Social Responsibility. *Leader to Leader*, 52, 30-36.
- Moir, L. (2001). What Do We Mean by Corporate Social Responsibility? *Corporate Governance: The International Journal of Business in Society*, 1 (2), 16-22.
- Observatorio Sectorial DBK (2020). Informe Especial Basic: Puertos Deportivos. <https://www.dbk.es/es/informes-especiales-basic/puertos-deportivos>.
- Pace, L. A., Saritas, O., & Deidun, A. (2023). Exploring future research and innovation directions for a sustainable blue economy. *Marine Policy*, 148, 105433.
- Poletan, T., Agatić, A., Gračan, D., & Šekularac-Ivošević, S. (2022). Sustainable activities in Croatian marinas – towards the “green port” concept. *Pomorstvo*, 36 (2), 318-327.
- Shen, L., Govindan, K., & Shankar, M. (2015). Evaluation of Barriers of Corporate Social Responsibility Using an Analytical Hierarchy Process under a

- Fuzzy environment: A Textile Case. *Sustainability*, 7 (3), 3493-3514.
- Sheppard, B. H., Hartwick, J., & Warshaw, P. R. (1988). The Theory Of Reasoned Action: A Meta Analysis Of Past Research With Recommendations For Modifications And Future Research. *Journal of Consumer Research*, 15, 325-343.
- Shimp, T. A., & Kavas, A. (1984). The Theory of Reasoned Action Applied To Coupon Usage. *Journal of Consumer Research*, 11, 795-809.
- Spinelli, R., & Benevolo, C. (2024). Sustainability in the Mediterranean tourist ports: The role of certifications. *Tourism and Hospitality Research*, 24 (3), 479-489.
- Stein, M., & Acciaro, M. (2020). Value creation through corporate sustainability in the port sector: a structured literatura analysis. *Sustainability*, 12 (5504), 1-17.
- Steurer, R. (2010). The Role of Governments in Corporate Social Responsibility: Characterising Public Policies on CSR in Europe. *Policy Sciences*, 43 (1), 49-72.
- Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society*, 36 (2), 111-147.
- Terebinska, M. (2017). Corporate social responsibility at the port of Gdansk Authority SA. *Marketing i Rynek*, 11, 620-630.
- Timane, R. (2012). Business Advantages of Corporate Social Responsibility: Cases from India. *SSRN Electronic Journal*. Available at SSRN 2180500.
- United Nations (2015). Sustainable Development. Department of Economic and Social Affairs. <https://sdgs.un.org/goals>.
- West, B., Hillenbrand, C., & Money, K. (2015). Building Employee Relationships through Corporate Social Responsibility: The Moderating Role of Social Cynicism and Reward for Application. *Group & Organization Management*, 40 (3), 295-322.
- Williams, L. J., Vandenberg, R. J., & Edwards, J. R. (2009). Structural Equation Modeling in Management Research: A Guide for Improved Analysis. *Academy of Management Annals*, 3 (1), 543-604.