The impact of environmental CSR communication on employees' organizational identification, commitment, and trust

The case of the Greek shipping sector

Student Name: Sarantia Sarmpezi
Student Number: 616433

Supervisor: Dr. Yijing Wang

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Abstract

Amid an increasing awareness of the importance of environmental responsibility in the corporate world, environmental Corporate Social Responsibility (CSR) has been identified as a useful tool in business for improving relationships between organizations and their stakeholders. This trend also includes the shipping industry, which has set the environment as a priority on its regulatory agenda. This means that what shipping organizations are communicating to the public in terms of their environmental CSR can affect the public's attitudes towards these organizations, but how could this environmental CSR communication affect employees' attitudes towards the shipping organizations? While the environment is a major factor affecting the shipping sector's external image to the public, limited attention has been paid to the impact of environmental CSR communication on employees across shipping, a B2B industry where employees are key stakeholders. To fill this gap, this study used an online survey to examine the impact of environmental CSR communication on three key employees' attitudes: organizational identification, organizational commitment, and organizational trust in shipping companies in Greece. Four dimensions of CSR communication were assessed in this study. These were informativeness (whether the company is detailed enough about its CSR communication), transparency (whether the company shares both CSR successes and failures), consistency (whether the company changes its sayings on environmental CSR from time to time), and message tone (whether the company is factual or promotional when sharing its CSR facts).

The findings showed that what companies communicate in terms of their environmental CSR towards the public does positively affect employees' attitudes. More specifically, consistency and message tone were found to affect all three types of employee attitudes. In all cases, employees' shaped perceptions about the company's environmental CSR practices mediated the impact of CSR communication on employees' identification, commitment, and trust. As a result, this study validates the growing relevance of environmental CSR in shipping and highlights the need for shipping companies to shed focus on their environmental CSR communication as a beneficial tool for improving attitudes, not only of external stakeholders but also

internal stakeholders. The results also reveal the importance for shipping organizations to maintain a consistent approach and a less promotional tone when planning their environmental CSR communication. Overall, this study provides important insights into the significance of CSR communication for Greek shipping.

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1. Introduction

The environment is an increasingly important topic for the global shipping sector, driven by a growing awareness of the adverse effects of climate change across the world and a subsequent increase in stringent environmental regulations (Mansouri et al., 2015). These regulations are put into force by the International Maritime Organization (hereinafter: IMO), the United Nation's official body for the global shipping industry, as well as by regional schemes such as the European Union, which has been showing an agenda of ambitious environmental measures (Baker, 2012). The efforts of the shipping industry to minimize the environmental impact of its operations begin with the landmark International Convention for the Prevention of Pollution from Ships (MARPOL) in 1973. More recently, the IMO-adopted strategy on greenhouse gas emissions of 2018 (Joung et al., 2020) and the more recent decision of the European Commission to include shipping in the EU Emissions Trading Scheme (hereinafter: EU ETS) (Wu et al., 2022) highlight the environmental topic as more relevant than ever for shipping (Mansouri et al., 2015).

This increased awareness of the importance of environmental responsibility has transformed the shipping business in Greece through subsequent growing pressure from stakeholders (Fafaliou et al., 2006; Pang et al., 2021). In this landscape, environmental Corporate Social Responsibility (hereinafter: CSR) has an important role to play. Environmental CSR describes the actions of an organization that goes beyond regulatory compliance to reduce the environmental impacts of its operations (Carroll, 1991). For example, in the era of ethical consumerism, consumers are more positively inclined toward companies showcasing environmental responsibility (Sen & Bhattacharya, 2001; Khojastehpour & Johns, 2014), which makes environmental CSR a vital tool for building long-term relationships with stakeholders (Shin & Thai, 2015).

In this respect, CSR, including environmental, social and economic aspects as its three main pillars, is necessary for a company to boost legitimacy and ensure long-term survival (Chandler, 2020). Research into environmental CSR, in particular, shows a positive correlation between organizational reputation and profit (Khojastehpour & Johns, 2014; Khan et al., 2021). In the shipping industry, environmental CSR can increase shipping customers' satisfaction (Shin & Thai, 2015;

Parviainen et al., 2018) and improve shipping companies' reputation (Pang et al., 2021).

Accordingly, research suggests that stakeholders' lack of awareness about the organization's CSR impedes CSR reputational benefits (Pomering & Dolnicar 2009), while meeting consumers' aspirations on how CSR is communicated adds significantly to the positive impacts of CSR on organizations (Kim, 2019). This showcases the importance of, not only engaging in CSR practices, but also effectively communicating these CSR practices (Buragohain & Dutta, 2021). And while the positive outcomes of CSR and CSR communication lead shipping organizations to growingly involve in CSR (Yuen et al. 2017), there seems to be little progress in CSR engagement of shipping companies in Greece (Fafaliou & Aroni, 2016), an important component of EU shipping which maintains a historic connection to maritime and is the world's largest shipowning nation (UGS, 2020).

However, it is often forgotten that CSR is a multidimensional concept that impacts several different stakeholders, including consumers, employees, investors, media, NGOs, and the government, among others (Carroll, 1991). Indeed, CSR literature has identified employees as an equally important stakeholder group (Carroll, 1999) and key company advocates (Dawkins, 2004; Du et al., 2010; Gross et al., 2021). As key stakeholders, employees are important drivers for CSR engagement (Ditlev-Simonsen & Wenstøp, 2013) and have been found as the main stakeholders urging organizations for environmental responsibility (Henriques & Sadorsky, 1999; Preuss et al., 2009). Despite this, there are not many studies examining how CSR communication affects this stakeholder group (Hameed et al., 2016), as CSR communication itself has mostly been studied from consumers' (Kim & Ferguson, 2014; Krisch & Krauter, 2017; Kim, 2019), rather than employees' perception. For instance, research finds it unlikely for CSR efforts to create a better image to consumers for an industry that is already identified with negative environmental outcomes (Vierebl & Koch, 2022). However, the extent to which this would also apply to employees remains understudied.

The importance of employees as main stakeholders makes the benefits of CSR communication in Business to Business (hereinafter: B2B) industries, such as shipping, an equally critical area of study (Wang et al., 2021). This occurs as the B2B nature of shipping makes it less interactive with the general public (Wang et al., 2021), creating a limited sense of supervision by consumers, which constitute an

important stakeholder group in Business to Consumers (B2C) industries (Wolf & Seuring, 2010). And while this B2B nature limits the industry's CSR communication to the public, the latter is seen as critical for maintaining the sector's attractiveness to potential employees (Wang et al., 2021).

In addition, a theoretical division between external and internal CSR is considered critical. External CSR communication describes the CSR communication efforts directed toward external stakeholders, such as customers, while internal CSR refers to the respective efforts directed toward employees (Hameed et al., 2016). This distinction is important from an employee perspective, as internal CSR seems as "self-focused" while external CSR as "others-focused", with the former affecting employees' internal respect and the latter impacting their perceived external prestige (Hameed et al., 2016). Although the first is important, there has been lately a greater focus on how the enhancement of this corporate prestige in the eyes of the external world can boost employees' attitudes, including identification with the company (Hameed et al., 2016; Gond et al., 2019). This makes this research relevant for the shipping sector, which claims a controversial reputation with respect to CSR (Wang et al., 2021).

Along with many studies in different sectors confirming the advantages of engaging in CSR to employee retention (Du et al., 2010), employee engagement (Rupp et al., 2018), and employee performance (Sun & Yu, 2015), there has also been some research showing the positive impact of CSR on employees' organizational trust, commitment and job satisfaction in the shipping industry (Ko et al., 2021). However, this is not extensive, as CSR communication in shipping remains limited both internally and externally (Wang et al., 2021). Meanwhile, most of the studies showcasing the advantages of CSR to employees' attitudes in the shipping industry are not exploring the impact of CSR communication on these attitudes. This academic gap in CSR communication literature, along with the growing importance of environmental CSR and the limited research on CSR impact on employees as key stakeholders in Greek shipping, leave an open field for research on how external environmental CSR communication can affect shipping employees' attitudes. For instance, among key attitudes, organizational trust, commitment, and identification have been identified as vital factors for organizational efficiency and success (Bastug et al., 2016; Bhattacharya et al., 2009). As a result, the Research Question for the present study is formulated as follows: *How does external environmental CSR*

communication affect employees' organizational identification, commitment, and trust in shipping companies in Greece?

Therefore, this study contributes to literature in several ways. First, although a great part of previous research has proven the benefits of CSR to shipping organizations (Lu et al., 2009; Coady et al., 2013; Shin & Thai, 2015; Ahn et al., 2021), there are very few studies focusing on the particular impact to shipping employees (Yuen et al., 2018; Ko et al., 2021). Second, while there has been some research focusing on the link of CSR with employees' attitudes in shipping (Lu et al., 2007), the critical link of CSR communication aspect remains largely understudied (Parviainen et al., 2018; Wang et al., 2021). Third, although CSR literature has found CSR as a positive enabler of employees' commitment (Du et al., 2010), trust (Ko et al., 2021), and identification (Bhattacharya et al., 2009), there has been other research showing that the pillar of environmental CSR specifically (in opposition to the economic and social CSR) does not affect these three employees' attitudes (Farooq et al., 2014). This opens an interesting field of research for the shipping industry, which has prioritized the environment in its agenda over the last years (Mansouri et al., 2015). As a result, this study is expected to provide literature with significant insights into the importance of environmental CSR communication to employees in shipping. Also, considering that no empirical investigation has so far tested the association between the two concepts in shipping companies in Greece, this study is expected to have a significant theoretical contribution to CSR communication specifically in Greek shipping.

Previous CSR studies have also offered limited empirical evidence of CSR communication's impact on employees' attitudes. From a practical perspective, this study is expected to inform about the ways that environmental CSR should be communicated to employees in the shipping sector, to increase their awareness of CSR importance. More specifically, this research seeks to stress the necessity for shipping companies to integrate employee expectations with respect to CSR communication, considering that credible CSR communication partly depends on employees' engagement in CSR policies (Morsing et al., 2008). Examining CSR communication factors and employees' attitudes, in terms of trust, commitment, and identification, could help the shipping industry to perceive the role of environmental CSR communication and provide practical implications for firms in the sector in Greece.

Following the introduction of this study topic and the research question, the second chapter provides the theoretical framework on CSR communication and employees' attitudes, including findings of previous studies, and highlights the importance of considering environmental CSR communication in the shipping context. The theory is structured into sub-chapters found relevant to this research and ends up in six hypotheses. Then, the third chapter presents the methodology used for this study, including the research design, the operationalization of theoretical concepts, the scales used for measurement, as well as the sampling method. Following this, the fourth chapter cites the results of the data analysis. These are further discussed and analyzed in the fifth chapter, along with resulting business implications for the future of shipping organizations. Finally, the conclusion presents a short overview of the current research, study limitations, and directions for future research.

2. Theoretical framework

2.1. The conceptualization of CSR

2.1.1. CSR background

The theoretical complexity of CSR is of particular academic interest, with scholars being unable to agree on one universal definition that would reflect the dynamic relationships of a corporation's various stakeholders (Morsing & Schultz, 2006), and the multifaceted nature of CSR which includes environmental, social, and economic pillars (Chandler, 2020). Being among the first researchers to focus on organizations' social responsibility, Bowen (1953) defines CSR as "the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (p. 6). Extending this definition, Carroll (1991) divided this responsibility into economic, legal, ethical, and philanthropic. Economic means that companies cannot serve any societal purpose if they cease to exist and that their principal role is to provide products and services that people need. Legal describes companies' obligation to operate in a fair and ethical manner that corresponds to regulatory framework. Ethical extends companies' obligations beyond simple compliance with the law. Lastly, philanthropic has a more voluntary nature than the other CSR components and refers to the public's demand for companies' tangible contributions to society (Carroll, 1991).

Besides the different academic definitions focusing on separate aspects of CSR which make the concept unclear (Sarkar & Searcy, 2016), the term becomes more complex if the CSR responsibility debate is added to the discussion. For example, Chandler (2020) argues that stakeholders are equally responsible for the firms' CSR actions, shifting the research interest from CSR to "Corporate Stakeholder Responsibility" (p. 153). This argument implies that stakeholders are equally responsible for shaping corporate actions through their purchasing decisions, despite an observed gap between good intentions and actions (Chandler, 2020). However, the reciprocal element of CSR does not take into account the inability of stakeholders, in some cases, to actually measure organizations' responsible behavior, and existing research does not seem to provide a clear answer to this end.

The different -and sometimes conflicting- expectations of an organization's stakeholders add to CSR complexity (Chandler, 2020), which is described accurately by Morsing & Schultz (2006) when characterizing CSR as "a moving target" (p. 336). Stakeholder theory divides stakeholders into primary -including those who hold a formal relationship with the organization, such as consumers, employees, and the government- and secondary -including those without a formal relationship with the organization, such as media and NGOs (Clarkson, 1995). Meeting the needs of key stakeholders, such as customers and employees, is critical for a company to increase its economic performance (Sen & Cowley, 2013). Another common categorization, in this respect, is internal and external CSR (Skudiene & Auruskeviciene, 2012). The former refers to companies' CSR practices towards external stakeholders, i.e., customers, partners, suppliers, etc., and the latter towards internal stakeholders, i.e., employees.

It becomes understood that CSR remains, firstly, an increasingly relevant topic for businesses to survive in a highly interconnected and globalized world (Chandler, 2020) and, secondly, a complex concept, dynamically shaped through a growing awareness of sustainability (Nguyen et al., 2020). When the trend of consumers' active participation on social media is also taken into account (Lyon & Montgomery, 2015), it is expected that this complexity extends also to the communication of CSR towards the various stakeholders.

2.1.2. Environmental CSR

As a main pillar of CSR, environmental CSR refers to a firm's environmental responsibility, meaning its actions intended to minimize both the environmental consequences of its operations and practices "that might adversely affect the enjoyment of the country's resources by future generations" (Mazurkiewicz, 2004, p. 2). According to Mohr & Webb (2005), environmental responsibility is one of the two basic components -along with the responsibility for charity- making up the concept of CSR, which is translated into a company's actions to reduce its environmental footprint, to use recyclable products and non-polluting materials, and participating in energy- or water-saving programs. Research by Kassinis & Vafeas (2006) showed that stakeholders find environmental CSR as the most critical component of an organization's CSR actions.

Environmental CSR brings significant profit and reputational benefits to a company (Khojastehpour & Johns, 2014), at a time when the rise of the Internet has created a trend of criticism towards firms based on their environmental stewardship (Mazurkiewicz, 2004). Meanwhile, an increased interest in the adverse effects of climate change (Steffen et al., 2015) leads to organizations growingly being held responsible for environmental issues (Porter & Kramer, 2011). In this landscape, a pressing challenge for organizations today is the need to correspond to increasing stakeholder demands for environmental friendliness (Helmig et al., 2016). Similarly, organizations that seem irresponsible towards the environment will be "punished" by stakeholders (Chandler, 2020). Based on this, it could be argued that the concept of environmental CSR has emerged to mitigate the negative repercussions of corporate operations on the environment (Skovgaard, 2018).

2.2. CSR communication

2.2.1. Benefits of CSR communication

CSR communication can be defined as some form of corporate communication containing a company's CSR practices (Morsing, 2006). Due to the multifaceted nature of CSR, CSR communication is addressed to various audiences, ranging from regulators to consumers and employees (Dawkins, 2004). Sen et al. (2006) suggest that both internal and external stakeholders identify stronger with an organization once they become aware of its CSR practices, which stresses the need for effective CSR communication. Theory showcased CSR benefits for organizations, but meeting consumers' aspirations on how CSR is communicated adds significantly to the positive impacts of CSR alone (Kim, 2019). This is confirmed in research showing that stakeholders demand to be aware of corporate responsibility (Viererbl & Koch, 2022) and that stakeholders' lack of awareness about the organization's CSR impedes CSR reputational benefits (Pomering & Dolnicar, 2009).

Vierebl & Koch (2022) suggest that credible communication of CSR is vital, especially in challenged industries. However, it is unlikely for CSR efforts to create a better image for an industry that is already identified with negative societal or environmental outcomes, like the tobacco industry (Vierebl & Koch, 2022). At the same time, current literature suggests that exaggerating in CSR communication can

have a backlash effect (Morsing et al., 2008; Du et al., 2010; Vierebl & Koch, 2022), the forms of which are discussed in the following sub-chapter.

2.2.2. Challenges in CSR communication

Vierebl & Koch (2022) have identified a gap between CSR activities and the communication of these CSR activities. For example, consumers may become suspicious that the organization has something to hide when emphasizing a lot on communicating its CSR (Brown & Dacin 1997, p. 81) and the more companies present their ethical concerns, the more probable they are to attract criticism from stakeholders (Morsing & Schultz, 2006). Meanwhile, organizations can also be criticized for communicating social responsibility efforts without these being real (Wagner et al., 2009). This is what Vallentin (2003) means when arguing that organizations highly engaged in CSR are also the most criticized. This thought is extended by Kim & Ferguson (2016), who argue that improper CSR communication can result from an organization's fear of being considered self-advertising.

In the field of environmental CSR communication specifically, extensive communication of a company's environmental efforts can be seen as greenwashing, a key area of discussion when it comes to environmental CSR reporting (Vollero et al., 2016). First seen in the 1980s, the term generally describes the condition of "misleading" the public concerning the environmental actions of an organization (Chandler, 2020), but, similarly to CSR, scholars do not seem to agree on what the term exactly includes. Some of them imply that misleading content is deliberate (Chandler, 2020; de Vries et al., 2013), while others argue that the presentation of environmental achievements is subject to interpretation, not only by the company but also by the message receivers (Oswald, 2011; Bowen, 2014). This is also what Coombs & Holladay (2013) mean when discussing "objective information" as a key CSR communication "myth" (p. 218). However, TerraChoice (2009) showed that 95% of communicated-as-green products in Canada and the US fell under at least one of the "sins of greenwashing", while even organizations excelling in CSR practices are using some form of greenwashing (Aggarwal & Kadyan, 2014). All the above mean that high CSR communication will only be positive for the organization if its CSR efforts are high accordingly (Vierebl & Koch, 2022).

2.2.3. CSR communication factors

Addressing this CSR communication conflict, Kim & Ferguson (2016) identified six factors explaining consumers' expectations on CSR communication: CSR informativeness, consistency, transparency, message tone, personal relevance, and third-party endorsement. As this study focuses on employees rather than consumers, only the first four factors were considered relevant. Third-party endorsement is included in "informativeness", for describing the extent of company information about third-party CSR endorsement (Kim, 2019). Personal relevance was removed for describing how CSR communication relates to consumers' "personal life experiences" (Kim & Ferguson, 2016, p. 5) and cannot be measured by employees' perceptions. Given the backlashes of CSR communication and the fact that the environment is high on the shipping agenda, it is suggested that communicating environmental CSR requires particular attention.

2.2.3.1. Informativeness. Informativeness is the key communication factor, describing the exact CSR efforts that the organization is engaged in (Kim & Ferguson, 2016). The critical element of informativeness is that it should entail detailed information, such as the company's motives and achievements in CSR so far (Kim & Ferguson, 2016), at a time when excessive information can be faced with people's skepticism, as shown above. However, CSR informativeness is generally considered as having a positive impact on corporate reputation (Kim, 2019), mostly due to people's limited knowledge of organizations' CSR matters (Du et al., 2010).

2.2.3.2. Transparency. Transparency describes a company's honesty about both positive and negative facts (Kim & Ferguson, 2014) "in a manner that is accurate, timely, balanced, and unequivocal, for…enhancing the reasoning ability of publics and holding organizations accountable for their actions, policies, and practices" (Rawlins, 2008, p. 75). Transparency is a key consideration for CSR reporting, as it is proven to enhance brand perception (Buragohain & Dutta, 2021) and trust (Rawlins, 2008), while addressing people's skepticism (Coombs & Holladay, 2011). For example, Kim & Lee (2009) argue that consumers are more acceptive of companies' CSR initiatives when their CSR messages disclose the exact amount of money the organization donated. However, the benefits of transparency in CSR reporting extend also to positive relations among employees, as well as enhancement of organizational trust and commitment (Rawlins, 2008).

2.2.3.3. Consistency. Consistency describes coherence between CSR communication and CSR practices and is achieved when the company does not change information regarding these CSR practices (Puncheva-Michelotti et al., 2018). Consistency can refer to the frequency of CSR communication or "how steadily the company communicates about its CSR goals" (Kim & Ferguson, 2016, p. 554) and is critical for enhancing stakeholders' trust (Du et al. 2010). Meanwhile, Puncheva-Michelotti et al., (2018) suggested that a lack of CSR consistency in job advertisements often indicates a lack of a holistic CSR strategy.

2.2.3.4. Message tone. Message tone in CSR communication describes "whether CSR communication is self-promotional or factual in tone" (Kim, 2019). As indicated in section 2.2.2., CSR communication can lead to backlash if considered inauthentic or promotional (Kim & Ferguson, 2016). The message tone is the communication factor linked to public skepticism and has been identified as significantly more impactful than transparency and consistency in the efficiency of CSR communication (Kim & Ferguson, 2014). Indeed, a study of Chinese consumers showed that factual tone is their number one expectation in companies' CSR communication (Kim & Ji, 2017).

2.3. Environmental CSR and the shipping sector

2.3.1. Shipping in relation to green challenges

Shipping is a global industry, accounting for about 80% of world's trade (UNCTAD, 2019). Commonly perceived as a polluting industry, shipping is considered to add significantly to climate change, accounting for 2.89% of global emissions (IMO, 2019) and 13% of total EU greenhouse gas emissions (European Commission, 2021). In this landscape, environmental sustainability of shipping has received extensive research since 2005 (Mansouri et al., 2015) urging pressures across the sector to control its footprint (Fafaliou et al., 2006; Pang et al., 2021).

The MARPOL Convention by the IMO (1973), the official United Nations' agency responsible for the maritime sector, has been a landmark step to this end, but a slow shipping regulatory response makes the environment a key area of concern (Parviainen et al., 2018). To put this into context, the IMO was accused of greenwashing, when it announced its emission reduction measures in June 2021 (T&E, 2021). The IMO's multi-discussed 2020 sulphur cap (Lindstad et al., 2017),

the initial strategy on greenhouse gas emissions (Chircop, 2019), and the Ballast Water Management Convention (David et al., 2014) are only a few examples revealing the industry's attention towards its environmental impacts. Further concerning impacts include marine pollution from invasive species, debris, and sewage, among others (Andersson et al. 2016).

2.3.2. Communicating CSR in the shipping sector

In this pressured landscape, CSR has an important role to play because it brings higher regulatory standards to environmental responsibility (Parviainen et al., 2018). For instance, controversial industries, i.e., those with particular environmental or social impacts, such as the oil and gas sector, have been at the forefront of CSR initiatives, in order to compensate for the damage caused by their operations (Parviainen et al., 2018). In this context, various actors in the shipping sector seem to have shed a growing focus on enhancing safety and reducing their environmental footprint (Acciaro, 2012). Meanwhile, shipping organizations have increased involvement in CSR (Yuen et al., 2017), and especially environmental CSR, to address stakeholders' expectations (Theotokas & Kaza, 2007). Indeed, in terms of CSR, shipping seems to be emphasizing more on environmental over social concerns (Lun et al., 2014). Due to the overregulated nature of shipping as an industry, environmental responsibility in the sector usually concerns legislative compliance and the efforts to win a competitive advantage through the construction of an environmentally friendly image (Acciaro 2012).

Although scholars seem divided as to whether CSR in the shipping sector leads to higher financial performance, with some finding a correlation (Lu et al. 2009; Yuen et al. 2017) and some not (Pang et al., 2021), literature seems to agree that CSR positively affects shipping customers' satisfaction (Shin & Thai, 2015; Parviainen et al., 2018). In addition, environmentally friendly practices bring reputational benefits for a shipping company among stakeholders (Pang et al., 2021).

However, research shows that the globalized and B2B nature of shipping, which results in fragmentized environmental regulation, makes the industry lag behind other sectors in terms of CSR (Lister et al., 2015). This can be explained by the fact that, although consumers in the B2C (business-to-consumer) tend to emphasize more and more on CSR issues, stakeholders in the B2B (business-to-business) sectors continue focusing primarily on price (Wolf & Seuring, 2010). This

is partly driven by a lack of consumers' pressure and sense of supervision (Wolf & Seuring, 2010). Meanwhile, CSR is typically meant to cover regulatory gaps, but the existence of a global regulatory approach in the globalized sector does not make CSR an imminent need for shipping companies (Skovgaard, 2018).

Except for lagging in CSR, shipping is a traditional industry typically problematic in communicating its goals and efforts to the public (Skovgaard, 2018). Apart from catastrophic maritime incidents that attract media attention, and considering the industry's B2B nature, the public generally knows few things about the sector and specifically the industry's sustainability communications remain limited both internally and externally (Wang et al., 2021). This is important if it is considered that environmental damage is a particular contributing factor to maintaining the industry's problematic reputation (Fafaliou et al., 2006).

Available literature showcased a problematic nature of shipping in terms of communicating its CSR, while environmental CSR is a critical area of attention for the industry. This is interesting considering that, despite its B2B nature, successful communication of CSR to the public is seen as critical for maintaining the sector's attractiveness to potential employees (Wang et al., 2021).

2.3.3. Greek shipping and CSR communication

As far as the Greek CSR landscape is concerned, transparency of corporate activities and transactions, complete information, labeling and traceability of products, ensuring quality and safety, respect for consumer rights, and responsible management of the supply chain are only some of the key areas of interest regarding CSR business efforts, while the environment is one of the four pillars of attention along with society, employees and the market (CSR Hellas, 2022).

Greece is holding a historic connection to shipping industry, claiming the title of the world's largest shipowning nation (UGS, 2020) and seeing a growing industry potential (UNCTAD, 2019; Xinhua & Baltic Exchange, 2021). The country also accommodates the Port of Piraeus -Europe's fourth-largest container port and the world's top eighth shipping center (Xinhua & Baltic Exchange, 2021). With a total of 589 shipping companies in Greece (Petropoulos, 2019), the sector accounts for over 3% of total employment in the country (UGS, 2020).

Despite this and despite the organizational benefits of environmental CSR shown above, CSR in Greek shipping industry has not received extensive attention.

Research by Fafaliou et al. (2006) on small Greek short-sea shipping companies showed that only a few of them were involved in CSR initiatives, which was partly attributed to a lack of respect towards CSR benefits to organizational performance. However, in line with a trend of growing attention on CSR as indicated above, later research (Fafaliou & Aroni, 2016) found some level of CSR awareness and action among Greek shipping firms, but this is still at a basic, locally oriented level.

2.4. CSR and employees' attitudes

CSR literature has identified employees as a key stakeholder group of an organization (Carroll, 1999) and main company advocates (Dawkins, 2004; Du et al., 2010; Gross et al., 2021). Dawkins (2004) revealed that approximately one-third of employees recommended their organization to someone else motivated by the organization's responsible behavior. With most literature focusing on CSR and external stakeholders (Du et al., 2010; Krisch & Krauter, 2017; Tang & Gekara, 2020), there has been recently an increasing interest in the link of CSR to employees (Schaefer et al., 2019). There has also been growing research on the connection of CSR to organizational performance, which is often seen as "the business case for CSR" (Brammer et al., 2015, p. 339).

Adoption of CSR practices by a company can create not only stronger bonds with its employees, but also more positive attitudes (Yoon et al., 2014), attracting their support even in controversial sectors (De Roeck & Delobbe, 2012). Among others, studies confirm positive effects of CSR on employee retention (Du et al., 2010), employee engagement (Rupp et al., 2018), employee performance (Sun & Yu, 2015), job satisfaction (Ko et al., 2021;), organizational trust (Ko et al., 2021), organizational commitment (Ko et al., 2021) and organizational identification (Riketta, 2005). Meanwhile, internal CSR is likely to show employees that the firm cares about them (Bhattacharya et al., 2008). Therefore, this study argues that shipping organizations should confront employees as equally vital to external stakeholders, such as consumers, when it comes to communicating their CSR practices.

Literature has specifically proven the organizational benefits arising from employees' organizational trust (Baumruk, 2004; Lamsa & Pucetaite, 2006; Jiang & Probst, 2015; Islam et al., 2018), commitment (Porter et al., 1974; Meyer & Allen, 1997; Abilash & Siju, 2021; Islam et al., 2018) and identification (Bhattacharya et al.

2009; van Dick et al. 2004; Islam et al., 2018), all the three of which constitute the focus of this study. For example, both trust and commitment have been identified with employees engaging efficiently with work assignments (Baumruk, 2004).

Research has generally found CSR strongly affecting employees' identification, trust, and commitment, as it boosts their "motivation, knowledge sharing…and extra-role behavior" (Farooq et al., 2014, p. 577). This, in turn, leads to higher organizational performance (Branco & Rodrigues, 2006). Ko et al. (2019) identified a positive relationship between economic CSR and employees' trust, while Na et al. (2011) found economic responsibility affecting trust and commitment more than ethical CSR, in B2B companies. On the other hand, latest research by Ko et al. (2021) on freight forwarders, a sector related to shipping, showed that ethical CSR did not influence organizational trust and commitment of employees. In addition, Farooq et al. (2014) confirmed the positive impact of CSR on employees' identification, trust, and commitment, but could not find an association of environmental CSR with these concepts, leaving an open field for research.

2.4.1. Organizational identification

Employees' organizational identification is defined as their "perception of oneness with or belongingness to the organization" (Ashforth & Mael, 1989, p. 34). The concept is closely related to social identity theory, which has described how individuals classify themselves as parts of social groups of reference (Tajfel & Turner, 1986), varying from national to political groups. This membership plays a significant role in the efforts of individuals to construct and maintain a positive social identity (Ashforth & Mael, 1989). In this context, it is expected that people who form part of a specific work environment should evaluate themselves in a certain way as a result of this participation. Indeed, employees' organizational identification is a specific part of social identity theory, defined as self-perception of identifying with the organization (Knippenberg & Sleebos, 2006). Tyler (1999) confirms that the social image of the organization affects how employees assess their self-worth. Hence, social identity theory suggests that people are more satisfied when they relate themselves to a company with a positive reputation, as this boosts their self-concept (Tajfel & Turner, 1985). Often resulting from positive communications (Yue et al., 2020), organizational identification improves job satisfaction (van Dick et al. 2004),

organizational commitment (Marique & Stinglhamber, 2011), and intention to remain in the job (Jones, 2010), among others.

Social identity theory has confirmed that CSR specifically enhances organizational identification of employees (Brammer et al., 2015; Farooq et al., 2014), when those perceive that the company also offers higher quality services (Brammer et al., 2014). A specific feature of how CSR and CSR communication increase employees' identification, based on social identity theory, lies in the field of the company's reputation (Farooq et al., 2014) or the so-called "external prestige", which describes employees' assessment of their organization's social status (Hameed et al., 2016). For instance, environmental investments are likely to enhance the organization's external image, which leads to employees' positive evaluation of the organization and, consequently, feelings of pride and higher self-evaluation for belonging to such an organization (Van Dick, 2001; Farooq et al., 2014), At the same time, a company's environmental management practices themselves lead to employees' higher identification (Jaich, 2021).

In the same context, social identity theory also sees a company's social performance as a significant enabler in attracting and retaining employees who are probable to identify with positive corporate values (Peterson, 2004). Although research by Farooq et al. (2014) found no association between environmental CSR and employees' organizational identification, research suggests that environmental CSR can prove beneficial for identification in contradictory sectors (De Roeck & Delobbe, 2012). For instance, in oil and gas, environmental CSR can boost employees' identification, while the integration of CSR communication in HR further enhances the organizational benefits of CSR in terms of employees (De Roeck & Delobbe, 2012).

Kim et al. (2019) found that informativeness, transparency, consistency, and factual tone in CSR communication toward consumers lead to a more positive perception of the company's reputation. Considering the link of an organization's positive reputation to employees' identification as established by social identity theory, as well as the critical presence of environmental issues in the shipping industry as highlighted earlier in this section, and the evidence of positive CSR impact on shipping customers (Shin & Thai, 2015; Tang & Gekara, 2020; Pang et al., 2021), this study suggests a strong link between CSR communication and employees' organizational identification. Kim (2019) found that the positive effects of CSR

transparency are positively related to identification. Based on this, it is hypothesized that:

H1a: In the shipping sector, informativeness of CSR communication positively affects employees' organizational identification.
H1b: In the shipping sector, transparency of CSR communication positively affects employees' organizational identification.
H1c: In the shipping sector, consistency of CSR communication positively affects employees' organizational identification.
H1d: In the shipping sector, message tone of CSR communication positively affects employees' organizational identification.

2.4.2. Organizational commitment

Organizational commitment is a major attitude in human capital research (Nastiezaie et al., 2015), describing a sense of "attachment to the organization, characterized by an intention to remain in it, an identification with the values and goals of the organization; and a willingness to exert extra effort on its behalf" (Porter et al., 1974, p. 604). Organizational commitment reflects the employees' belief in the organization's values and principles, as well as the feeling of loyalty and moral obligation towards the organization (Weng et al., 2010). The concept is considered to positively affect the quality of relations between employees and the company (Ko et al., 2021), as well as organizational performance (Rashid et al., 2003) and job satisfaction (Abilash & Siju, 2021). Committed employees stay in the company despite any adverse conditions that may affect it (Meyer & Allen, 1997), accept its values, and are motivated to put strong effort on its behalf (Porter et al., 1974).

Previous research (Brammer et al. 2007; Farooq et al., 2014) has also relied on social identity theory to explain the direct link between CSR and organizational commitment. More specifically, an organization showing environmental responsibility impacts employee organizational commitment, in light of a growing interest and awareness of environmental issues (Nguyen et al., 2020). Based on social identity theory, a great deal of research has proven a positive association between CSR and employees' commitment (Brammer et al., 2007; Rego et al., 2010; Farooq et al., 2014). Organizational commitment of employees is enhanced, not only by internal but also by external CSR, as employees feel better when working for an organization which acknowledges the needs of its customers (Turker, 2008). This showcases the

importance of employees' perception of the company's CSR to organizational commitment.

Extending the positive effects of the company's positive external image on employees' self-esteem based on social identity theory as described above, it could be argued that this positive external image also enhances employees' commitment to this company (Farooq et al., 2014). Literature also suggests that commitment inside the organization is enhanced by transparency and consistency in CSR reporting (Rawlins, 2008; Kim & Ferguson, 2016), which is considered critical for shipping, an industry with problematic history in open communication (Skovgaard, 2018). Based on these, it is hypothesized that:

H2a: In the shipping sector, informativeness of CSR communication positively affects employees' organizational commitment.

H2b: In the shipping sector, transparency of CSR communication positively affects employees' organizational commitment.

H2c: In the shipping sector, consistency of CSR communication positively affects employees' organizational commitment.

H2d: In the shipping sector, message tone of CSR communication positively affects employees' organizational commitment.

2.4.3. Organizational trust

Pucetaite (2006) points out three common features making up trust: dependence between at least two parties, belief of one party that the other will act with good intentions, and belief that this expectation will not be fulfilled under pressure. As such, organizational trust can be seen as an attitude from the trustor (in this study, employees) to the trusted party (the organization) and is defined as "expectations, assumptions, or beliefs about the likelihood that another's future actions will be beneficial, favorable, or at least not detrimental to one's interest" (Robinson, 1996, p. 575). Rousseau et al. (1998) indicated risk and interdependence as pre-conditions for trust to exist. In their definition, risk describes the trustor's concerns about potential loss and interdependence describes a condition where the interests of one party are linked to the other's (Rousseau et al., 1998). On this, Vakola & Bouradas (2011) add that organizational trust reflects how employees feel and behave when the company is facing risky situations.

Organizational trust has been identified with the feeling of confidence by employees in the organization (Jena et al., 2018), as well as higher job performance, and engagement (Chughtai & Buckley, 2008), adaptability to business hazards (Ko et al., 2021) and lower operating costs (Connell et al. 2003). Employees' trust in the organization is not something fixed, but management approaches can cultivate it (Connell et al. 2003; Pucetaite, 2006). From this perspective, it could be considered that CSR can affect trust. Indeed, research has found CSR practices directly improving employees' organizational trust (Soni & Mehta, 2020; Kumari et al., 2021). Studying the impact of CSR on employees' commitment, Farooq et al. (2014) used the social exchange theory, which adds the reciprocal element of two parties exchanging benevolent actions. For example, while social identity theory is linked to employees' identification with a highly reputable company, social exchange theory suggests that CSR practices show to employees that the organization cares for its stakeholders. This in turn makes the employees "feel obliged to reciprocate…their company with positive attitudes and behaviors" (Farooq et al., 2014), thus enhancing their trust.

Literature has made evident that transparency in CSR reporting is strongly associated with trust (Rawlins, 2008), in a way that it reduces scepticism and urges people to even advocate for the firms they perceive as communicating CSR transparently (Kim & Lee, 2018). Additionally, evidence (Coombs & Holladay, 2011; Du et al., 2010) shows that inconsistency in CSR communication leads to people's distrust. When considering these factors along with the proven positive effects of CSR in cultivating employees' trust (Soni & Mehta, 2020; Kumari et al., 2021), this study hypothesizes that:

H3a: In the shipping sector, informativeness of CSR communication positively affects employees' organizational trust.

H3b: In the shipping sector, transparency of CSR communication positively affects employees' organizational trust.

H3c: In the shipping sector, consistency of CSR communication positively affects employees' organizational trust.

H3d: In the shipping sector, message tone of CSR communication positively affects employees' organizational trust.

2.4.4. Employees' perceptions of the company's CSR

In this study, employees' perceptions of the company's CSR are defined as the employees' awareness and understanding of their employing organization's CSR practices towards external stakeholders, either acquired directly or indirectly from the organization to the employees. Research shows that how employees perceive their company's CSR practices directly impacts their organizational identification (Hameed et al., 2016; Gond et al., 2017) and organizational commitment (Abbas, 2020).

More specifically, studies showed that a company's external CSR can significantly increase its employees' organizational commitment (Brammer et al., 2007) and identification (Carmeli et al., 2007; Kim et al., 2010). Meanwhile, employees' perceptions of their company's social presence boost trust by extending the image of this company from "a place to work" to a place that shares common values with them (Rodrigo & Arenas, 2008). CSR actions also result in a better external organizational image which boosts employee satisfaction (Barakat et al., 2016). Research on the positive outcomes of employees' positive perceived CSR includes both the employer's attractiveness to job applicants and the general satisfaction of current employees (Farooq et al., 2014).

The public's awareness of the company's CSR practices is a major factor in the efficiency of reputational benefits associated with CSR described above (Bhattacharya & Sen, 2004). Hence, enhancing this awareness is also an important factor in ensuring the CSR-linked reputational benefits (Kim, 2019). Pomering & Dolnicar (2008) found that the positive effect of CSR communication to consumers is mediated by their "self-company congruence". Kim (2019) revealed that consumers' CSR knowledge positively mediates the effect of CSR communication on a company's reputation to the public. A similar study on employees showed that the positive effect of CSR communication on an organization's reputation was mediated by employees' perception of the organization's hypocrisy (Jiang et al., 2022). Considering all the above together, it is hypothesized that:

H4: The impact of a) CSR informativeness, b) CSR transparency, c) CSR consistency and d) CSR message tone on employees' organizational identification will be mediated by their perceptions of the company's environmental CSR.

H5: The impact of a) CSR informativeness, b) CSR transparency, c) CSR consistency and d) CSR message tone on employees' organizational commitment will be mediated by their perceptions of the company's environmental CSR.

H6: The impact of a) CSR informativeness, b) CSR transparency, c) CSR consistency and d) CSR message tone on employees' organizational trust will be mediated by their perceptions of the company's environmental CSR.

2.5. Conceptual Model

Overall, this chapter used previous theoretical knowledge to end up with six hypotheses. Figure 1 illustrates the conceptual model of the present study, which provides a visual overview of all hypotheses:
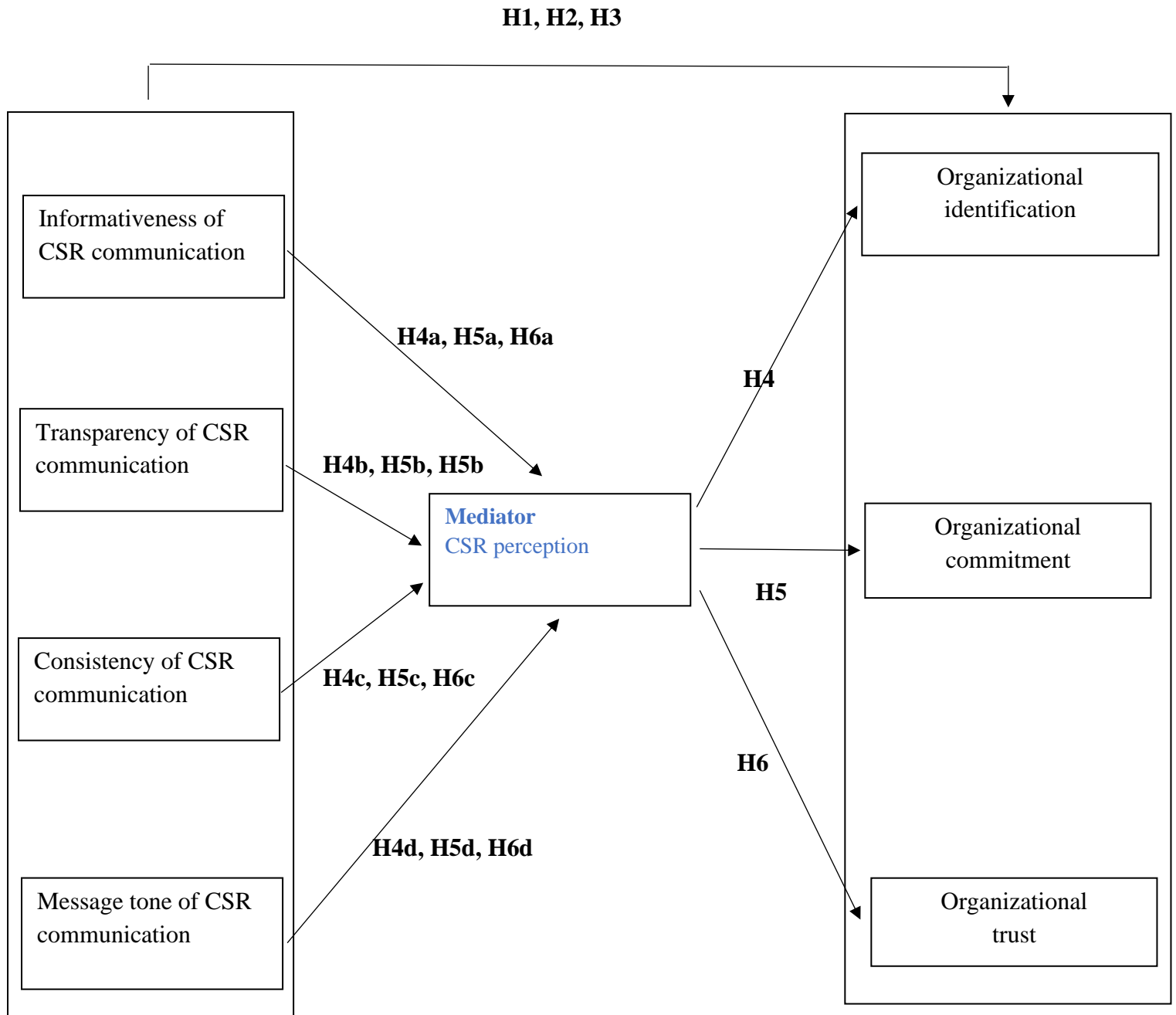
H1, H2, H3

Figure 1. Conceptual Model

3. Research design and methods

This chapter explains the methodology selected for the aforementioned conceptual model. As such, the chapter analyzes the reasons for selection of the research design and presents the sampling method and data collection, as well as the operationalization of the theoretical concepts contained in this study.

3.1. Research design

A quantitative method was adopted in the current research, as numerical data are a useful tool for measuring humans' behavior in social sciences (Russel Bernard, 2013). The advantage of quantitative research, compared to qualitative, relates to its capacity to study large groups of people and generalize the findings to even bigger groups (Swanson & Holton, 2005). Considering that the Greek shipping sector regards a large group of people, with 589 shipping companies currently in operation in the country (Petropoulos, 2019), a quantitative method seemed more appropriate than a qualitative one. More specifically, qualitative could enable a deeper understanding of the specific respondents' attitudes but would make it harder to generalize the findings for the whole Greek sector (Swanson & Holton, 2005). Contrary to the qualitative, the quantitative method follows a deductive approach, meaning that the researcher formulates hypotheses based on theory and then tests if they are true or not (Matthews & Ross, 2010). This enables, not only generalization of findings, but also prediction of some outcomes (Zhou & Sloan, 2009).

As the RQ at hand examined shipping employees' perceptions and attitudes, a survey was selected as the most appropriate research method for examining attitudes and behaviors (Matthews & Ross, 2010). Questionnaires are beneficial for the researcher as they enable the concentration of factual data from a wide range of people and the gathering of this data in a standardized way, enabling him/her to directly put it into a computer for analysis of results quickly and easily (Matthews & Ross, 2010). Another advantage of the survey relates to ethical considerations, as questionnaires can be anonymous securing respondents' privacy (Matthews & Ross, 2010). As such, an online survey questionnaire was created using Qualtrics (see Appendix A).

The benefits of an online survey, instead of a conventional one, are low costs, high convenience, and quick response rates (Gunter et al., 2002), as well as

confidentiality and anonymity (Matthews & Ross, 2010; Rice et al., 2017). Considering that an estimated 78,1% of Greek population are Internet users as of 2020 (World Bank, 2022), the researcher of the present study was able to reach a large number of participants. A major disadvantage of the online survey is that the researcher cannot control whether the respondent will answer the questions, which creates issues for sample representativeness (Punch, 2014), as well as for validity and generalizability of findings (Singh & Sagar, 2021). However, the online form was still chosen as the most suitable due to the majority of its advantages. It was also considered a safer means of data collection amid the COVID-19 pandemic (Singh & Sagar, 2021). Also, as this study used a "self-completion" questionnaire (Matthews & Ross, 2010), specific attention was given to the clarity and simplicity of instructions as the first contact with potential respondents.

3.2. Sampling

3.2.1. Proposed sample and sampling strategy

As the goal of the present study was to examine the impact of CSR communication on employees, employees working in shipping companies in Greece constituted the survey population. This included both office employees and seafarers employed by Greek-based companies. The survey was in online form, so participants were recruited online, using emails and social media platforms. Considering the wide nature of shipping operations, the survey was distributed to a wide range of shipping companies, including shipowning and operating companies, charterers, brokers, marine leisure firms, maritime security firms, marine consultants, marine insurance firms, and classification societies.

This research opted for non-probability sampling, a method enabling the researcher to select samples based on accessibility (Etikian, 2015). This was chosen for two reasons. First, although probability sampling is considered the best for ensuring generalizability of findings thanks to random selection, non-probability sampling can still ensure validity and has always been an important part of academic research thanks to its low-cost and convenience benefits (Sarstedt et al., 2018). Second, the nature of the topic, which focused on the specific and limited population of shipping employees in Greece, could not allow a random sampling (Etikian, 2015). Hence, a non-probability method was selected, including a combination of convenience and snowballing sampling methods.

As a key category of non-probability sampling, convenience sampling prioritizes the convenience of the researcher to reach respondents, reducing the chances of equal inclusion for the whole population, thus creating representativeness and generalizability issues (Sarstedt et al., 2018). However, convenience sampling has been used in a great majority of studies (Sarstedt et al., 2018) and it was opted, so that as many as possible shipping employees could be recruited in an efficient way.

In addition, this research used the snowball method, a sampling technique where survey respondents themselves promote the survey to other potential respondents, such as their relatives and friends -or, in this case, their colleagues-, who then promote the survey to their personal network of friends and family and so on (Zhou & Sloan, 2011). A key disadvantage of this sampling method is that it may provide biased results, as the initial respondents could "form the entire sample and exclude access to some members of the population of interest" (Etikian, 2015, p. 6-7) Another disadvantage is that it makes hard for the researcher to evaluate the eligibility of participants (Biernacki & Waldorf, 1981).

However, snowballing is still one of the most popular forms of non-probability sampling, specially tailored to sociological research (Coleman, 1958), because it enables the researcher to gather responses from hard-to-reach populations (Etikian, 2015). Considering that recruitment of numerous shipping employees as survey participants requires a significant amount of networking time and resources, the snowballing method was also used for providing the convenience of reaching a higher number of relevant participants in a short period of time (Coleman, 1958).

3.2.2. Data collection

The online survey questionnaire for this research was conducted using Qualtrics. Before starting actual data collection, a pre-test of five participants from the shipping sector was conducted to ensure that the questions are clear and well-structured, thus making sure of the quality and functionality of the research instrument. As such, these participants were asked to provide their feedback for relevant adjustments to be made. Overall, the feedback was positive, with one respondent commenting specifically that the survey design was not eye friendly. This was therefore adjusted to be more attractive to the participants. In addition, valuable feedback was gained concerning the comprehension of items, with minor

modifications made to enhance clarity. All the pre-test participants also commented that they felt like answering the same questions differently.

The actual data collection took place between 11 April and 12 May 2022. First, the researcher posted the survey on LinkedIn, which is the world's biggest professional networking website measuring 800 million members (LinkedIn, 2022) and gathering a great part of shipping professionals. The privacy settings of the post were "public", so that everyone in the LinkedIn community could see it. To make sure that the targeted population would be attracted, the post highlighted that the survey was addressed to anyone currently employed in a shipping company in Greece, either as a seafarer or as an office employee. The posting took place one time at the early stages of the survey dissemination and another time two weeks later.

Then, the researcher conducted thorough Internet-based research on shipping companies currently under operation in Greece. Visiting every website of a Greek-based shipping organization, the researcher created a list of companies and their communication details. As a result, the survey was sent to the professional e-mails of 159 shipping companies, where the potential participants received the survey link accompanied by a short text asking for their participation and thanking them in advance (Appendix B). There were no personal data concerns, as company email addresses do not fall under GDPR protection (EU Commission, 2016). The 75 of these emails were sent during afternoon hours, between 16.00-18.00 local time – which is shortly before the end of the working day– and the 84 were sent in the morning hours of the next day, between 8.00-10.30 local time -which is generally the start of the working day in shipping companies in Greece. However, 19 of these emails were undeliverable.

In addition, the researcher published the survey link in a well-known Facebook group called "University of Piraeus Maritime Studies Alumni Association". The group is gathering 1,150 members, mainly young professionals of the maritime sector in Piraeus, who were kindly asked to complete it and thanked in advance. Similarly, the survey was posted in an open Facebook group called "Ναυτικοί και Ναυτιλία" ("Seafarers and Shipping") -measuring about 2,400 members- and another open Facebook group called "ΤΝΕΥ", which is gathering 1,600 members, mainly young professionals of the maritime sector in the Greek island of Chios.

Finally, the researcher sent the survey link and text via social media messages to her personal network of shipping professionals, who were requested to promote it

to their own companies and networks based on the snowballing method (Coleman, 1958). She also regularly sent kind reminders, because in many cases, potential respondents opened the survey but would not complete it.

3.2.3. Data cleaning and final sample

The dataset was exported from Qualtrics as an SPSS data file. Before the analysis started, the data had to be "cleaned", which means any incomplete responses to be removed from the dataset, to enhance internal validity. More specifically, during these 32 days, a total of 262 respondents participated in the survey. Of these participants, only 205 were recorded by Qualtrics as "recorded answers" and 57 were recorded as "responses in progress". As such, the initial SPSS dataset exported included 205 answers. The SPSS file with the 205 recorded responses was thoroughly examined for potential issues to be identified. For example, it was found that only 187 out of the 205 recorded responses were complete.

Of the 187 respondents who finished the survey, two were deleted for having completed the survey in a duration of 72 and 53 seconds respectively, which is considered not enough for a proper elaboration on the questions. An indicative example is that, in both cases, the same response (the neutral one) was selected for every single item in the questionnaire. Finally, another response was excluded for having a wrong answer in the "How many years have you been in the sector", where the response was "No". This left a final sample of 184 respondents, which were included in the analysis.

Of the 184 respondents that were included in the data analysis, 47.8% were female (*N*=88), 49.5% male (*N*=91), 1.6% non-binary/third gender (*N*=3) and 1.1% preferred not to say (*N*=2). Further, the respondents were between 23 and 60 years old, with a mean age of 34.49 years old (*SD*=9.076) and a median of 30.00. As far as the educational level of respondents is concerned, it can be noticed that they were highly educated, with an 82.6% having achieved a Bachelor's (40.2%, *N*=74) or a Master's/PhD degree (42.4%, *N*=78). More specifically, only 3.3% (*N*=6) had achieved a high school diploma as their highest level of education and only 4.3% (*N*=8) had achieved Institute of Vocational Training ("Ινστιτούτο Επαγγελματικής Κατάρτισης") or IEK, which is a program of non-formal, post-secondary education and training inferior to university studies. Lastly, 9.8% of the sample claimed to have studied in Merchant Navy (*N*=18). It is noted that one participant who selected

"other" for his education level and typed "University degree" was included in the "Bachelor's degree" default responses during the data cleaning.

In addition to this demographic information, the survey asked the participants which type of shipping sector they worked in. Most respondents (31.5%, $N=58$) were employed in a ship-owning / ship-operating company, while 19.6% ($N=36$) were working in Marine Insurance, 12.5% ($N=23$) for a Shipping Charterer, 4.9% ($N=9$) for a Classification Society, and 8.7% ($N=16$) were seafarers. Lastly, 23.9% ($N=44$) were working in other sub-sectors, such as Marine Consultancy ($N=7$), Ship Broking ($N=4$), and others.

Regarding the number of years that they have been working in the company, the majority of respondents (44%, $N=81$) said between 1.5-5 years, the 23.9% ($N=44$) between 5.5-10 years, the 15.2% ($N=28$) for 1 year or less, the 9.8% ($N=18$) for 10.5-20 years and the 7.1% ($N=13$) for over 20 years. Accordingly, most respondents (40.8%, $N=75$) have been in the shipping sector for 1.5-5 years, the 25.5% ($N=47$) for 5.5-10 years, the 17.4% ($N=32$) for 10.5-20 years, the 10.3% ($N=19$) for over 20 years and the 6% ($N=11$) for 1 year or less.

Table 2.1: Summary of demographic information of respondents (continuous variables)

Variables	MEAN	SD	N
Age	34.49	9.07	184
Years in the company	6.65	6.58	184
Years in the sector	9.03	7.76	184

3.3. Operationalization and measurements

For this study, previously tested and well-known measurements were used and adjusted to the topic of environmental CSR communication and employees' attitudes. Although this study focused on shipping employees in Greece, the questionnaire was in English, considering that this is the official language of shipping (Koriche, 2015) and that shipping employees work in a globalized, multicultural environment (UNCTAD, 2019). The survey started with a consensus form (see Appendix A1), which ensured anonymity and confidentiality of responses, provided instructions about completion of the questionnaire and included the researcher's name and contact email address for people who could have questions (Matthews & Ross, 2010). At its

end, the form asked the participants to select the "Agree to proceed" option, to ensure that they had read the instructions and consented to provide their responses.

Furthermore, Matthews & Ross (2010) argue that the survey research must ask potential respondents about things they know. Considering the familiarity of the shipping industry with the CSR concept, the targeted population was seen as appropriate for answering the questionnaire. However, in order to ensure that all the respondents were familiar with what they had to answer, the survey included also a very short text, following the consensus form, which explained what the environmental CSR of a company is about (Appendix A2).

Overall, the questionnaire included a total of 45 questions, 6 of which were concerned demographics and background information. The other 39 items were adjusted from previous studies, based on a 5-point Likert scale (1=strongly disagree, 5=strongly agree) and measured three different sub-sections: Employees' perception of the company's environmental CSR, environmental CSR communication, and employees' attitudes. With the Likert scale, respondents were enabled to express how strongly they feel about the items, distinguishing themselves from other respondents in the survey (Matthews & Ross, 2010).

3.3.1. Organizational trust

The Dependent Variable (DV) "organizational trust" was measured using a 5-item scale from Ko et al., (2021), including items like "*My company is generally responsible*". (Appendix A2). The items are based on work by Lee & Xu (2014), Ko & Cho (2019) and Cook & Wall (1980). As in the original research, this variable was also measured using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). In the original research, this scale had a reliability coefficient of Cronbach's α=.88 (Ko et al. 2021). In this study, the Cronbach α=.90, indicating high reliability (Shrestha, 2021).

3.3.2. Organizational commitment

The DV "organizational commitment" was measured using also a 5-item scale from Ko et al. (2021), based on work from Lee & Xu (2014); Moon (2018); Lee (2012); Cook & Wall (1980) and including items such as "I am proud to be a member of the organization" (Appendix A2). As in the original research, this variable was also measured using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). In the

original research, this scale had a Cronbach's α=.90 (Ko et al. 2021). In this study, the Cronbach α=.86 still indicated very good reliability (Shrestha, 2021).

3.3.3. Organizational identification

The DV "organizational identification" was measured using a 6-item scale from Edwards & Peccei (2007), including items such as "My employment in the company is a big part of who I am". As in the original research, this variable was also measured using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). In the two original studies in professional samples, this scale had a Cronbach's α=.87 and Cronbach's α=.92 respectively (Edwards & Peccei, 2007). In this study, the Cronbach α=.91, indicating high reliability.

3.3.4. Environmental CSR communication

The Independent Variable (IV) "environmental CSR communication" was measured using four different scales from Kim (2019), based on four CSR communication factors presented below. The scales used for the communication factors are based on previous thorough research by Kim & Ferguson (2014, 2016), but have also been used by several other researchers as prerequisites for successful CSR communication (Morsing & Schultz, 2006; Du et al., 2010; Coombs & Holladay, 2011).

CSR informativeness measures what CSR efforts the organization is exactly engaged in (Kim & Ferguson, 2016) and includes six items like "I believe the company has been actively providing me with potential results of its current CSR activities" (Appendix A3). As in the original research, this variable was measured using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). In the original study by Kim (2019), this scale had a Cronbach's α=.93. In this study, the Cronbach α=.89 still showed very good reliability (Shrestha, 2021).

Transparency measures the company's honesty on CSR reporting and includes three items, such as "I believe the company has informed the public if its CSR initiative fails" (Appendix A2). As in the original research (Kim, 2019), this variable was measured using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). This scale had originally a high reliability with Cronbach's α=.94, but in this study, the Cronbach α=.91, which is indicating a high reliability (Shrestha, 2021).

In addition, consistency describes the company not changing details regarding its CSR practices (Puncheva-Michelotti et al., 2018) and includes items, such as "I believe consistency in CSR communication of the company is important to me" (Appendix A3). As in the original research (Kim, 2019), this variable was measured using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). This scale had originally a high reliability with Cronbach's α=.96. The reliability in this study was still good with Cronbach α=.84 (Shrestha, 2021).

Finally, the message tone refers to whether the company's tone is perceived as being based on facts or is self-promotional when communicating its CSR practices (Kim, 2019). The scale on message tone included items, such as "I feel that the company's CSR messages have been based on facts" (Appendix A3) and is measured using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). This scale had originally a good reliability with Cronbach's α=.86. In the present study, two items had to be reversed for reliability to be achieved. For example, the item "The company's CSR messages have been too promotional" became "The company's CSR messages have been not too promotional" and the item "The company's CSR messages have been too self-congratulatory" became "The company's CSR messages have been not too self-congratulatory". As such, the reliability in this study was found acceptable with Cronbach α=.79 (Shrestha, 2021).

Considering that the scales originally examined the expectations of consumers towards a company's CSR communication, but the present study was addressed to employees, there were slight modifications in the scales. For example, when measuring the CSR consistency factor, the questions were slightly modified from "*What the company is communicating about its CSR activities should be consistent*" to "*What the company is communicating about its CSR activities to the public should be consistent*". This clarified for the respondents that the items concerned their own perceptions about their company's CSR communication practices towards the external world. In addition, all items in this section were modified to include the environmental factor, i.e., where the original item read "*CSR communication*", it became "*environmental CSR communication*" (see Appendix A2).

3.3.5. Mediator: Employees' perceptions

"Employees' perception of company's environmental CSR" was added as a mediator variable (M) in the study. A mediator causes mediation in the relationship

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between the DV and the IV (Baron & Kenny, 1986). This means that the study aimed to measure how the shipping companies' environmental CSR communication (IV) affects employees' organizational trust, commitment, and identification (DV), through the mediated effect of the employees' perceptions of the companies' environmental CSR actions (M). In a mediational model, the IV first affects the mediator, and then the mediator affects the DV, meaning the mediator acts as a possible explanation for the relationship between IV and DV (Namazi & Namazi, 2016).

The mediator was measured using a 6-item scale created by Ko et al. (2021), which examines the ethical responsibility of CSR and was also used in a study on employees of logistics sector. Example items in the scale included "*My company has a general code of ethics and guidelines*" (Appendix A3). In this section, the items were also slightly reformed to measure the environmental factor, i.e. "*My company has a general code of ethics and guidelines regarding environmental issues*". This variable was also measured using a 5-point Likert scale (1=strongly disagree, 5=strongly agree). In the original research, this scale had a reliability coefficient of Cronbach's α=.81 (Ko et al. 2021). In this study, the Cronbach α=.87 shows very good reliability (Shrestha, 2021).

3.3.6. Demographics

The last section was comprised of demographics, including questions on the respondent's gender, age, highest educational level achieved, type of shipping company, years of working in the sector and years of working in the company (Appendix A2).

3.4. Data analysis

The data collected were analyzed using the software SPSS Statistics version 28, to decide whether each one of the hypotheses is accepted or rejected, and eventually, the overarching RQ to be answered.

3.4.1. Validity and Reliability

Validity in survey research means the questionnaire is measuring what it is supposed to measure (Matthews & Ross, 2010). The pre-tests were proven useful for testing if the respondents comprehended what exactly they were asked about, while the selection of previously used and scientifically proven scales improved the validity

of results (Etchegaray & Fischer, 2010). In addition, the use of pre-existing scales, which sometimes asked for the same information in a different way, helped ensure convergent validity (Matthews & Ross, 2010). A good example of this are the following two items: "I believe that the company I work in has provided the public information about its environmental CSR failures, not just successes" and "I believe that the company I work in has informed the public both good and bad information about its environmental CSR activities".

Reliability in survey research comes when the items selected are measuring what they are supposed to measure in a consistent way (Sarstedt et al., 2017). Cronbach alpha is one of the most regular internal consistency estimates for measuring reliability of language test results (Brown, 2002). It is based on the logic that numerous items are measuring the same underlying construct (Shrestha, 2021). It generally ranges between 0 and 1, but if it is 0.7 or higher, the reliability is satisfied, while a high level of alpha shows that the items are highly correlated (Shrestha, 2021). In the present study, a reliability test was conducted for each of the eight scales measuring the eight different variables. As mentioned above, in all cases, Cronbach's alpha was over 0.7, so the reliability of each scale was verified.

3.4.2. Analysis

After the reliability tests, a total of eight new variables were constructed. Four IVs and three DVs were included in this study. There was also one Mediator variable (M). As all of the IVs were continuous and the relationship between variables was linear, an Ordinary Least Squares regression (OLS) was considered the best to examine the association between the variables and, thus, to discover whether the hypotheses of the research were valid or not (Pallant, 2007). OLS is a typical statistical practice for estimating coefficients of linear regression equations which reflect the association of one or more IVs and a DV (XLSTAT, 2022).

More specifically, this study examined the five hypotheses using multiple linear regression analysis. This type of regression analysis is based on correlations but also enables a more complex examination of the relationship between several IVs and one DV (Pallant, 2007). For instance, the linear multiple regression examined the four predictors (CSR Informativeness, CSR Transparency, CSR Consistency and CSR Message Tone) on the DV Organizational Identification, and then the same four

predictors on the DV Organizational Commitment, and lastly, the same four predictors on the DV Organizational Trust.

For a multiple linear regression analysis to be performed, several assumptions have to be tested (Kneer, 2022). The first precondition for conducting a regression analysis is the existence of at least 15 respondents per IV (Kneer, 2022). This is satisfied in the present study, as the sample size includes 184 participants. A second prerequisite is to check the normality assumption, an important test in order to unbiasedly estimate standard errors, confidence intervals and P-values (Schmidt & Finan, 2018). As such, a normality check had to be conducted to test if the residuals of the regression follow a normal distribution (Kneer, 2022). The normal P-P plot diagram showed that the data were normally distributed (Appendix C1). Another prerequisite that must be checked is linearity - meaning that the IVs have a straight-line relationship with the DV. However, when the data are normally distributed, there is no need to check on linearity (Poole & O'Farrell, 1971).

In addition, the data had to be checked for homoscedasticity, describing whether the regression residuals were equally distributed. The homoscedasticity assumption can significantly affect the validity of linear regression results (Yang et al., 2019). The statistical tests showed that these residuals were equally distributed above and below zero on the X-axis, and to the left and right of zero on the Y-axis (Appendix C2).

Lastly, a check was performed for the absence of multicollinearity -explaining the high intercorrelations among the IVs themselves (Poole & O'Farrell, 1971). Having multicollinear IVs results in individual regression coefficients for each variable to be non-identifiable (Poole & O'Farrell, 1971). In this study, the lack of multicollinearity was checked using VIF values. As each value in the Coefficients table was below 10, the absence of high correlations among the IVs was confirmed (Appendix C3). Therefore, the OLS regression analysis could be performed.

Then, to test the potential mediation effect of the employees' CSR perception on the model, the statistical package PROCESS Macro version 4.1 was used in the SPSS (Hayes, 2022). The 95% confidence interval was generated with 5000 bootstrap samples.

4. Results

The previous chapter validated the reliability of measurements, so, in this chapter, the relationship between the DVs and the IVs will be analyzed and the six hypotheses will be tested. In addition, the results of a mediation analysis on the effect of the IVs on the DVs will be presented.

4.1. Descriptive analysis

When asked to what extent they think that their company is engaged in environmental CSR, most respondents (33.7%) were neutral, while a considerable part (30.4%) answered "Much" and 16.8% said "Very Much". Meanwhile, an estimated 19% answered "Little" and "Very Little". The average score of environmental CSR engagement according to the respondents in this study is $M=3.40$ $(SD=1.07)$ on a 5-point Likert scale.

The average score of organizational identification of the respondents in this study is $M=3.51$ $(SD=0.73)$ on a 5-point Likert scale. Being higher than the scale's middle of 3.0, the score indicates a more-than-moderate level of the respondents' identification with the shipping companies they work in. Meanwhile, the average score of organizational commitment of the respondents in this study is $M=3.63$ $(SD=0.70)$ on a 5-point Likert scale, reflecting a good level of the employees' commitment to their companies. Finally, the average score of organizational trust is $M=3.60$ $(SD=0.74)$ on a 5-point Likert scale, which shows again a good level of the employees' trust in their companies.

The average score of CSR informativeness in this study is $M=3.39$ $(SD=0.70)$ on a 5-point Likert scale. This means that the respondents of this study perceive the company they work in as scoring more than average in the communication of their environmental CSR activities toward the public. Moving to the CSR transparency, the average score of this IV is $M=3.09$ $(SD=0.85)$ on a 5-point Likert scale, which lies slightly above the scale's middle of 3.0. This score shows that the employees surveyed consider their companies being moderately transparent in their environmental CSR communication. For the CSR consistency factor, the average in this study is $M=3.65$ $(SD=0.73)$ on a 5-point Likert scale, which scores higher than average and the highest when compared with all the 8 variables. This means that the respondents find consistency as the most important factor in organizations'

environmental CSR communication. Lastly, the average score of CSR message tone in this study is *M=3.36 (SD=0.63)* on a 5-point Likert scale, also slightly above the middle. This may reflect shipping employees' perception that organizations score the average on presenting completely factual information in their environmental CSR communication.

Finally, the average score of respondents' environmental CSR perception in this study is *M=3.55 (SD=0.70)*. Scoring above 3, which is the middle of the scale, shows the employees have a relatively good perception of their companies' engagement with environmental CSR. It becomes evident that all the responses on the questionnaire scored higher than the middle value of 3.

Table 4.1: Overview of Variables

Variables	MEAN	SD	Cronbach a
CSR informativeness	3.39	0.70	.89
CSR transparency	3.09	0.85	.91
CSR consistency	3.65	0.73	.96
CSR message tone	3.36	0.63	.79
Organizational identification	3.51	0.73	.91
Organizational commitment	3.63	0.70	.86
Organizational trust	3.60	0.74	.90
CSR perception	3.55	0.70	.87

N=184

4.2. Correlations

Research uses the bivariate correlation, or Pearson correlation, to check both the extent and the direction of the linear relationship amongst numerous variables (Pallant, 2007). More specifically, Pearson correlation coefficients (*r*) can only take values between +1 and -1, indicting a positive and negative relationship among the variables, respectively. A positive relationship means that when the one variable increases, the other variable increases as well, while negative means that when the one variable increases, the other variable decreases. In addition, the number of the value reflects the level of relationship between the variables. For instance, if the value is 0, this shows no relationship among the variables. According to Cohen (1988), if

the *r* value is between $r = .10$ to $r = .29$, the strength of the relationship is considered small, if it is between $r = .30$ to $r = .49$, it is medium, and if $r = .50$ to $r = 1.0$, it is strong. The following table includes all the correlations found for the IVs and DVs and the Mediator.

Table 4.2: Correlation analysis between CSR informativeness, CSR transparency, CSR consistency, CSR message tone, Organizational Identification, Organizational Commitment, Organizational Trust and CSR perception

Variables	CSR informativeness	CSR transparency	CSR consistency	CSR message tone	CSR perception	Organizational Identifica	Organizational Commit	Organizational
CSR informativeness	1,00							
CSR transparency	,653***	1,00						
CSR consistency	,483***	,356***	1,00					
CSR message tone	,439***	,240***	,462***	1,00				
CSR perception	,701***	,466***	,447***	,425***	1,00			
Organizational Identification	,360***	,336***	,384***	,341***	,529***	1,00		
Organizational Commitment	,406***	,322***	,473***	,436***	,545***	,805***	1,00	
Organizational Trust	,555***	,390***	,441***	,417***	,612***	,700***	,753***	1,00

*Significance levels: ~p< .10   *p< .05   ** p< .01   *** p< .001* (2-tailed)

Based on the results of the correlation analysis, there is a strong correlation among all the three DVs (organizational identification, commitment, and trust) with a significance of $p<.001$. As the correlations are positive, the level of organizational commitment corresponds to the level of organizational trust and the level of organizational identification. As expected, there is also a high correlation between the company's CSR informativeness and employees' perception of their company's environmental CSR, which means that the level to which the companies inform about their environmental CSR activities corresponds to the employees' perception of these activities.

4.3. Hypotheses testing

4.3.1. Hypothesis 1

The first hypothesis suggested that, in the Greek shipping sector, a) informativeness of CSR communication, b) transparency of CSR communication, c) consistency of CSR communication, and d) message tone of CSR communication positively affect employees' organizational identification. So, for the DV Organizational Identification, a multiple linear regression analysis was performed, with CSR informativeness, CSR transparency, CSR consistency, and CSR message tone as predictors. This model explains 22% of the variance. This means that the four CSR communication factors determine the variance of organizational identification to a considerable, but not large, extent.

The model was found to be significant, $F(4,189) = 12.83$, p< .001, R^2=.22. Out of the four predictors, transparency (β=.174, SE=.075, p=.048), consistency (β= .209, SE=.079, p=.009), and message tone of CSR communication (β= .172, SE=.090, p=.028) were found to be significant predictors for employees' organizational identification, while informativeness of CSR communication was found to be non-significant (β=.07, SE=.101, p=.470). This means that the transparency, consistency and factual tone in CSR communication of a shipping company toward the public positively affects their employees' identification with the company. So, H1a is rejected, while H1b, H1c and H1d are confirmed.

4.3.2. Hypothesis 2

The second hypothesis suggested that, in the Greek shipping sector, a) informativeness of CSR communication, b) transparency of CSR communication, c) consistency of CSR communication, and d) message tone of CSR communication positively affect employees' organizational commitment. So, for the DV "Organizational Commitment", a multiple linear regression analysis was performed, with "CSR informativeness", "CSR transparency", "CSR consistency" and "CSR message tone" as predictors. This model explains 30% of the variance. This means that the four CSR communication factors determine the variance of organizational commitment to a larger extent than the variance of organizational identification.

The model was found to be significant, $F(4,179) = 19.99$, p< .001, R^2=.30. Out of the four predictors, only consistency (β=.277, SE=.072, p< .001), and message

tone of CSR communication (β= .239, SE=.082, p=.001) were found to be significant predictors of employees' organizational commitment, while there was no significance between informativeness of CSR communication (β=.103, SE=.092, p=.260) and transparency (β=.099, SE=.068, p=.233) with employees' commitment. This means that the consistency and factual tone in CSR communication of a shipping company to the external world positively affects their employees' commitment to the company. So, H2a and H2b are rejected, while H2c and H2d are confirmed.

4.3.3. Hypothesis 3

The third hypothesis suggested that, in the Greek shipping sector, a) informativeness of CSR communication, b) transparency of CSR communication, c) consistency of CSR communication, and d) message tone of CSR communication positively affect employees' organizational trust. So, for the DV "Organizational Trust", a multiple linear regression analysis was conducted, with "CSR informativeness", "CSR transparency", "CSR consistency" and "CSR message tone" as predictors. This model explains 36% of the variance. This means that the four CSR communication factors determine the variance of organizational trust to a larger extent than the variance of both organizational identification and commitment.

The model was again found to be significant, $F(4,179) = 25.94$, $p< .001$, R^2=.36. Out of the four predictors, informativeness (β=.368, SE=.093 p< .001), consistency (β=.170, SE=.073, p=.019) and message tone of CSR communication (β= .165, SE=.082, p=.020) were found to be significant predictors for employees' organizational trust, while transparency (β=.049, SE=.069, p=.533) was found as a non-significant factor for employees' trust. This means that informativeness, consistency and message tone in CSR communication of a shipping company to the external world positively affects their employees' trust in the company. So, H3a, H3c and H3d are accepted, while H3b is rejected.

Table 4.3: Results of hypothesis testing

Number	Hypothesis	Rejected/Confirmed
H1a	In the shipping sector, informativeness of CSR communication positively affects employees' organizational identification.	*Rejected*

H1b	In the shipping sector, transparency of CSR communication positively affects employees' organizational identification.	*Confirmed*
H1c	In the shipping sector, consistency of CSR communication positively affects employees' organizational identification.	*Confirmed*
H1d	In the shipping sector, message tone of CSR communication positively affects employees' organizational identification.	*Confirmed*
H2a	In the shipping sector, informativeness of CSR communication positively affects employees' organizational commitment.	*Rejected*
H2b	In the shipping sector, transparency of CSR communication positively affects employees' organizational commitment.	*Rejected*
H2c	In the shipping sector, consistency of CSR communication positively affects employees' organizational commitment.	*Confirmed*
H2d	In the shipping sector, message tone of CSR communication positively affects employees' organizational commitment.	*Confirmed*
H3a	In the shipping sector, informativeness of CSR communication positively affects employees' organizational trust.	*Confirmed*
H3b	In the shipping sector, transparency of CSR communication positively affects employees' organizational trust.	*Rejected*
H3c	In the shipping sector, consistency of CSR communication positively affects employees' organizational trust.	*Confirmed*
H3d	In the shipping sector, message tone of CSR communication positively affects employees' organizational trust.	*Confirmed*

4.4. Testing of Mediation Effect

Then, it was tested whether the employees' pre-existing perception about the company's environmental CSR activities (CSR perception) could function as a mediator that forms an intermediate link between the four IVs (CSR informativeness, CSR transparency, CSR consistency, and CSR message tone) and the three DVs

(organizational identification, commitment, and trust). To test the potential mediation effect of the employees' CSR perception on the model, the statistical package PROCESS macro version 4.1 was used in the SPSS (Hayes, 2022). Mediation includes four steps: The significance between the IV and the DV, the significance between the IV and the Mediator, the significance between the mediator and the DV in the presence of the IV and, finally, the insignificance of the initial IV and the DV in the presence of the Mediator (Elite Research LLC, 2004-2013). The 95% confidence interval was generated with 5000 bootstrap samples. Also, Sobel's tests (1982) were used to validate the significance of mediation effects.

4.4.1. Hypothesis 4a

Step 1 of the mediation model showed that the regression of CSR informativeness (IV) on organizational identification (DV), ignoring the mediator, was significant (b=.3759, t (182) =5.21, SE=.0721, p=.000). Step 2 showed that the regression of CSR informativeness (IV) on CSR perception (M) was also significant (b=.7060, t (182) = 13.26, SE=.0532, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR informativeness, was significant, (b=.5624, t (181) = 6.14, SE=.0916, p= .000). Step 4 of the analyses revealed that, controlling for the mediator (CSR perception), CSR informativeness was no longer a significant predictor of organizational identification (β = -.0212, t (181) = -.2294, SE=.0922, p=.818), so mediation is confirmed. A Sobel test was also conducted and found full mediation in the model (z=7.09, p=.000). So, it was found that employees' perception about the company's environmental CSR practices fully mediated the relationship between informativeness in CSR communication and employees' organizational identification.

4.4.2. Hypothesis 4b

Step 1 of the mediation model showed that the regression of CSR transparency (IV) on organizational identification (DV), ignoring the mediator, was significant (b=.2876, t (182) = 4.80, SE=.0598, p=.000). Step 2 showed that the regression of CSR transparency (IV) on CSR perception (M) was also significant (b=.3852, t (182) = 7.09, SE=.0543, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR transparency, was significant, (b=.4926, t (181) = 6.72, SE=.0733, p=.000). Step

4 revealed that, controlling for the mediator (CSR perception), CSR transparency was no longer a significant predictor of organizational identification (b= -.0979, t (181) = 1.61, SE=.0606, p=.1082), so mediation is confirmed. A Sobel test was also conducted and found full mediation in the model (z=5.41, p=.000). So, it was found that employees' perception about the company's environmental CSR practices fully mediated the relationship between transparency in CSR communication and employees' organizational identification.

4.4.3. Hypothesis 4c

Step 1 of the mediation model showed that the regression of CSR consistency (IV) on organizational identification (DV), ignoring the mediator, was significant (b=.3833, t (182) = 5.61, SE=.0682, p=.000). Step 2 showed that the regression of CSR consistency (IV) on CSR perception (M) was also significant (b=.4307, t (182) = 6.74, SE=.0638, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR consistency, was significant, (b=.4620, t (181) = 6.44, SE=.0716, p= .000). Step 4 revealed that, controlling for the mediator (CSR perception), CSR consistency was still a significant predictor of organizational identification (b= .1843, t (181) = 2.67, SE=.0690, p=.008), but in a smaller magnitude, so a partial mediation is confirmed. A Sobel test was also conducted and found partial mediation in the model (z=5.25, p=.000). So, it was found that employees' perception about the company's environmental CSR practices partially mediated the relationship between consistency in CSR communication and employees' organizational identification.

4.4.4. Hypothesis 4d

Step 1 of the mediation model showed that the regression of CSR message tone (IV) on organizational identification (DV), ignoring the mediator, was significant (b=.3942, t (182) = 4.89, SE=.0805, p=.000). Step 2 showed that the regression of CSR message tone (IV) on CSR perception (M) was also significant (b=.4738, t (182) = 6.32, SE=.0749, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR message tone, was significant, (b=.4851, t (181) = 6.80, SE=.0713, p= .000). Step 4 revealed that, controlling for the mediator (CSR perception), CSR message tone was still a significant predictor of organizational identification (b= .1643, t (181)

=2.06, *SE*=.0796, *p*=.040), but in a smaller magnitude, so a partial mediation is confirmed. A Sobel test was also conducted and found partial mediation in the model (*z* =5.05, *p*=.000). So, it was found that employees' perception about the company's environmental CSR practices partially mediated the relationship between the CSR communication tone and employees' organizational identification.

4.4.5. Hypothesis 5a

Step 1 of the mediation model showed that the regression of CSR informativeness (IV) on organizational commitment (DV), ignoring the mediator, was significant (*b*=.4086, t (182) = 6.00, *SE*=.0681, *p*=.000). Step 2 showed that the regression of CSR informativeness (IV) on CSR perception (M) was also significant (*b*=.7060, *t* (182) = 13.26, *SE*=.0532, *p*=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR informativeness, was significant, (*b*=.5109, *t* (181) = 5.86, *SE*=.0872, *p*= .000). Step 4 revealed that, controlling for the mediator (CSR perception), CSR informativeness was no longer a significant predictor of organizational commitment (*b*= .0480, *t* (181) = 54.64, *SE*=.0878, *p*=.585), so mediation is confirmed. A Sobel test was also conducted and found full mediation in the model (z = 7.31, p = .000). So, it was found that employees' perception about the company's environmental CSR practices fully mediated the relationship between informativeness in CSR communication and employees' organizational commitment.

4.4.6. Hypothesis 5b

Step 1 of the mediation model showed that the regression of CSR transparency (IV) on organizational commitment (DV), ignoring the mediator, was significant (*b*=.2661, *t* (182) = 4.59, *SE*=.0580, *p*=.000). Step 2 showed that the regression of CSR transparency (IV) on CSR perception (M) was also significant (*b*=.3852, *t* (182) = 7.09, *SE*=.0543, *p*=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR transparency, was significant, (*b*=.5037, *t* (181) = 7.19, *SE*=.0700, *p*= .000). Step 4 revealed that, controlling for the mediator (CSR perception), CSR transparency was no longer a significant predictor of organizational commitment (*b*= .0721, *t* (181 =1.24, *SE*=.0579, *p*=.214), so mediation is confirmed. A Sobel test was also conducted and found full mediation in the model (z = 5.51, p = .000). So, it was found

that employees' perception about the company's environmental CSR practices fully mediated the relationship between transparency in CSR communication and employees' organizational commitment.

4.4.7. Hypothesis 5c

Step 1 of the mediation model showed that the regression of CSR consistency (IV) on organizational commitment (DV), ignoring the mediator, was significant (b=.4542, t (182) = 7.23, SE=.0628, p=.000). Step 2 showed that the regression of CSR consistency (IV) on CSR perception (M) was also significant (b=.4307, t (182) = 6.74, SE=.0638, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR consistency, was significant, (b=.4166, t (181)=6.28, SE=.0662, p= .000). Step 4 revealed that, controlling for the mediator (CSR perception), CSR consistency was still a significant predictor of organizational commitment (b= .2748, t (181)=4.30, SE=.0638, p=.000), but in a smaller magnitude, so a partial mediation is confirmed. A Sobel test was also conducted and found partial mediation in the model (z=5.34, p=.000). So, it was found that employees' perception about the company's environmental CSR practices partially mediated the relationship between consistency in CSR communication and employees' organizational commitment.

4.4.8. Hypothesis 5d

Step 1 of the mediation model showed that the regression of CSR message tone (IV) on organizational commitment (DV), ignoring the mediator, was significant (b=.4855, t (182) = 6.53, SE=.0743, p=.000). Step 2 showed that the regression of CSR message tone (IV) on CSR perception (M) was also significant (b=.4738, t (182) = 6.32, SE=.0749, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR message tone, was significant, (b=.4386, t (181) = 6.62, SE=.0662, p= .000). Step 4 revealed that, controlling for the mediator (CSR perception), CSR message tone was still a significant predictor of organizational commitment (b= .2777, t (181) =3.76, SE=.0738, p=.000), but in a smaller magnitude, which indicates a partial mediation. A Sobel test was also conducted and found significance in the partial mediation of the model (z=5.13, p=.000). So, it was found that employees' perception

about the company's environmental CSR practices partially mediated the relationship between the CSR communication tone and employees' organizational commitment.

4.4.9. Hypothesis 6a

Step 1 of the mediation model showed that the regression of CSR informativeness (IV) on organizational trust (DV), ignoring the mediator, was significant (b=.5884, t (182) = 8.99, SE=.0654, p=.000). Step 2 showed that the regression of CSR informativeness (IV) on CSR perception (M) was also significant (b=.7060, t (182) =13.26, SE=.0532, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR informativeness, was significant, (b=.4631, t (181) =5.47, SE=.0846, p= .000). Step 4 revealed that, controlling for the mediator (CSR perception), CSR informativeness was still a significant predictor of organizational trust (b=.2614, t (181) =3.06, SE=.0878, p=.002), but in a smaller magnitude. This shows a partial mediation. A Sobel test was also conducted and found significance of the partial mediation in the model (z=8.2, p=.000). So, it was found that employees' perception about the company's environmental CSR practices partly mediated the relationship between informativeness in CSR communication and employees' organizational trust.

4.4.10. Hypothesis 6b

Step 1 of the mediation model showed that the regression of CSR transparency (IV) on organizational trust (DV), ignoring the mediator, was significant (b=.3397, t (182) = 5.71, SE=.0595, p=.000). Step 2 showed that the regression of CSR transparency (IV) on CSR perception (M) was also significant (b=.3852, t (182) = 7.09, SE=.0543, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR transparency, was significant, (b=.5795, t (181)=8.38, SE=.0691, p= .000). Step 4 revealed that, controlling for the mediator (CSR perception), CSR transparency was still a significant predictor of organizational trust (b=.1165, t (181) =2.03, SE=.0572, p=.043), but in a smaller magnitude, so a partial mediation is confirmed. A Sobel test was also conducted and found mediation significance (z= 5.87, p=.000). So, it was found that employees' perception about the company's environmental CSR practices

partly mediated the relationship between transparency in CSR communication and employees' organizational trust, and H6b is confirmed.

4.4.11. Hypothesis 6c

Step 1 of the mediation model showed that the regression of CSR consistency (IV) on organizational trust (DV), ignoring the mediator, was significant (b=.4476, t (182) =6.63, SE=.0675, p=.000). Step 2 showed that the regression of CSR consistency (IV) on CSR perception (M) was also significant (b=.4307, t (182) =6.74, SE=.0638, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR consistency, was significant, (b=.5465, t (181) = 8.12, SE=.0672, p= .000). Step 4 revealed that, controlling for the mediator (CSR perception), CSR consistency was still a significant predictor of organizational trust (b= .2122, t (181) =3.27, SE=.0647, p=.001), but in a smaller magnitude, so a partial mediation is confirmed. A Sobel test was also conducted and found partial mediation in the model (z=5.66, p=.000). So, it was found that employees' perception about the company's environmental CSR practices partially mediated the relationship between consistency in CSR communication and employees' organizational trust. So. H6c is confirmed.

4.4.12. Hypothesis 6d

Step 1 of the mediation model showed that the regression of CSR message tone (IV) on organizational trust (DV), ignoring the mediator, was significant (b=.4896, t (182) =6.18, SE=.0792, p=.000). Step 2 showed that the regression of CSR message tone (IV) on CSR perception (M) was also significant (b=.4738, t (182) =6.32, SE=.0749, p=.000). This means that the two first conditions are met. Step 3 of the mediation process showed that the mediator (CSR perception), controlling for CSR message tone, was significant, (b=.5597, t (181) = 8.38, SE=.0667, p= .000). Step 4 showed that, controlling for the mediator (CSR perception), CSR message tone was still a significant predictor of organizational trust (b= .2244, t (181) = 3.01, SE=.0744, p=.002), but in a smaller magnitude, which indicates a partial mediation. A Sobel test was also conducted and found significance in the partial mediation of the model (z=5.41, p=.000). So, it was found that employees' perception about the company's environmental CSR practices partially mediated the relationship between

the CSR communication tone and employees' organizational trust. So, H6d is confirmed.

Table 4.7: Summary of Results

Variables	Before Mediator Included			After Mediator Included		
	Model 1 (DV; Organizational	**Model 2 (DV: Organizational**	**Model 3 (DV: Organizational Trust)**	**Model 1 (DV; Organizational**	**Model 2 (DV: Organizational Commitment)**	**Model 3 (DV: Organizational Trust)**
CSR informativeness	0,70~	,103~	,368***	-,0203~	,0477~	,2465*
CSR transparency	,174*	,099~	,049~	,1142~	,0873~	,1337*
CSR consistency	,209**	,277***	,170*	,1849~	,2859***	,2092*
CSR message tone	,172*	,239**	,165*	,1422*	,2493***	,1909*
R^2	,223	,309	,367			
F	12,831	19,999	25,948			
N	184	184	184			

Notes: Reported effects are standardized (Beta) coefficients.
*Significance levels: ~$p < .10$ *$p < .05$ ** $p < .01$ *** $p < .001$.*

4.5. Control variables

After testing the relationship between the predictors and the mediator with the DVs, another multiple linear regression was performed to test whether any of the demographic variables could affect the model. More specifically, the focus was put on the effects of age, years working in the company, and years of working in the sector, on the employees' organizational identification, commitment, and trust. For instance, previous research has shown that age can have a significant impact on organizational identification (Cohen, 1993; Riketta, 2005) and commitment (Mayer et al., 2002; Suryani, 2018) of employees. Research by Mayer et al., (2002) also showed that the length of employment in the company affects commitment.

When the three control variables were added as predictors along with "CSR informativeness", "CSR transparency", "CSR consistency" and "CSR message tone" to organizational identification, the model was found to be significant $F_{(7,176)} =$ 8.172, $p < .001$, $R^2 = .24$. This shows that the age, the number of years that the employees have been working in the company, and the years that they have been working in the sector affect the impact of CSR communication on their organizational identification. However, only CSR consistency ($\beta = .225$, $p = .005$) was found to be a significant predictor. This means that CSR consistency affects employees'

identification with the company, either when measured with the control variables or not. On the contrary, CSR transparency (β=.150, p=.090) and CSR message tone (β=.149, p=.058) affect identification when measured alone, but not when the three control variables are taken into account. Lastly, CSR informativeness was found as an insignificant predictor for identification in both cases (β=.100, p=.306). Table 4.4 shows the results of the two models for H1.

Table 4.8: Overview of Results for DV "Organizational identification"

Variables	**β**	**SD**
CSR informativeness	0,100~	,703
CSR transparency	,150~	,856
CSR consistency	,225**	,736
CSR message tone	,149~	,635
Age	,235*	9.07
Years in the company	,013~	6.58
Years in the sector	-,157~	7.76
R2 ,245		
F 8,172		
N 184		

*Significance levels: ~p< .10   *p< .05   ** p< .01   *** p< .001.*

When the three control variables were added as predictors along with CSR informativeness, CSR transparency, CSR consistency, and CSR message tone to organizational commitment, the model was again found to be significant F (7,176) 12.411, p< .001, R^2=.33, which shows that the age, the number of years that the employees have been working in the company and the years that they have been working in the sector affect the impact of CSR communication on their commitment to the company. However, only CSR consistency (β=.283, p<.001) and CSR message tone (β=.222, p=.003) were found to be significant predictors. This model showed the same results as the first one, when the control variables were not taken into account. This validates the impact of consistency and tone of CSR communication on employees' commitment. The table below summarizes the findings for the DV Organizational Commitment.

Table 4.9: Overview of Results for DV "Organizational commitment"

Variables	β	SD
CSR informativeness	,122~	,703
CSR transparency	,078~	,856
CSR consistency	,283***	,736
CSR message tone	,222**	,635
Age	,214*	9.07
Years in the company	-,079~	6.58
Years in the sector	-,047~	7.76

R2	,330
F	12,411
N	184

*Significance levels: ~p< .10   *p< .05   ** p< .01   *** p< .001.*

Finally, when the same model was repeated for organizational trust, it was again found to be significant $F_{(7,176)} =15.652$, $p< .001$, $R^2=.38$. This shows that the age, the number of years that the employees have been working in the company, and the years that they have been working in the sector affect the impact of CSR communication on their trust in the company. Like the previous models, CSR consistency ($\beta=.174$, $p=.017$) and CSR message tone ($\beta=.151$, $p=.034$) were found to be significant predictors, but also CSR informativeness was found significant ($\beta=.385$, $p<.001$). This model showed the same results as the first one, when the control variables were not considered. This validates the impact of the three communication factors on employees' trust.

Table 4.10: Overview of Results for DV "Organizational trust"

Variables	β	SD
CSR informativeness	,385***	,703
CSR transparency	,034~	,856
CSR consistency	,174*	,736
CSR message tone	,151*	,635
Age	,200*	9.07
Years in the company	-,090~	6.58
Years in the sector	-,082~	7.76

R2	*,384*
F	*15,652*
N	*184*

5. Discussion

In this chapter, the outcomes of the data analysis will be interpreted along with the theoretical concepts that were presented in Chapter 2. In addition, this section will demonstrate the contributions of this study to the environmental CSR communication of shipping companies and the associated managerial implications.

5.1. Theoretical implications

Overall, the findings suggest that the shipping companies' consistent and factual environmental CSR communication towards the external world positively affects their employees' identification, commitment, and trust towards this company. This is consistent with previous research confirming the importance of sustainability communications, even in a B2B sector such as shipping, for shaping the industry's attractiveness to "potential employees and indirect customers" (Wang et al., 2021). This is an important finding, considering that CSR in shipping is in a premature stage (Skovgaard, 2018) and is mostly led by big international container ship firms who comply with stringent environmental regulations but lack a deeper understanding of customers' needs (Shin & Thai, 2015). At the same time, Greek shipping has proven particularly slow in integrating CSR in its operations (Fafaliou & Aroni, 2016). Nevertheless, this study showed that almost half (47.2%) of the shipping companies in the sample are engaging in environmental CSR communication. This validates the increasing relevance of environmental CSR in shipping in accordance with previous research (Lu et al., 2009).

More specifically, this study found that transparent, consistent, and factual environmental CSR communication positively affects employees' identification. This is in line with both social identity theory and previous research showing that employees better evaluate their self-worth when they identify with a positively acclaimed company (Tyler, 1999). Even though this finding contradicts research by Farooq et al. (2014) which found no link between environmental CSR and employees' identification, it can still be seen as a valid result because it relates to an industry particularly linked to environmental impact (Pang et al., 2021). In addition, Greece is part of the EU, where the heavy regulation generally signifies a growing importance of preserving the environment (Lister et al., 2015). Hence, it could be argued that, amid this growing awareness, the organizations that move beyond just regulatory

compliance on environmental issues can achieve distinction. Another possible explanation can be related to the cultural factor, as people in developed countries - such as Greece- tend to be more interested in environmental concerns compared to people in countries with a higher poverty line (Farooq et al., 2014).

An interesting finding is particularly the insignificance of CSR informativeness for employees' identification. On the one hand, Kim (2019) says CSR informativeness is a basic-level CSR communication advantage for companies that does not necessarily require strong relationships with the receivers in order to be beneficial. On the other hand, identification with a company's values is a fundamental employee attitude defining a great part of oneself and extending from simple corporate co-existence to a deeper, personal level (Hameed et al., 2016). In this respect, identification is more fundamental than the other two attitudes examined. For instance, neither being committed nor trusting a company could be considered equal to being identified with a company. From this aspect, it seems reasonable that informativeness was found as a non-significant predictor for identification.

Accordingly, it is not surprising that CSR transparency was found to affect identification, because transparency is deeply linked to honesty (Kim et al., 2020). However, the study showed no significance of transparency with neither trust nor commitment. The fact that CSR transparency was found not to affect trust, in contrast with previous findings (Rawlins, 2008; Du et al., 2010; Kim et al., 2019) nor commitment in contrast with previous research (Rawlins, 2008; Kim & Ferguson, 2016) could be explained by two reasons. The first relates to the fact that this study focused on employees rather than consumers. Consumers' trust is fundamentally dependent on transparency (Rawlins, 2008), but being an entity of the corporation, employees may emphasize more on internal than external transparency to build trust. The second could relate to the nature of the B2B industry, which does not find a great effect from ethical CSR. For instance, previous research by Na et al. (2011) and Ko et al. (2021) found that environmental and ethical responsibility in CSR affected neither organizational trust nor organizational commitment of employees, in contrast with economic responsibility.

Commitment was the attitude that was found to be affected only by two communication factors, i.e., consistency and factual tone. It becomes evident that, despite being highly correlated, the three different employee attitudes can be pretty distinctive. Commitment is a more basic attitude, as committed employees are not

necessarily employees who trust their company, even more identifying with it. This is also reflected in the study findings, where respondents scored higher in commitment and lower in identification. However, the results identified external CSR communication as a predictor of organizational commitment, which agrees with previous studies (Meyer et al., 2002; Brammer et al., 2007). This is an interesting result because external CSR can provide an indirect benefit to companies regarding employees, highlighting the relevance of social identity theory (Brammer et al., 2007). It should also be noted that age was a significant predictor of the impact of CSR communication on employees' commitment. The positive coefficient shows a positive relationship between higher age and higher commitment, a finding which is supported by previous studies (Meyer et al., 2002; Brammer et al., 2007).

This study also drew attention to the importance of consistency in environmental CSR communication, confirming that when companies share CSR information in a steady manner -meaning they do not change their sayings from time to time- they tend to inspire trust to their employees. This is also found in other studies, which have identified consistency in CSR communication as vital for building stakeholders' trust (Du et al. 2010, Coombs & Holladay 2011; Kim, 2019). Consistency was significant also for both identification and commitment, validating its importance as a main CSR communication aspect, in line with Kim (2019) and Puncheva-Michelotti et al., (2018), who found that lack of consistency in CSR communication in job advertisements reflects a lack of a holistic CSR strategy.

The message tone of CSR communication, describing whether the company was self-promotional or not with respect to its environmental CSR, was found as a significant predictor for all three employees' attitudes, meaning that it affects their identification, trust, and mostly their commitment to the company. This is confirmed by previous research which shows that, in the consumers' world, a promotional tone in companies' CSR communication decreases people's trust and diminishes corporate reputation (Kim, 2019), while attracting criticism (Brown & Dacin, 1997; Vallentin, 2003). In addition, similar to previous research (Kim & Ferguson, 2014), message tone was identified as a more important factor than transparency and consistency in the benefits of CSR communication.

The employees' perception of the company's CSR practices was identified as a key predictor for all the three employee attitudes, both as a sole predictor and as a mediator along with CSR communication. More specifically, the study showed that

when employees have a high perception of the company's CSR practices, this leads to higher identification, trust, and commitment to the company. This agrees with previous research showing that environmental management practices improve employees' identification (Jaich, 2021).

But most importantly, the study showed that, when employees have a high perception of the company's CSR practices and when the company shares more details with the public, when it shares both successes and failures consistently and when it is not promotional in its environmental CSR, employees show higher identification, commitment, and trust. This is in accordance with social identity theory which finds CSR beneficial for employees' identification but when the actions of the company are high quality accordingly (Brammer et al., 2014; Vierebl & Koch, 2022). This means that, on the one hand, external environmental CSR communication can benefit a shipping company in terms of employees' attitudes, but, on the other hand, it is unsure what happens to these attitudes if the external CSR communication is efficient, but the actions of the organization are internally perceived as greenwashing.

5.2. Managerial Implications

Based on the results of this study, several practical recommendations can be made. The overall findings suggest, first, that shipping companies in Greece show a relatively high engagement in environmental CSR communication and, second, that the extent to which shipping companies implement their environmental CSR communication toward the public can affect employees' attitudes towards the organization. So, as a starting point, this study highlights the increasing relevance of environmental CSR communication in the Greek shipping sector, which must be noticed by companies that wish to maintain a competitive advantage by moving beyond compliance with stringent environmental regulations (Acciaro 2012). However, as a more important takeaway, shipping companies in Greece need to notice perceived environmental CSR as a key factor to improve their employees' attitudes, in line with previous research (Shin & Thai, 2015). This means that it does not matter only to engage in environmental CSR, but also to focus on how and what they communicate to the world with respect to CSR.

As the theory made evident, shipping is lagging compared to other sectors in terms of communicating its value and its business status quo to the world (Wang et al., 2021), which applies also to Greek shipping (Fafaliou et al., 2006). In this respect,

this study can be useful for communications practitioners of shipping companies, tasked with the challenge of communicating CSR in an industry commonly perceived as controversial (Wang et al., 2021). For instance, they may wish to notice that providing details is not as important as being consistent and transparent in CSR communication for inspiring employee identification, the most fundamental attitudes for employees' engagement (Kumar & Pansari, 2015). In general, shipping companies should take into account that building a non-promotional CSR communication plan based on consistency is vital for enhancing their employees' attitudes.

In this way, this study showcases the deployment of environmental CSR communication as a useful tool for making employees a power in a company's positive external image. This finding is important if Chandler's (2020) "Corporate Stakeholder Responsibility" theory is taken into account, which sees stakeholders as active -rather than passive- enablers of companies' environmental actions. This means that an efficient (meaning detailed, consistent, transparent, and factual) environmental CSR communication could act both as a booster of employees' attitudes towards the company and an enabler of a positive external image through employee advocacy. Therefore, a tangible recommendation derived from this research is for shipping companies in Greece to invest in hiring sustainability communications specialists to undertake an efficient CSR communication planning, for building a legitimate corporate image.

Considering that employees have been long-ago identified as the main competitive advantage of an organization (Lawler, 1996), while CSR communication is increasingly finding its place in online job advertising (Puncheva-Michelotti et al., 2018), the current findings may also be relevant for HR teams, who wish to attract new talent in shipping. For instance, this study confirms previous findings showing that the inclusion of CSR information in job ads could boost job seekers' interest in these ads (Puncheva-Michelotti et al., 2018) and specifically highlighted the necessity of a bigger focus on consistency and factual information when planning the environmental CSR communication of shipping companies. Hence, HR managers should consider including environmental CSR facts in their recruitment ads, as shipping owns a particularly fragile image in environmental issues (Pang et al., 2021). Finally, this study highlighted the significant mediating effect of the employees' perceptions of the company's environmental CSR practices. This probably stresses the necessity of an internal CSR communication planning, equally to an external one.

6. Conclusion

This section will provide a summarized overview of the study at hand, while also presenting limitations and associated recommendations for future research.

6.1. Summary of research

This study aimed to understand if and to what extent the identification, commitment, and trust of shipping employees toward their company may be affected by this company's environmental CSR communication towards the wider public. This CSR communication was studied through four factors a) informativeness (to what extent the company provides detailed information in its CSR communication), b) transparency (to what extent it shares both CSR failures and successes), c) consistency (to what extent it is consistent in what it shares, and d) factual tone (to what extent it is providing facts or it is promotional when communicating its CSR). For this purpose, a sample of 184 employees working in the Greek shipping sector was selected, including seafarers and employees of shipowning and operation companies, classification societies, marine insurance, marine consultancy companies, and others. A multiple regression analysis, a correlation analysis, and mediation were performed using SPSS 28.0.

Overall, the results showed that environmental CSR communication does positively affect shipping employees' identification, commitment, and trust. Consistency and factual tone in CSR communication were found to improve all three attitudes. CSR transparency was found to affect only employees' identification, while CSR informativeness had a positive impact on employees' commitment and trust. The mediation analysis also showed that employees' shaped perceptions about the company's environmental CSR practices mediate the impact of CSR communication on employees' identification, commitment, and trust. As a result, this study contributed to the existing literature on CSR communication, which is an understudied field in the Greek shipping sector. To the researcher's knowledge, there is no other research in recent years to have studied how environmental CSR communication can affect employees' attitudes in shipping companies in Greece.

6.2. Limitations

As with most studies, this one also has some limitations that should be noted. The first limitation can be related to the type of methodology selected for this

research. As mentioned above, a quantitative method has several advantages, and the survey, in particular, is a valuable method for testing big samples and generalizing findings, but when interpreting the data, surveys put some boundaries to the researcher as they do not allow to go in-depth to the results. Only a qualitative method, in the form of interviews, could enable a deeper understanding of the specific respondents' attitudes. For instance, an interview could unveil the reasons why some forms of CSR communication affect their commitment to the company, while some others do not. Also, the selection of snowballing method could be considered as bringing biased results, as it includes participants with certain relevant characteristics.

A second limitation of this study can be traced to the sample size, which has received data from a total of 184 respondents. Considering that over 500 shipping companies are currently operating in Greece, it could be argued that this is a not very representative sample of shipping employees. Indeed, the nature of the research topic, which, firstly, targeted such a narrow and specific population and, secondly, surveyed busy professionals -instead of a wider population, such as everyday consumers for example-, made the data collection process particularly challenging. As a result, the researcher had to extend the duration of survey dissemination to collect as many responses as possible.

Another important limitation of this study is that it examines the matter in a single national context, that of the Greek shipping industry, which is triggering concerns about the generalizability of conclusions. Although Greece holds a leading position in the world's shipping industry, there might be contextual factors that do not apply to shipping employees of different states. However, the sample was balanced in terms of gender and age of the participants. For the educational level, while most respondents are well-educated, this is not considered biased, as working in the shipping industry typically requires some form of university qualifications.

In addition, this research has only focused on the environmental aspect of CSR, which however covers also financial and social responsibility. A relevant limitation can be traced to the unknown level of familiarization across shipping employees in Greece with CSR as a term. Examining CSR communication based on employees' perceptions, this study took for granted that employees are familiar with what CSR exactly entails, although theory had made evident a low -yet growing- integration of CSR in Greek shipping. Extending this thought, it should be noted that the study at hand measured how environmental CSR communication may affect

employees' attitudes, but it should not be neglected that additional and unrelated factors may affect these attitudes, such as the actual conditions of working, pay, bonding, wellbeing initiatives, etc.

Finally, the high correlation levels among the DVs (organizational identification, commitment, and trust) should also be taken into account as a potential limitation in this research, because this correlation implies similar attitudes. All these potential biases should be taken into consideration when interpreting the results of this study.

6.3. Directions for future research

More employees' attitudes, such as job satisfaction or employee engagement, could be added to the scope of the research for a more holistic view of the CSR communication impact on shipping employees. As the importance of environmental CSR communication for shipping has been justified by both the current and previous studies, an interesting way forward for future research could emphasize on the most effective ways in which a B2B industry, such as shipping, could best communicate its environmental CSR practices to the wide public.

Moreover, considering the findings that show the environmental CSR not affecting significantly employees compared to the other pillars (Ko et al., 2021), it would be interesting for future research to focus on how organizational commitment, identification, and trust of shipping employees in Greece is affected by communication of other CSR aspects, to shed light on which aspect is more impactful on employees' attitudes. This could provide an interesting way forward for the planning of environmental CSR communication in shipping corporations.

Considering also the globalized nature of the shipping industry, more practical and in-depth recommendations could be drawn if the research area was expanded to a more international context, with a bigger and more representative sample. Only when comparing results from a Greek sample with that of other shipping nations -maybe adding also the cultural dimension for interpreting the results, as employees of developing world may assign more importance to economic than to environmental issues (Farooq et al., 2014)-, the full significance of this research would become clear. Finally, as the current research examines attitudes, a qualitative approach in the form of interviews could provide significant insights regarding the underlying motives and expectations of shipping employees concerning CSR communication.

Lastly, an interesting way forward for academic research could emphasize a comparison between the effect of external environmental CSR communication and an internal one. Taking also a similar, Greek-based sample, it would be very relevant for local shipping corporations to identify which form of CSR communication (internal-external) has a higher effect on employees' attitudes and help them plan their CSR communications accordingly.

References

Abdul Rashid, Z., Sambasivan, M., & Johari, J. (2003). The influence of corporate culture and organizational commitment on performance. *Journal of Management Development*, *22*(8), 708-728. https://doi.org/10.1108/02621710310487873

Abilash, K. M., & Mary Siju, N. (2021). Telecommuting: An empirical study on job performance, job satisfaction and employees' commitment during pandemic circumstances. *Shanlax International Journal of Management, 8*(3), 1-10. https://doi.org/10.34293/management.v8i3.3547

Acciaro, M. (2015). Corporate responsibility and value creation in the port sector. *International Journal of Logistics Research and Applications, 18*, 1-21. 10.1080/13675567.2015.1027150

Aggarwal, P. & Kadyan, A. (2014). Greenwashing: The Darker Side of CSR. *Indian Journal of Applied Research, 4*(3), 61-66. 10.15373/2249555X/MAR2014/20

Ahn, J., Shamim, A., & Park, J. (2021). Impacts of cruise industry corporate social responsibility reputation on customers' loyalty: Mediating role of trust and identification. *International Journal of Hospitality Management*, *92*, 102706. https://doi.org/10.1016/j.ijhm.2020.102706

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review, 14*(1), 20–39. https://doi.org/10.5465/amr.1989.4278999

Baker, S. (2012). The evolution of European Union environmental policy. In *Politics of sustainable development*, 101-116, Routledge.

Barakat, S. R., Isabella, G., Boaventura, J. M., & Mazzon, J. A. (2016). The influence of corporate social responsibility on employee satisfaction. *Management Decision*, *54*(9), 2325-2339. https://doi.org/10.1108/md-05-2016-0308

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social behaviours. *Journal of Personality and Social Psychology, 51*(6), 443-464.

Baştug, G., Pala, A., Kumartaşli, M., Günel, İ., & Duyan, M. (2016). Investigation of the relationship between organizational trust and organizational commitment. *Universal Journal of Educational Research, 4*(6), 1418-1425. https://doi.org/10.13189/ujer.2016.040619

Baumruk, R. (2004). The missing link: The role of employee engagement in business success. *Workspan. 47*. 48-52.

Bernard, H. R., & Bernard, H. R. (2013). Social research methods: Qualitative and quantitative approaches. *SAGE.*

Bhattacharya, C., Korschun, D., & Sen, S. (2009), 'Strengthening Stakeholder– Company Relationships Through Mutually Beneficial Corporate Social Responsibility Initiatives,' *Journal of Business Ethics, 85*(52), 257-272. https://doi.org/10.1007/s10551-008-9730-3

Bhattacharya, C. B., & Sen, S. (2004). Consumer-company identification: A framework for understanding consumers' relationships with companies. *Journal of Marketing, 67,* 76–88.

Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological Methods & Research*, *10*(2), 141- 163. https://doi.org/10.1177/004912418101000205

Bowen, F. (2014). After greenwashing: Symbolic corporate environmentalism and society. Cambridge, England: Cambridge University Press

Brammer, S., He, H., & Mellahi, K. (2015). Corporate social responsibility, employee organizational identification, and creative effort. *Group & Organization Management*, *40*(3), 323-352. https://doi.org/10.1177/1059601114562246

Brammer, S., Millington, A. & Rayton, B. (2007). CSR and organizational commitment: An empirical study about consequences of CSR on motivation and commitment, *Corporate Social Responsibility and Business Performance, 18*(10) 1701-1719. https://doi.org/10.4337/9780857932389.00014

Branco, M. & Lima Rodrigues, L. (2006). Corporate Social Responsibility and Resource-Based Perspectives. *Journal of Business Ethics, 69*, 111-132. 10.1007/s10551-006-9071-z.

Brown, J. D. (2002). The Cronbach alpha reliability estimate. *Shiken: JALT Testing & Evaluation SIG Newsletter, 6*(1). https://hosted.jalt.org/test/bro_13.htm

Brown, T.J. and Dacin, P.A. (1997). The company and the product: corporate associations and consumer product responses. *Journal of Marketing, 61*(1), 68–84

Buragohain, N. & Dutta, A. (2021). Transparency and Disclosure: Evaluating CSR Communication by India's Global Giants. *International Journal of Science and Research (IJSR), 10*(2). 10. 10.21275/SR21202220130.

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, *34*(4), 39-48. https://doi.org/10.1016/0007-6813(91)90005-g

Carroll, A. B. (1999). Corporate Social Responsibility: Evolution of a Definitional Construct. *Business & Society, 38*(3), 268-295. https://doi.org/10.1177/000765039903800303

Chandler, D. (2020). *Strategic corporate social responsibility: Sustainable value creation* (5th ed.). SAGE Publications, Inc.

Chircop, A. (2019). The IMO initial strategy for the reduction of GHGs from international shipping: A commentary. *The International Journal of Marine and Coastal Law, 34*(3), 482-512. https://doi.org/10.1163/15718085-13431093

Chughtai, A. A. & Buckley, F. (2008). Work Engagement and Its Relationship with State and Trait Trust: A Conceptual Analysis, *Journal of Behavioral and Applied Management, 10*(1), 47-71.

Clarkson M.B.E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Acad Manag Rev 20*(1), 92–117.

Coady, L., Lister, J., Strandberg, C., & Ota, Y. (2013). The Role of Corporate Social Responsibility (CSR) in the International Shipping Sector. *Prepared for The Northern European Symposium on CSR in Shipping Copenhagen, Denmark 12 November 2013*. https://corostrandberg.com/wp-content/uploads/2013/11/ubc-csr-in-shipping-denmark.pdf

Cohen, A. (1993). 'Age and tenure in relation to organizational commitment: A meta-analysis'. *Basic and Applied Social Psychology, 14*, 143–59.

Coleman, J. S. (1958). Relational Analysis: The Study of Social Organizations with Survey Methods. *Human Organization, 17*

Connell, J., Ferres, N., & Travaglione, T. (2003). Engendering trust in manager-subordinate relationships. *Personnel Review, 32*(5), 569-587. https://doi.org/10.1108/00483480310488342

Coombs, W. T., & Holladay, S. J. (2011). Managing Corporate Social Responsibility: A Communication Approach. Malden, MA: Wiley-Blackwell

CSR Hellas (2022). CSR & SDGs. https://csrhellas.org/csr-sdgs/

Coombs, W. T., & Holladay, S. J. (2013). The pseudo-panopticon: The illusion

created by CSR-related transparency and the internet. *Corporate Communications: An International Journal, 18*(2), 212–227. 10.1108/13563281311319490

David, M., Gollasch, S., Elliott, B., & Wiley, C. (2014). Ballast water management under the ballast water management convention. *Global Maritime Transport and Ballast Water Management*, 89-108. https://doi.org/10.1007/978-94-017-9367-4_5

Dawkins, J. (2004). Corporate responsibility: the communication challenge. *Journal of Communication Challenge, 9*, 108–119.

De Vries, G., Terwel, B. W., Ellemers, N. & Daamen, D. D. L. (2013). Sustainability or Profitability? How Communicated Motives for Environmental Policy Affect Public Perceptions of Corporate Greenwashing. *Corporate Social Responsibility and Environmental Management, 22*(3), 142-154. https://doi.org/10.1002/csr.1327

Ditlev-Simonsen, C. D., & Wenstøp, F. (2013). How stakeholders view stakeholders as CSR motivators. *Social Responsibility Journal*, *9*(1), 137-147. https://doi.org/10.1108/17471111311307868

Du, S., Bhattacharya, C., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International Journal of Management Reviews*, *12*(1), 8-19. https://doi.org/10.1111/j.1468-2370.2009.00276.x

Edwards, M. R., & Peccei, R. (2007). Organizational identification: Development and testing of a conceptually grounded measure. *European Journal of Work and Organizational Psychology*, *16*(1), 25-57. https://doi.org/10.1080/13594320601088195

Elite Research LLC (2003-2014). Stats Moderation Mediation Process. https://pdf4pro.com/amp/view/stats-moderation-moderation-kean-university-417f88.html

Etchegaray, J. M., & Fischer, W. G. (2010). Understanding evidence-based research methods: Reliability and validity considerations in survey research. *HERD: Health Environments Research & Design Journal*, *4*(1), 131-135. https://doi.org/10.1177/193758671000400109

Etikan, I. (2016). Comparison of snowball sampling and sequential sampling

technique. *Biometrics & Biostatistics International Journal*, *3*(1). https://doi.org/10.15406/bbij.2016.03.00055

Fafaliou, I. & Aroni, T. (2016). Corporate social responsibility in the Greek shipping business. *Research Handbook on Corporate Social Responsibility in Context*, 228-250. https://doi.org/10.4337/9781783474806.00024

Fafaliou, I., Lekakou, M. & Theotokas, I. (2006). Is the European shipping industry aware of corporate social responsibility? The case of the Greek-owned short sea shipping companies. *Marine Policy, 30*(4), 412-419. https://doi.org/10.1016/j.marpol.2005.03.003

Farooq, O., Payaud, M., Merunka, D., & Valette-Florence, P. (2014). The impact of corporate social responsibility on organizational commitment: Exploring multiple mediation mechanisms. *Journal of Business Ethics*, *125*(4), 563-580. https://doi.org/10.1007/s10551-013-1928-3

Gross, H. P., Ingerfurth, S., & Willems, J. (2021). Employees as reputation advocates: Dimensions of employee job satisfaction explaining employees' recommendation intention. *Journal of Business Research*, *134*, 405-413. https://doi.org/10.1016/j.jbusres.2021.05.021

Gunter, B., Nicholas, D., Huntington, P., & Williams, P. (2002). Online versus offline research: Implications for evaluating digital media. *Aslib Proceedings*, *54*(4), 229-239. https://doi.org/10.1108/00012530210443339

Gupta, M. (2015). Corporate social responsibility, employee–company identification, and organizational commitment: Mediation by employee engagement. *Current Psychology*, *36*(1), 101-109. https://doi.org/10.1007/s12144-015-9389-8

Hameed, I., Riaz, Z., Arain, G. A., & Farooq, O. (2016). How do internal and external CSR affect employees' organizational identification? A perspective from the group engagement model. *Frontiers in Psychology*, *7*. https://doi.org/10.3389/fpsyg.2016.00788

Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Publications.

Helmig, B., Spraul, K., & Ingenhoff, D. (2013). Under positive pressure. *Business & Society*, *55*(2), 151-187. https://doi.org/10.1177/0007650313477841

Henriques, Irene & Sadorsky, Perry. (1999). Henriques I., P. Sadorsky: 1999, The

Relationship Between Environmental Commitment and Managerial
Perceptions of Stakeholder Importance. *Academy of Management Journal. 42*.
10.2307/256876

Holton, E. F., & Burnett, M. F. (2005). The Basics of Quantitative Research. In
Research in Organizations Foundations and Methods of Inquiry.
https://www.bkconnection.com/static/Research_in_Organizations_EXCERPT.
pdf

Hox, J. J. (1997). From Theoretical Concept to Survey Question. In *Survey
Measurement and Process Quality*.
https://doi.org/10.1002/9781118490013.ch2

IMO (2019). Fourth Greenhouse Gas Study 2020.
https://www.imo.org/en/OurWork/Environment/Pages/Fourth-IMO-
Greenhouse-Gas-Study-2020.aspx

Islam, T., Ahmed, I., Ali, G., & Sadiq, T. (2016). Behavioral and psychological
consequences of corporate social responsibility: Need of the time. *Social
Responsibility Journal*, *12*(2), 307-320. https://doi.org/10.1108/srj-04-2015-
0053

Islam, T., Tariq, J., & Usman, B. (2018). Transformational leadership and four-
dimensional commitment. *Journal of Management Development*, *37*(9/10),
666-683. https://doi.org/10.1108/jmd-06-2017-0197

Ismail, Z. (2020). Corporate social responsibility for employee's commitment: Does
corporate reputation count? European Proceedings of Social and Behavioural
Sciences. https://doi.org/10.15405/epsbs.2020.12.05.78

Jaich, H. (2021). Linking environmental management and employees' organizational
identification: The mediating role of environmental attitude. Corporate Social
Responsibility and Environmental Management.
https://doi.org/10.1002/csr.2201

Jena, L. K., Pradhan, S., & Panigrahy, N. P. (2018). Pursuit of organisational trust:
Role of employee engagement, psychological well-being and transformational
leadership. *Asia Pacific Management Review*, *23*(3), 227-
234. https://doi.org/10.1016/j.apmrv.2017.11.001

Jiang, H., Cheng, Y., Park, K., & Zhu, W. (2022). Linking CSR communication to

corporate reputation: Understanding hypocrisy, employees' social media
engagement and CSR-related work engagement. *Sustainability*, *14*(4),
2359. https://doi.org/10.3390/su14042359

Jiang, L., & Probst, T. M. (2015). Do your employees (collectively) trust you? The
importance of trust climate beyond individual trust. *Scandinavian Journal of
Management, 31*(4), 526-535. https://doi.org/10.1016/j.scaman.2015.09.003

Jones, D. A. (2010). Does serving the community also serve the company? Using
organizational identification and social exchange theories to understand
employee responses to a volunteerism programme. *Journal of Occupational
and Organizational Psychology, 83*(4), 857–878.

Joung, T., Kang, S., Lee, J., & Ahn, J. (2020). The IMO initial strategy for reducing
greenhouse Gas (GHG) emissions, and its follow-up actions towards
2050. *Journal of International Maritime Safety, Environmental Affairs, and
Shipping*, *4*(1), 1-7. https://doi.org/10.1080/25725084.2019.1707938

Kassinis, G., & Vafeas, N. (2006). Stakeholder pressures and environmental
performance. *The Academy of Management Journal, 49*, 145–159.

Khan, S. A., Yu, Z., & Umar, M. (2021). How environmental awareness and
corporate social responsibility practices benefit the enterprise? An empirical
study in the context of emerging economy. *Management of Environmental
Quality: An International Journal*, *32*(5), 863-885.
https://doi.org/10.1108/meq-08-2020-0178

Khojastehpour, M., & Johns, R. (2014). The effect of environmental CSR issues on
corporate/brand reputation and corporate profitability. *European Business
Review*, *26*(4), 330-339. https://doi.org/10.1108/ebr-03-2014-0029

Kim, S. (2019). The process model of corporate social responsibility (CSR)
communication: CSR communication and its relationship with consumers'
CSR knowledge, trust, and corporate reputation perception. *Journal of
Business Ethics*, *154*(4), 1143-1159. https://doi.org/10.1007/s10551-017-3433-
6

Kim, S., & Ferguson, M. T. (2014). Public expectations of CSR communication:
What and how to communicate CSR. *Public Relations Journal, 8*(3).
https://www.bellisario.psu.edu/assets/uploads/2014KIMFERGUSON.pdf

Kim, S., & Ferguson, M. T. (2016). Dimensions of effective CSR communication

based on public expectation. *Journal of Marketing Communications*. 10.1080/13527266.2015.1118143

Kim, S., & Ji, Y. (2017). Chinese consumers' expectations of corporate communication on CSR and sustainability. *Corporate Social Responsibility and Environmental Management*, *24*(6), 570-588. https://doi.org/10.1002/csr.1429

Kneer, J. (2022). Regression Analysis Part I: Simple and Multiple Regression Analysis. *Canvas*. https://canvas.eur.nl/courses/36128/modules/items/702661

Knight, C. & Haslam, S. A. (2010). Your place or mine? Organizational identification and comfort as mediators of relationships between the managerial control of workspace and employees' satisfaction and well-being. *British Journal of Management, 21*(3), 717-735. https://doi.org/10.1111/j.1467-8551.2009.00683.x

Knippenberg, D. & Sleebos, E. (2006). Organizational Identification versus organizational commitment: Self-definition, social exchange, and job attitudes. *Journal of Organizational Behavior, 27*, 571-584. https://doi.org/10.1002/job.359

Ko, J., Jang, H., & Kim, S. Y. (2021). The effect of corporate social responsibility recognition on organisational commitment in global freight forwarders. *The Asian Journal of Shipping and Logistics*, *37*(2), 117-126. https://doi.org/10.1016/j.ajsl.2020.12.005

Koriche, H. (2015). The Emergence of a New Discourse for Business Communication, 'A Case Study of e-mails in Shipping Company'. *Procedia - Social and Behavioral Sciences, 199*, 539-547. https://doi.org/10.1016/j.sbspro.2015.07.544

Krisch, U., & Grabner-Kräuter, S. (2016). Insights into the impact of CSR communication source on trust and purchase intention. *Handbook of Integrated CSR Communication*, 449-469. https://doi.org/10.1007/978-3-319-44700-1_25

Kumar V, & Pansari A. (2015). Measuring the benefits of employee engagement. *MIT Sloan Management Review*, *56*(4), 67-72. https://www.proquest.com/scholarly-journals/measuring-benefits-employee-engagement/docview/1694713041/se-2?accountid=13598

Lamsa, A., & Pucetaite, R. (2006). Development of organizational trust among

employees from a contextual perspective. *Business Ethics: A European Review, 15*(2), 130-141. https://doi.org/10.1111/j.1467-8608.2006.00437.x

Lindstad, H., Rehn, C., & Eskeland, G. S. (2017). Sulphur abatement globally in maritime shipping. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2994757

LinkedIn (2022). About us. LinkedIn Corporation https://news.linkedin.com/about-us#Statistics

Lister, J., Poulsen, R. T., & Ponte, S. (2015). Orchestrating transnational environmental governance in maritime shipping. *Global Environmental Change, 34*, 185–195.

Lu, W. (2015). Corporate social responsibility and firm risk: Implications from employee satisfaction. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2617101

Lu, C., Lin, C., & Tu, C. (2009). Corporate social responsibility and organisational performance in container shipping. *International Journal of Logistics Research and Applications*, *12*(2), 119-132. https://doi.org/10.1080/13675560902749373

Lun, Y. H., Lai, K., Wong, C. W., & Cheng, T. C. (2013). Green shipping practices and firm performance. *Maritime Policy & Management*, *41*(2), 134-148. https://doi.org/10.1080/03088839.2013.819133

Lyon, T. P. & Montgomery, A. W. (2015). The Means and End of Greenwash. *Organization & Environment, 28*(2), 223–249. https://doi.org/10.1177/1086026615575332

Mansouri, S. A., Lee, H., & Aluko, O. (2015). Multi-objective decision support to enhance environmental sustainability in maritime shipping: A review and future directions. *Transportation Research Part E: Logistics and Transportation Review*, *78*, 3-18. https://doi.org/10.1016/j.tre.2015.01.012

Marique, G. & Stinglhamber, F. (2011), 'Identification to Proximal Targets and Affective Organizational Commitment: The Mediating Role of Organizational Identification,' *Journal of Personnel Psychology, 10*, 107–117.

Matthews, B. & Ross, L. (2010). *Research Methods*. Pearson Longman, London.

Mazurkiewicz, P. (2018). Practices and factors influencing construction enterprises' corporate social responsibility (CSR) implementation: A conceptual framework. *Proceedings of the International Workshop on Environmental*

Management, Science and Engineering.
https://doi.org/10.5220/0007563305760583

Meyer, J. & Allen, N. (1997), Commitment in the Workplace: Theory, Research and
Application. Sage, London

Meyer, J.P., Stanley, D.J., Herscovitch, L. and Topolnytsky, L. (2002). Affective,
Continuance, and Normative Commitment to the Organization: A Meta-
Analysis of Antecedents, Correlates, and Consequences. *Journal of Vocational
Behavior*, *61*, 20–52.

Mishra, A.K. (1996) Organizational Responses to Crisis: The Centrality of Trust. In:
Kramer, R.M. and Tyler, T.R., E., Eds., Trust in Organizations, Sage,
Thousand Oaks, 261-287.

Mohr, L. A., & Webb, D. J. (2005). The effects of corporate social responsibility and
price on consumer responses, Journal of Consumer Affairs, 39(1), 121-147

Morsing, M., & Schultz, M. (2006). Corporate social responsibility communication:
Stakeholder information, response and involvement strategies. *Business
Ethics: A European Review, 15*(4), 323–338.

Morsing, M., Schultz, M., & Nielsen, K. U. (2008). The 'Catch 22' of communicating
CSR: Findings from a Danish study. *Journal of Marketing
Communications*, *14*(2), 97-111. https://doi.org/10.1080/13527260701856608

Na, D.S., Leem, W.B. & Kang, Y.S. (2011). The impact of CSR activities in domestic
SMEs on their financial performances: Analysis of the difference between
B2B and B2C. *Journal of Digital Convergence, 9*(6), 325-341.

Namazi, M., & Namazi, N. (2016). Conceptual analysis of moderator and mediator
variables in business research. *Procedia Economics and Finance, 36*, 540-554.
https://doi.org/10.1016/s2212-5671(16)30064-8

Nguyen, T. T., Pham, T. T., Le, Q. B., Pham, T. T., Bui, T. V., & Nguyen, T. Q.
(2020). Impact of corporate social responsibility on organizational commitment
through organizational trust and organizational identification. *Management
Science Letters*, 3453-3462. https://doi.org/10.5267/j.msl.2020.5.032

Oswald, L. J. (2011). The law of marketing (2nd ed.). Mason, OH: South-Western,
Cengage Learning

Pallant, J. (2007). SPSS Survival Manual. McGraw-Hill: Open University Press.

Pang, K., Lu, C. S., Shang, K. C., & Weng, H. K. (2021). An empirical investigation

of green shipping practices, corporate reputation and organisational performance in container shipping. *International Journal of Shipping and Transport Logistics*, *13*(3/4), 422. https://doi.org/10.1504/ijstl.2021.113996

Parviainen, T., Lehikoinen, A., Kuikka, S., & Haapasaari, P. (2017). How can stakeholders promote environmental and social responsibility in the shipping industry? *WMU Journal of Maritime Affairs*, *17*(1), 49-70. https://doi.org/10.1007/s13437-017-0134-z

Peterson, D.K. 2004. The Relationship between Perceptions of Corporate Citizenship and Organizational Commitment. *Business and Society, 43*, 296–319.

Petropoulos, T. (2019). Greek shipping companies based on data as of end December 2019. *Petrofin Research*. https://www.petrofin.gr/wp-content/uploads/2021/01/1stPart-2019-PetrofinResearch-GreekShippingCompanies.pdf

Petty, R.E., Cacioppo, J.T. and Goldman, R. (1981). Personal involvement as a determinant of argument-based persuasion. *Journal of Personality and Social Psychology, 41*, 847–855.

Pomering, A., & Dolnicar, S. (2008). Assessing the prerequisite of successful CSR implementation: Are consumers aware of CSR initiatives? *Journal of Business Ethics, 85*(52), 285-301. https://doi.org/10.1007/s10551-008-9729-9

Poole, M. A. & O'Farrell, P. N. (1971). The Assumptions of the Linear Regression Model. *Transactions of the Institute of British Geographers, 52*, 145-158. https://www.jstor.org/stable/621706

Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology, 59*(5), 603–609. https://doi.org/10.1037/h0037335

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review, 89*(1/2), 62–77.

Preuss, L., Haunschild, A., & Matten, D. (2009). The rise of CSR: Implications for HRM and employee representation. *The International Journal of Human Resource Management*, *20*(4), 953-973. https://doi.org/10.1080/09585190902770893

Punch, K. F. (2014). Introduction to social research: Quantitative and qualitative approaches (3rd edition). London: Sage.

Puncheva-Michelotti, P., Hudson, S., & Jin, G. (2018). Employer branding and CSR communication in online recruitment advertising. *Business Horizons*, *61*(4), 643-651. https://doi.org/10.1016/j.bushor.2018.04.003

Rawlins, B. (2008). Give the emperor a mirror: Toward developing a stakeholder measurement of organizational transparency. *Journal of Public Relations Research*, 21(1), 71–99. 10.1080/10627260802153421

Rice, S., Winter, S. R., Doherty, S., & Milner, M. (2017). Advantages and Disadvantages of Using Internet-Based Survey Methods in Aviation-Related Research. *Journal of Aviation Technology and Engineering, 7*(1), 58-65. 10.7771/2159 6670.1160

Riketta, M. (2005). Organizational identification: A meta-analysis. *Journal of Vocational Behavior, 66(*2), 358. https://link.springer.com/article/10.1007/s10551-012-1489-x

Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly, 41*, 4.

Rodrigo, P., & Arenas, D. (2008). Do employees care about CSR programs? A typology of employees according to their attitudes. *Journal of Business Ethics, 83*(2), 265–283.

Rupp, D. E., Shao, R., Skarlicki, D. P., Paddock, E. L., Kim, T., & Nadisic, T. (2018). Corporate social responsibility and employee engagement: The moderating role of CSR-specific relative autonomy and individualism. *Journal of Organizational Behavior*, *39*(5), 559-579. https://doi.org/10.1002/job.2282

Sarstedt, M., Bengartc, P., Monim-Shaltoni, A., & Lehmann, S. (2018). The use of sampling methods in advertising research: a gap between theory and practice. *International Journal of Advertising, 37*(4), 650–663. https://doi.org/10.1080/02650487.2017.1348329

Sarkar, S. & Searcy, C. (2016). Zeitgeist or chameleon? A quantitative analysis of CSR definitions, Journal of Cleaner Production, 135, 1423-1435 10.1016/j.jclepro.2016.06.157

Schmidt, A. F., & Finan, C. (2018). Linear regression and the normality assumption. *Journal of Clinical Epidemiology*, *98*, 146-151. https://doi.org/10.1016/j.jclinepi.2017.12.006

Sen, S., & Cowley, J. (2013). The relevance of stakeholder theory and social capital

theory in the context of CSR in SMEs: An Australian perspective. *Journal of business ethics, 118*(2), 413-427.

Sen, S., Bhattacharya, C., and Korschun, D. (2006). The role of corporate social responsibility in strengthening multiple stakeholder relationships: a field experiment. *J. Acad. Mark. Sci.* 34, 158. 10.1177/0092070305284978

Sharma, V. (2020). Impact of organizational culture on employee commitment: Mediating role of organizational Learningc. *Journal of Advanced Research in Dynamical and Control Systems*, *12*(7), 55-59. https://doi.org/10.5373/jardcs/v12i7/20201984

Shin, Y. & Thai, V. V. (2015). The Impact of Corporate Social Responsibility on Customer Satisfaction, Relationship Maintenance and Loyalty in the Shipping Industry. *Corporate Social Responsibility and Environmental Management, 22*(6), 381-392. https://doi.org/10.1002/csr.1352

Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, *9*(1), 4-11. https://doi.org/10.12691/ajams-9-1-2

Singh, S., & Sagar, R. (2021). A critical look at online survey or questionnaire-based research studies during COVID-19. *Asian Journal of Psychiatry, 65*, 102-850. https://doi.org/10.1016/j.ajp.2021.102850

Skovgaard, J. (2018). Response to institutional processes: A study of corporate social responsibility in Danish shipping companies. *Corporate Social Responsibility in the Maritime Industry*, 279-293. https://doi.org/10.1007/978-3-319-69143-5_15

Skudiene, V. & Auruskeviciene, V. (2012). The Contribution of Corporate Social Responsibility to Internal Employee Motivation, *Baltic Journal of Management, 7*(1), 49- 67. http://dx.doi.org/10.1108/ 17465261211197421

Sobel, M. E. (1982). Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models." *Sociological Methodology, 13*, 290–312.

Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Biggs, R., Carpenter, S. R., de Vries, W., de Wit, C. A., Folke, C., Gerten, D., Heinke, J., Mace, G. M., Persson, L. M., Ramanathan, V., Reyers, B., & Sörlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science, 347*(6223), 125-9855.

Sun, L., & Yu, T. R. (2015). The impact of corporate social responsibility on

employee performance and cost. *Review of Accounting and Finance*, *14*(3), 262-284. https://doi.org/10.1108/raf-03-2014-0025

Suryani, I. (2018). Factors Affecting Organizational Commitment. *Jurnal Manajemen Inovasi, 9*(1). http://www.jurnal.unsyiah.ac.id/JInoMan/article/view/11418

Swanson, R. A., & Holton, E. F. (2005). *Research in organizations: Foundations and methods in inquiry*. Berrett-Koehler Publishers.

Tajfel, H. and Turner, J.C. (1986). "The Social Identity Theory of Intergroup Behaviour". In *Psychology of Intergroup Relations*, Edited by: Austin, S. and Austin, W.G. 7–24. Chicago, IL: NelsonHall.

Tang, L., & Gekara, V. (2018). The importance of customer expectations: An analysis of CSR in container shipping. *Journal of Business Ethics*, *165*(3), 383-393. https://doi.org/10.1007/s10551-018-4062-4

TerraChoice. (2009). The seven sins of greenwashing. Environmental claims in consumer markets. Summary report: North America. Retrieved from http://sinsofgreenwashing.com/indexd49f.pdf

Theotokas, I. & Kaza, V. (2007). Environmental management in Greek shipping companies. *Conference: International Symposium on Maritime Safety, Security and Environmental Protection*

Transport & Environment (2021, June 18). UN greenwashes shipping with hopelessly weak carbon efficiency target. https://www.transportenvironment.org/discover/un-greenwashes-shipping-with-hopelessly-weak-carbon-efficiency-target/

Tyler, T. R. (1999). Why people cooperate with organizations: An identity-based perspective. *Research in Organizational Behavior, 21*, 201–246.

Union of Greek Shipowners (2020). Greek Shipping and Economy 2020. https://www.ugs.gr/en/greek-shipping-and-economy/greek-shipping-and-economy-2020/

United Nations Conference on Trade and Development (2019). Review of Maritime Transport. https://unctad.org/system/files/official-document/rmt2019_en.pdf

van Dick, R., Christ, O., Stellmacher, J., Wagner, U., Ahlswede, O., Grubba, C.,

Hauptmeier, M., Hohfeld, C., Molzen, K., and Tissington, P.A. (2004), 'Should I Stay or Should I Go? Explaining Turnover Intentions with Organizational Identification and Job Satisfaction,' *British Journal of Management, 15*(4), 351-360. https://doi.org/10.1111/j.1467-8551.2004.00424.x.

Van Dick, R. (2001). Identification in organizational contexts: linking theory and research from social and organization psychology. *Int. J. Manage. Rev.* 3, 265–283. 10.1111/1468-2370.00068

Vanhala, M., Heilmann, P., & Salminen, H. (2016). Organizational trust dimensions as antecedents of organizational commitment. *Knowledge and Process Management*, *23*(1), 46-61. https://doi.org/10.1002/kpm.1497

Vakola, M. & Bouradas, D. (2005). Antecedents and Consequences of Organizational Silence: an Empirical Investigation, *Employee Relations, 27*(5), 441-458. 10.1108/01425450510611997

Viererbl, B., & Koch, T. (2022). The paradoxical effects of communicating CSR activities: Why CSR communication has both positive and negative effects on the perception of a company's social responsibility. *Public Relations Review*, *48*(1), 102-134. https://doi.org/10.1016/j.pubrev.2021.102134

Vollero, A., Palazzo, M., Siano, A., & Elving, W. J. (2016). Avoiding the greenwashing trap: Between CSR communication and stakeholder engagement. *International Journal of Innovation and Sustainable Development*, *10*(2), 120. https://doi.org/10.1504/ijisd.2016.075542

Wagner, T., Lutz, R. J., & Weitz, B. A. (2009). Corporate hypocrisy: Overcoming the threat of inconsistent corporate social responsibility perceptions. *Journal of Marketing, 73*(6), 77–91. https://doi.org/10.1509/jmkg.73.6.77

Wang, X., Wong, Y. D., Li, K. X., & Yuen, K. F. (2021). Shipping industry's sustainability communications to public in social media: A longitudinal analysis. *Transport Policy*, *110*, 123-134. https://doi.org/10.1016/j.tranpol.2021.05.031

Weng, Q., McElroy, J. C., Morrow, P. C., & Liu, R. (2010). The relationship between career growth and organizational commitment. *Journal of Vocational Behavior, 77*(3), 391–400. https://doi.org/10.1016/j.jvb.2010.05.003

Wolf, C., & Seuring, S. (2010). Environmental impacts as buying criteria for third

party logistical services. *International Journal of Physical Distribution & Logistics Management, 40*(1/2), 84–102.

Wu, M., Li, K. X., Xiao, Y., & Yuen, K. F. (2022). Carbon emission trading scheme in the shipping sector: Drivers, challenges, and impacts. *Marine Policy*, *138*, 104-989. https://doi.org/10.1016/j.marpol.2022.104989

XLSTAT (2022). Ordinary Least Squares Regression (OLS). *Addinsoft*. https://www.xlstat.com/en/solutions/features/ordinary-least-squares-regression-ols

Xinhua & Baltic Exchange (2021). Xinhua-Baltic International Shipping Centre Development Index Report. https://www.balticexchange.com/content/dam/balticexchange/consumer/documents/2021_Xinhua_Baltic_ISCDI_EN.pdf

Yang, K., Tu, J., & Chen, T. (2019). Homoscedasticity: An overlooked critical assumption for linear regression. *General Psychiatry*, *32*(5), e100148. https://doi.org/10.1136/gpsych-2019-100148

Yoon, H.W., Lee, S.K., & Lee, K.W. (2014). The effect of CSR on organizational commitment and organizational citizenship behavior of casino employees, *Journal of Tourism & Leisure Research, 26*(7), 373-392

Yue, C. A., Men, L. R., & Ferguson, M. A. (2020). Examining the effects of internal communication and emotional culture on employees' organizational identification. *International Journal of Business Communication, 58*(2), 169-195. https://doi.org/10.1177/2329488420914066

Yuen, K. F., Thai, V. V., Wong, Y. D. & Wang, X. (2018). Interaction impacts of corporate social responsibility and service quality on shipping firms' performance. *Transportation Research Part A: Policy and Practice, 113*, 397-409. https://doi.org/10.1016/j.tra.2018.04.008

Zhou, S. & Sloan, WM.D. (2011). Research Methods in Communication (2nd. edition). Northport: Vision V Press
https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=GR

Appendices

-Appendix A – Questionnaire

Appendix A1 – Consensus form

Dear participant,

Thank you very much for your participation in this research!

As part of my Master Thesis in Business and Media at Erasmus University Rotterdam, Department of Media and Communication (ESHCC), I am conducting research on environmental Corporate Social Responsibility (CSR) communication of shipping companies and employees' attitudes.

The survey will take approximately 5 minutes to complete. Please read the instructions carefully. There are neither right nor wrong answers.

Be aware that your participation is completely voluntary and you are free to discontinue your participation at any time. The data retrieved will be treated anonymously and your personal information will be kept strictly confidential. The data will be solely used for the purpose of this research and will not be shared with other third parties. Your privacy will be protected to the maximum extent. No personally identifiable information will be reported in any research product.

If you have any questions regarding the survey, you can contact me at the following e-mail address: 616433ss@student.eur.nl

Thank you for your participation,
Sandra Sarmpezi

To proceed with the questionnaire, please click on the box below. With this, you indicate you have read and understood this consent form.

□ I understand and agree to proceed

Appendix A2 – Survey items

Environmental CSR refers to a firm's environmental responsibility, meaning its actions intended to minimize the environmental consequences of their operations that could adversely affect future generations. Please take a moment to recall to what extent your company engages in and communicates these practices to the public.

To what extent does your company engage in environmental CSR?

□ Very little

□ Little

□ Neutral

□ Much

□ Very much

I believe that the company I work in...

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree
...has a general code of ethics and guidelines regarding environmental issues.	□	□	□	□	□
...does not engage in exaggerated or false advertising regarding environmental issues.	□	□	□	□	□
...has transparent management regarding environmental issues.	□	□	□	□	□
...deals fairly with business partners regarding environmental issues.	□	□	□	□	□
...values ethical standards more than economic performance when it comes to environmental issues.	□	□	□	□	□

I believe the company has been actively providing the public with...

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree
...specific achievement or outcomes from its previous environmental CSR activities.	□	□	□	□	□
...potential results of its current environmental CSR activities.	□	□	□	□	□
...its motives or intentions for doing environmental CSR activities.	□	□	□	□	□
...information about what the company wants to achieve from its environmental CSR activities.	□	□	□	□	□
...information about who is benefiting from the company's environmental CSR activities.	□	□	□	□	□
...information about whether third-party organizations (NGOs) endorse the company's environmental CSR activities.	□	□	□	□	□

I believe that the company I work in has…

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree
...provided the public information about its environmental CSR failures, not just successes.	☐	☐	☐	☐	☐
...informed the public if its environmental CSR initiative fails.	☐	☐	☐	☐	☐
...informed the public both good and bad information about its environmental CSR activities.	☐	☐	☐	☐	☐

I believe that...

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree
...what the company is communicating about its environmental CSR activities to the public should be consistent.	☐	☐	☐	☐	☐
...consistency in environmental CSR communication of the company to the public is important to me.	☐	☐	☐	☐	☐
...a lack of consistency of the company's environmental CSR communication to the public is problematic.	☐	☐	☐	☐	☐

I believe that the company's environmental CSR messages to the public...

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree
...have been based on facts.	☐	☐	☐	☐	☐
...have been focusing on factual information.	☐	☐	☐	☐	☐
...have been low-key.	☐	☐	☐	☐	☐

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree
...have been not too promotional.	□	□	□	□	□
...have been not too self-congratulatory.	□	□	□	□	□

I feel that...

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree
...my company tries to meet my expectations.	□	□	□	□	□
...my company tries to practice effective management.	□	□	□	□	□
...my company tries to understand its employees.	□	□	□	□	□
...my company is generally responsible	□	□	□	□	□
...I trust my company.	□	□	□	□	□

I feel that...

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree
...I am proud to be a member of the company.	□	□	□	□	□
...I have a considerable interest in the future of the organization.	□	□	□	□	□
...I am trying to improve my organization.	□	□	□	□	□
...I regard a problem that has arisen in the organization as my problem.	□	□	□	□	□
...leaving my organization now would be a great loss to me.	□	□	□	□	□

I feel that…

	1 - Completely Disagree	2 - Disagree	3 - Neither Agree nor Disagree	4 – Agree	5 - Completely Agree
...my employment in this company is a big part of who I am.	□	□	□	□	□

...I consider myself as a 'this company' person.	□	□	□	□	□
...what the company stands for is important to me.	□	□	□	□	□
...I share the goals and values of the company.	□	□	□	□	□
...my membership of the company is important to me.	□	□	□	□	□

What is your gender?

□ Male

□ Female

□ Non-binary

□ Prefer not to say

How old are you?

What is the highest level of education you have achieved?

□ High school diploma

□ Institute of Vocational Training (IEK)

□ Bachelor's degree

□ Master's degree / PhD

□ Merchant Navy

□ Other (Please indicate)

In which type of shipping company do you work?

□ Shipping owner-operator

□ Shipping charterer

□ Classification society

□ Marine insurance

□ I am a seafarer

□ Other (Please indicate)

For how many years have you been working in the company?

[   ]

For how many years have you been working in the sector?

[   ]

We thank you for your time spent taking this survey.
Your response has been recorded.

-Appendix A3 – Original scales

Perception of ethical responsibility

1. Our company has a general code of ethics and guidelines

2. Our company does not engage in exaggerated or false advertising

3. Our company has transparent management

4. Our company deals fairly with business partners

5. Our company values ethical standards more than economic performance.

CSR Informativeness

I believe the company has been actively providing…

1. Specific achievement or outcomes from its previous CSR activities

2. Potential results of its current CSR activities

3. Its motives or intentions for doing CSR activities

4. Information about what the company wants to achieve from its CSR activities

5. Information about who is benefiting from the company's CSR activities

6. Information about whether third-party organizations (non-profit or government) endorse the company's CSR activities

CSR Transparency

I believe the company has…

1. Provided the public information about its CSR failures, not just successes

2. Informed the public if its CSR initiative fails.

3. Informed the public of both good and bad information about its CSR activities.

CSR Consistency

1. What the company is communicating about its CSR activities should be consistent.

2. Consistency in CSR communication of the company is important to me.

3. A lack of consistency of the company's CSR communication is problematic.

CSR message tone

1. The company's CSR messages have been based on facts

2. The company's CSR messages have been focusing on factual information

3. The company's CSR messages have been low-key

4. The company's CSR messages have been too promotional

5. The company's CSR messages have been too self-congratulatory

Organizational identification

1. My employment in the NHS is a big part of who I am

2. I consider myself an NHS person

3. What the NHS stands for is important to me

4. I share the goals and values of the NHS

5. My membership of the NHS is important to me

6. I feel strong ties with the NHS

Organizational commitment

1. I am proud to be a member of the organization

2. I have a considerable interest in the future of the organization

3. I am trying to improve my organization

4. I regard a problem that has arisen in the organization as my problem

5. Leaving my organization now would be a great loss to me

Organizational trust

1. Our company tries to meet my expectations

2. Our company tries to practice effective management

3. Our company tries to understand its employees

4. Our company is generally responsible

5. I trust our company.

-Appendix B – Email sent to shipping companies

Dear Sir or Madam,

Hope you are doing well!

My name is Sandra Sarmpezi and I am a Master's student of Media and Business at Erasmus University Rotterdam. As part of my Thesis, I am currently conducting research on environmental CSR communication and shipping employees in Greece.

By responding to the following survey, you can contribute your valuable help to an understudied field in the Greek shipping sector. It only takes a few minutes to complete, and your responses are anonymous.
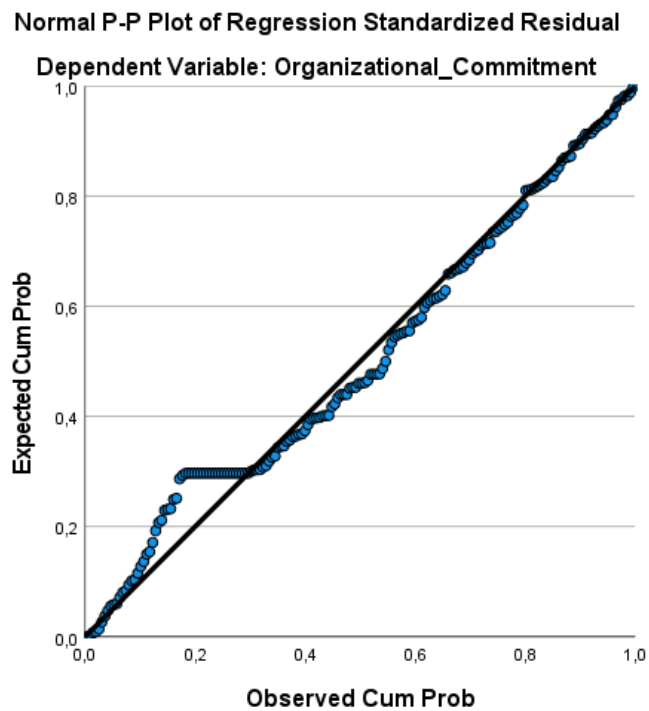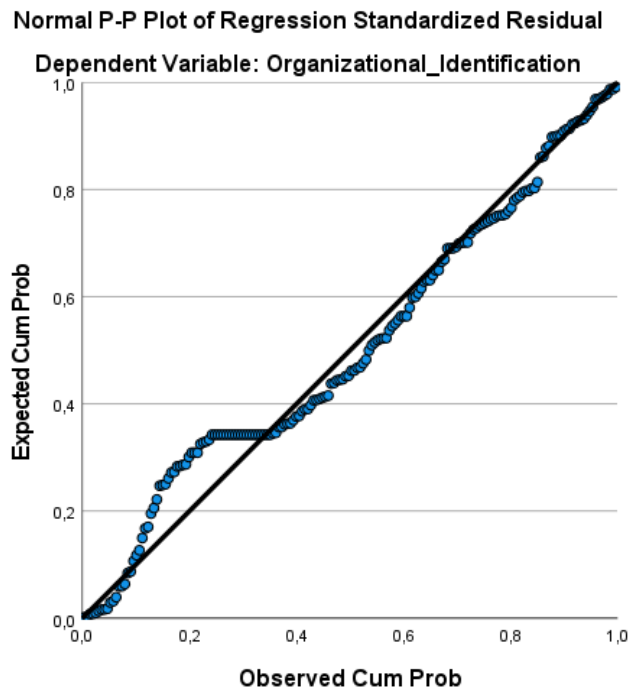
https://erasmusuniversity.eu.qualtrics.com/jfe/form/SV_aeK1QDRLeEHPZtk?fbclid=IwAR2R8Ro3SxCE qypfCWJTRHL5_wDjJJmKaR8VuW4RFRcQrTfWqNfY-ywygS4

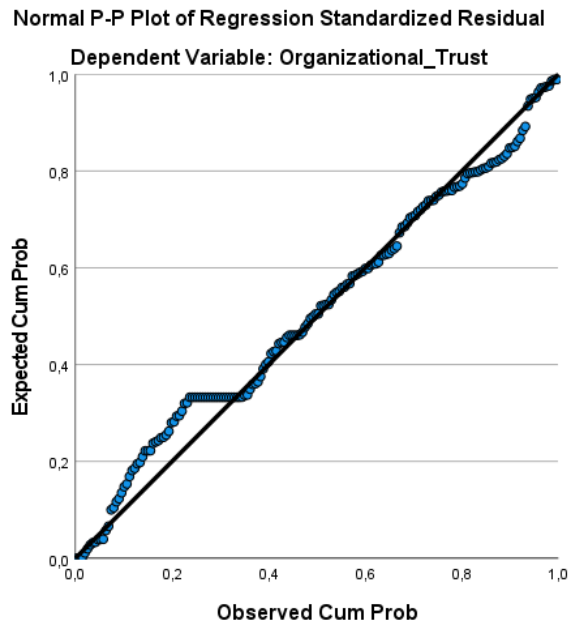Please do not hesitate to contact me at this address for any questions you may have.

Thanking you in advance,
Sandra Sarmpezi

-Appendix C – Assumptions testing

Appendix C1 – Normality assumption

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Organizational_Identification

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Organizational_Commitment

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Organizational_Trust

Appendix C2 – Homoscedasticity assumption

Scatterplot
Dependent Variable: Organizational_Identification

Scatterplot

Dependent Variable: Organizational_Commitment

Scatterplot

Dependent Variable: Organizational_Trust
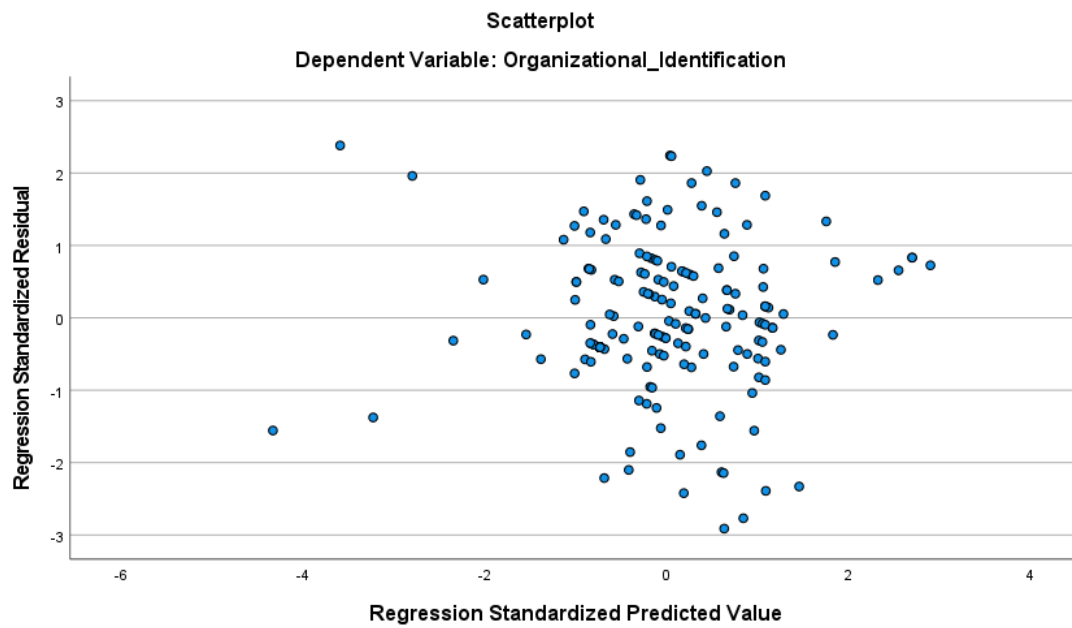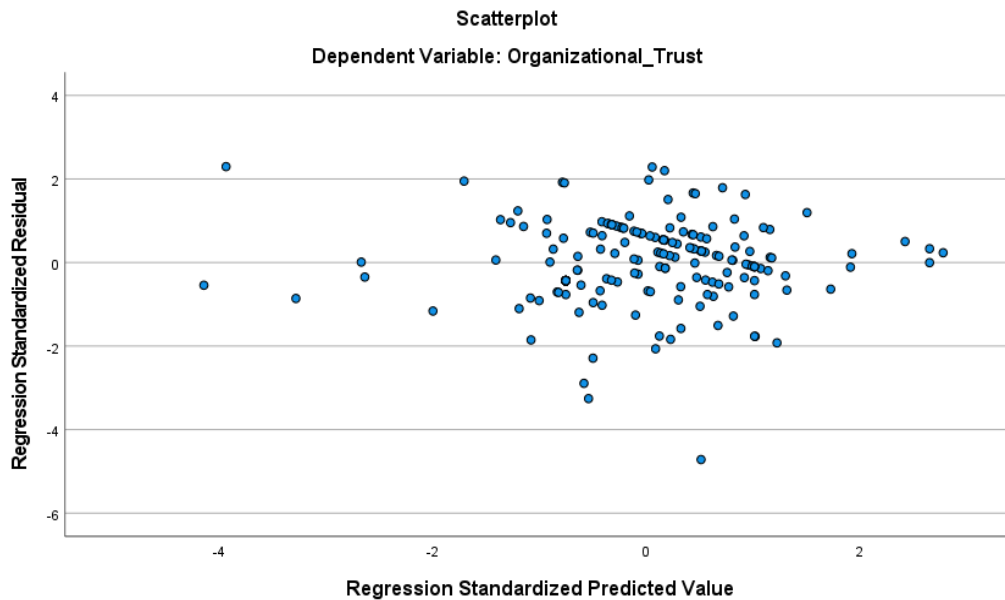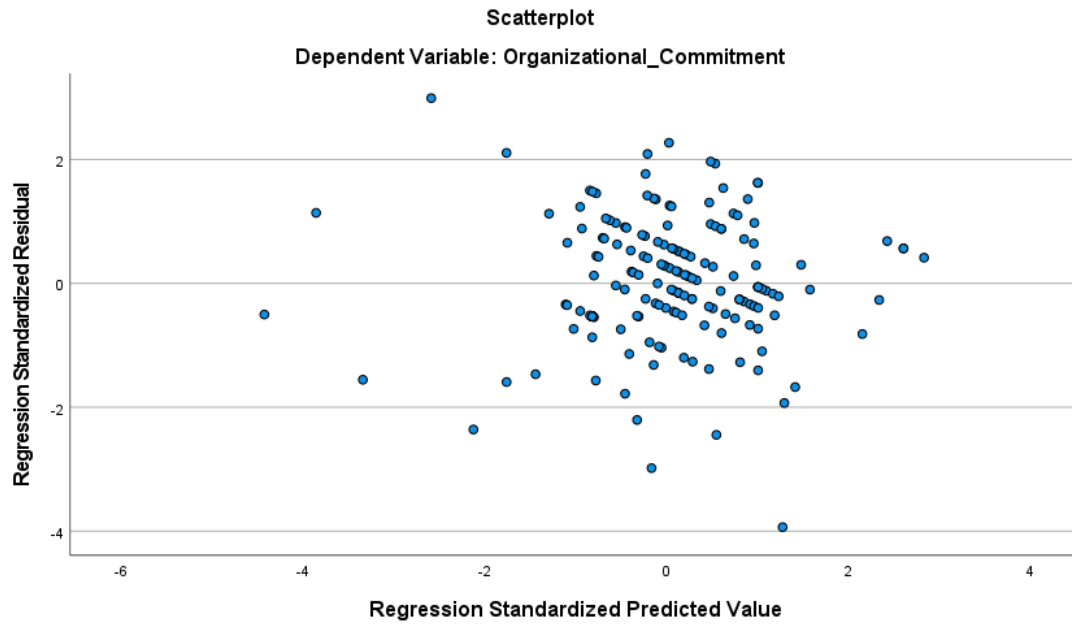
Appendix C3 – Multicollinearity assumption

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	1,376	,310		4,435	<,001		
	CSR_informativeness	,073	,101	,070	,725	,470	,463	2,162
	CSR_transparency	,149	,075	,174	1,988	,048	,566	1,766
	CSR_consistency	,209	,079	,209	2,628	,009	,685	1,461
	CSR_messagetone	,199	,090	,172	2,212	,028	,720	1,390

a. Dependent Variable: Organizational_Identification

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,163	,282		4,123	<,001		
	CSR_informativeness	,104	,092	,103	1,130	,260	,463	2,162
	CSR_transparency	,082	,068	,099	1,196	,233	,566	1,766
	CSR_consistency	,267	,072	,277	3,693	<,001	,685	1,461
	CSR_messagetone	,266	,082	,239	3,258	,001	,720	1,390

a. Dependent Variable: Organizational_Commitment

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,862	,285		3,025	,003		
	CSR_informativeness	,390	,093	,368	4,210	<,001	,463	2,162
	CSR_transparency	,043	,069	,049	,624	,533	,566	1,766
	CSR_consistency	,173	,073	,170	2,368	,019	,685	1,461
	CSR_messagetone	,193	,082	,165	2,347	,020	,720	1,390

a. Dependent Variable: Organizational_Trust

Appendix D - Abbreviations

B2B	-	Business-to-Business
B2C	-	Business-to-Consumers
CSR	-	Corporate Social Responsibility
DV	-	Dependent Variable
ETS	-	Emissions Trading Scheme
EU	-	European Union
GDPR	-	General Data Protection Regulation
IMO	-	International Maritime Organization
IV	-	Independent Variable
M	-	Mediator
MARPOL	-	International Convention for the Prevention of Pollution from Ships
OLS	-	Ordinary Least Squares
SD	-	Standard Deviation
SE	-	Standard Error
UGS	-	Union of Greek Shipowners
UNCTAD	-	United Nations Conference on Trade and Development