

The Spread of Social Inclusion in the Maritime Industry: A Social Study

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Abstract: This paper presents a social study on the maritime port of Montreal investigating the spread of social inclusion in the maritime industry. We used both qualitative and quantitative methods, including structural equation modeling to answer the research questions. Our findings show that the spread of social inclusion was significant in the port in terms of workplace diversity and inclusion, the workplace environment, and the port's responsibility toward society. These findings highlight specific factors that are currently being overlooked and thus require greater industry collaboration. The proposed framework also serves as a tool for a single maritime port to self-assess its current stage of sustainable development, with implications for future social-inclusion implementation strategies.

Keywords: Sustainability, Social Inclusion, Diversity, Port, Maritime, Structural Equation Modeling, Partial Least Squares.

Type: Research paper



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1. Introduction

Corporations and ports have undergone significant transformations driven by the need to incorporate environmental and social dimensions into their business operations. The triple bottom line approach, as outlined by Sislian et al. (2016) and Gupta et al. (2020), emphasizes balancing economic, social, and environmental considerations to achieve sustainability. In the literature, sustainability is well-defined as the integration of international laws and stakeholder concerns, which have presented unique challenges for businesses and ports alike (Moir, 2021).

In the shipping and maritime industry, the world operates as a highly interconnected and interdependent global village. Shipping, as the most heavily regulated industry globally, faces mounting challenges in addressing growing sustainability concerns. Key issues such as health and safety, environmental protection, workplace diversity, working conditions, and the social impact of port

activities on local communities require the urgent attention of port authorities (International Maritime Organization, 2021). Furthermore, port management involves multifaceted and complex responsibilities. Maritime activities occur within an international environment where employees from diverse cultural backgrounds interact, often leading to potential workplace conflicts. Aras and Crowther (2008) have examined these maritime activities through academic, moral, and financial lenses, underscoring the importance of addressing these challenges comprehensively. Achieving sustainability in the maritime sector involves improving employee relations, enhancing port reputations, fostering better stakeholder communication, minimizing operational costs, and increasing efficiency (Timane, 2012).

Despite the maritime industry's critical role in achieving sustainability, there remains a noticeable gap in research exploring the relationship between sustainability and the impact of social inclusion. Given the industry's potential to foster social inclusion, this lack of research is surprising. Some scholars attribute this gap to the International Maritime Organization's (IMO) slow response in implementing explicit social inclusion policies, particularly for the maritime sector (Sciberras & Silva, 2018). As a result, the maritime industry remains uncertain about its role in advancing social inclusion, and visibility of such initiatives across all industries remains limited (Sciberras & Silva, 2018; Alaghbari et al., 2021). A comprehensive assessment of social inclusion and its implications for sustainable maritime development is still needed.

This article addresses these gaps by exploring how the spread of social inclusion in the maritime industry (the dependent variable) is influenced by three key independent variables: 1) workplace diversity and inclusion, 2) the workplace environment, and 3) a port's responsibility to society. The central research question guiding this study is: "What factors curb or drive the spread of social inclusion in ports and their surrounding communities?"

The structure of the paper is as follows: Section 2 reviews findings from the existing literature. Section 3 outlines the research methodology employed in the study. Section 4 presents an analysis of the questionnaire results. Section 5 provides an in-depth discussion of these findings. Section 6 elaborates on the implications of the study for research and policymaking. Finally, Section 7 concludes by highlighting the study's limitations and offering recommendations for future research.

2. Literature Review

Ports are increasingly motivated to engage in social inclusion initiatives, recognizing the significant benefits of developing a social inclusion strategy and reporting system. Such systems are believed to enhance a port's ethical standards, economic transparency, and operational efficiency. By integrating social inclusion principles into organizational functions and employee interactions, ports can foster loyalty, stimulate innovation, and mitigate risks (Moir, 2021; Progoulaki & Roe, 2011).

Social inclusion emphasizes "putting people first" in development processes, empowering individuals, building cohesive and resilient societies, and fostering the inclusion of marginalized groups. It achieves this by creating citizen-friendly and accountable institutions that prioritize accessibility and equity

(Froholdt, 2018). This approach aligns with the broader objectives of sustainable development by addressing societal vulnerabilities while enhancing institutional accountability.

The advantages of inclusive and diverse work environments are well-documented. Research consistently demonstrates a direct link between diversity and organizational performance. Organizations that cultivate diversity are more attractive to prospective talent, particularly younger generations such as millennials and Gen Z. Furthermore, diversity correlates strongly with profitability. Ports with racially and culturally diverse leadership teams are 33% more likely to achieve industry-leading profitability, while those lacking gender and ethnic/cultural diversity in leadership are 29% less likely to attain above-average profitability (Hunt et al., 2018).

However, diversity alone is insufficient without an inclusive culture. Inclusive workplaces are critical to maximizing the potential of diversity. Organizations that prioritize inclusivity are twice as likely to meet or exceed financial targets, three times more likely to exhibit stronger organizational structures, six times more likely to innovate and adapt, and eight times more likely to achieve superior business outcomes (Hunt et al., 2018). Moreover, 74% of millennials believe that inclusive cultures foster greater innovation within organizations. Despite these benefits, only 60% of employees feel their workplace culture supports inclusivity, and an overwhelming 90% express a desire for their employers to do more to create environments where every individual feels valued and empowered to contribute (Hunt et al., 2018). Thus, ports that embrace diversity and inclusivity stand to benefit not only in terms of profitability but also in fostering innovation, reducing risks, and building a loyal workforce. These findings underscore the importance of embedding social inclusion within organizational culture as a core strategy for sustainable growth and competitive advantage.

The shipping and maritime industry has the advantage of learning from sectors that are more advanced in diversity and inclusion, enabling organizations to adopt tested and proven best practices and methodologies to move forward (Saunders et al., 2019). Educating ports and individuals at all levels of the maritime and shipping industry about the specific benefits of inclusion and diversity for their organizations and roles is essential. Achieving diversity and social inclusion is feasible for ports of any size or budget. However, its effectiveness hinges on active engagement and commitment at every organizational level (Saunders et al., 2019).

A strong diversity and inclusion policy, supported by effective monitoring, systems, and processes, is fundamental to fostering an inclusive corporate culture. Essential elements include recruitment and retention strategies, pay equity, learning and development programs, and flexible work arrangements. These factors collectively create an environment where diversity and inclusion can thrive and become sustainable practices (Saunders et al., 2019).

In 2015, the United Nations (UN) issued the landmark document *Transforming Our World: The 2030 Agenda for Sustainable Development*, outlining 17 Sustainable Development Goals (SDGs) and 169 targets. This agenda addresses various issues related to sustainable development, including poverty, hunger, health and well-being, and education. The SDGs serve as a globally agreed-upon framework that integrates social, environmental, and economic

concerns into development-related efforts. Among the 17 goals, five are directly tied to environmental sustainability: SDG 11 (sustainable cities and communities), SDG 12 (responsible production and consumption), SDG 13 (climate action), SDG 14 (life below water), and SDG 15 (life on land) (Alamoush et al., 2021).

While these environmental goals are critical, they are not the only SDGs relevant to addressing marine sustainability. Socially oriented SDGs, such as SDG 4 (quality education), SDG 5 (gender equality), and SDG 10 (reduced inequalities), are equally significant for driving long-term and meaningful societal change. These goals provide clear targets and indicators that can guide the design and implementation of waste-management and other sustainability-focused activities (Pedersen, 2018).

For the first time, a global agenda has been established to inspire coordinated action toward economic, environmental, and social sustainability. The 17 SDGs offer a shared normative framework that engages actors at all levels, including governments, civil societies, and private sectors. This unified framework provides an unprecedented opportunity to foster collaboration and achieve impactful outcomes across diverse domains (Ntona & Morgera, 2018; Virto, 2018). By integrating the SDGs into maritime and port operations, the industry can contribute significantly to the broader goals of global sustainability while addressing its unique challenges.

The maritime industry's responsibility extends well beyond SDG 14. For instance, efforts to reduce port-related pollution in coastal regions contribute directly to the health and well-being of coastal residents, aligning with SDG 3 (Good Health and Well-being). Ensuring decent working conditions for seafarers, a core component of SDG 8 (Decent Work and Economic Growth), and fostering sustainable urban and community development (SDG 11: Sustainable Cities and Communities) rely heavily on efficient and reliable global logistics systems. Thus, the development of the maritime industry is integral to achieving the UN's 2030 agenda and the Sustainable Development Goals (SDGs). A sustainable maritime industry not only supports the SDGs but also benefits from them as a universal framework that effectively guides its development toward sustainability (Benamara et al., 2019; International Maritime Organization, 2021).

Currently, the lack of data and analysis on the intersection of vulnerable groups and environmental issues poses a significant challenge. Environmental interventions driven solely by scientific approaches risk overlooking the human dimensions of these problems. Recognizing that the environment does not exist in isolation from the people who live within it is critical. Therefore, the considerable insights offered by social sciences must complement environmental efforts to address these challenges holistically (Qingmei & Hong, 2021).

Ports' participation in social inclusion operations offers several key benefits. These include increased societal trust and acceptance, a higher likelihood of attracting new charterers, and the potential for business expansion. Additionally, participants in this study reported that engaging in social inclusion activities significantly enhanced their port's regional image and reputation.

The spread of social inclusion within the maritime industry remains a relatively nascent area of research. Consequently, significant gaps in the literature need to be addressed. Empirical studies exploring the effectiveness of social inclusion initiatives within the maritime industry are scarce. There is limited evidence on the impact of these initiatives on various industry stakeholders,

including seafarers, shipowners, port workers, and other key players. Moreover, research tends to disproportionately focus on gender diversity and equality, neglecting other marginalized groups such as individuals with disabilities and ethnic minorities. Expanding the scope of research to include these groups is critical.

Another notable gap is the absence of standardized definitions and measures for social inclusion within the maritime industry. This lack of standardization makes it challenging to compare different initiatives and evaluate their effectiveness. Much of the existing research emphasizes individual-level factors, such as diversity training and recruitment practices, while neglecting the broader role of organizational culture in promoting social inclusion.

Given the identified gaps in the literature and the growing trend of social inclusion initiatives in the maritime industry, this study seeks to investigate the importance of spreading social inclusion in ports, focusing on three key areas: workplace diversity and inclusion, the workplace environment, and ports' responsibility towards society. To guide the investigation, the following hypotheses are proposed:

H₀: There is a positive relationship between the spread of social inclusion and workplace inclusion and diversity, working conditions, and the port's social impact.

H₁: There is no positive relationship between the spread of social inclusion and workplace inclusion and diversity, working conditions, and the port's social impact.

This study aims to provide empirical insights into the factors that promote or hinder social inclusion in the maritime industry, contributing to both academic literature and practical policy development.

3. Research Methodology

3.1. Research Design and Data Collection

Our study focuses on the social dimension of the triple bottom-line approach (Sislian et al., 2016) and examines the spread of social inclusion in the maritime industry. We began by conducting a comprehensive literature review to identify current knowledge gaps in the research. The findings of our study were analyzed both quantitatively and qualitatively through a structured questionnaire. The data collected from respondents provided insights into the relationships between the dependent, mediating, and independent variables. Descriptive and inferential statistics were employed to interpret the data and assess the effects of the independent and mediating variables on the dependent variable (Soiferman, 2010).

3.2. Questionnaire Sample

Our questionnaire was distributed to 65 respondents from the Port of Montreal. This port was chosen due to its significance as an international container hub serving Toronto, Central Canada, and the Midwestern and Northeastern United States. Located along the Saint Lawrence River, 1,600 kilometers (990 miles) inland from the Atlantic Ocean, the Port of Montreal acts as a critical shortcut

between the Midwestern United States, Europe, and the Mediterranean. The port supports over 18,000 jobs and contributes \$1.5 billion to the Canadian economy (Port of Montreal, 2022).

The questionnaire consisted of 40 questions, including demographic information about the respondents, their departmental affiliation, and the port's location. Each question was linked to one of three primary independent variables or the mediator variable (internal factors within the port). Respondents were asked to rate statements on a five-point Likert scale ranging from "strongly disagree" to "strongly agree." The electronic, self-administered questionnaire was distributed to employees working in various departments, including safety, quality, technical, operations, management, and supply and logistics.

3.3. Research Model

Three independent variables were identified for this study based on the existing literature: port workplace diversity and inclusion, workplace environment, and the port's responsibility toward society. The study examines the effect of these independent variables on the dependent variable—the spread of social inclusion—through a mediator variable. The mediator variable includes internal factors within the port, such as working conditions, employee diversity and inclusion, safety, freedom to participate in decision-making, and delegation of authority.

Figure 1 illustrates the variables covered by the questionnaire within the research framework. This model was constructed following a thorough review of the existing literature and an analysis of research gaps (Froholdt, 2018; Hunt et al., 2018; Moir, 2021; Pedersen, 2018; Progoulaki & Roe, 2011).



Figure 1: Research model

The questionnaire responses were analyzed using the Minitab and Stata statistical analysis packages. Structural equation modeling (SEM), one of the most commonly used tools for examining relationships between variables, was employed to analyze the data within the research framework. SEM served as a confirmation and testing method, explaining the links between variables and providing estimates of the coefficients based on these relationships. To enhance our analysis, we utilized several regression models, comparing their results to develop a more robust model. Additionally, we applied the partial least squares (PLS) path modeling method to integrate SEM with regression models. The regression models were used to investigate the linear relationships between multiple independent and dependent variables (Tenenhaus et al., 2004).

To ensure comprehensive coverage of the study's objectives, the questionnaire was designed to address the three independent variables and the two hypotheses. Specifically:

- Questions 1–15 focused on the port's workplace diversity and inclusion, drawing from prior studies (Hunt et al., 2018; Soiferman, 2010).
- Questions 16–33 examined environmental workplace conditions, leveraging insights from the literature (Alamouh et al., 2021; Qingmei & Hong, 2021; Sislian et al., 2016).
- Questions 34–40 investigated the port's responsibility toward society, grounded in theoretical frameworks from Froholdt (2018), Moir (2021), Pedersen (2018), and Progoulaki & Roe (2011).

This structured approach ensured that the analysis was both systematic and aligned with the study's theoretical and empirical objectives.

4. Results

The most appropriate data analysis approach depends on the type and nature of the variables in the dataset. Since our data were categorical and measured on a nominal scale, we used the Chi-square test of independence to determine whether there were any statistically significant relationships between the variables. The Chi-square test of independence is a statistical tool that evaluates hypotheses by analyzing nominally measured variables. The null hypothesis is rejected, and the alternative hypothesis is accepted when the p-value (i.e., the level of significance) is below 0.05 (McHugh, 2013). Additionally, we used the contingency coefficient (C) metric to assess the strength of correlations between the variables. The C value ranges from -1 to +1: values closer to -1 indicate a strong negative relationship, values closer to +1 indicate a strong positive relationship, and values near 0 suggest no correlation between the variables. Both qualitative and quantitative analyses were performed.

Among the respondents, 66% were employees, with the majority (64%) working in the operations department. Respondents from the operations department likely have a solid understanding of and familiarity with social inclusion issues. Overall, 75% of the respondents confirmed that they had incorporated social inclusion policies and concepts into their daily operations. These findings suggest that the maritime industry's social footprint has been continuously expanding. However, while 75% of survey participants have adopted social inclusion policies, 25% do not measure the impact of the port's social footprint on the surrounding community. According to the findings, most respondents (75%) preferred to measure and communicate their safety, social, and sustainability-related activities. The primary recipients of such communication were the board of directors (84%), while only 16% chose to share these activities with society at large. Among other groups, port workers (78%) and charterers (56%) were the most common recipients of communications about the port's activities.

The spread of social inclusion was reported to be most limited by workplace diversity and inclusion (34%). The second major hurdle was the lack of proper workplace conditions (26%), followed by insufficient responsibility toward society (32%). Interestingly, insufficient commitment from top management and the prevailing culture of top management (15%) did not appear to be major impediments to the spread of social inclusion.

The most prominent driver identified for encouraging the spread of social inclusion was the improvement of port culture, specifically through enhanced

ethics, employee diversity, and inclusion (77% of respondents). Regarding workplace conditions, employees expressed a need for greater recognition, motivation, and attention from their supervisors (35%). Other significant factors included maintaining a clean environment outside the port (76%) and actively helping the surrounding community (68%). A less critical factor was threats and harassment in the workplace (6%).

Social inclusion initiatives were found to significantly enhance the port's ability to comply with marine regulations (58%) and improve safety performance (56%). Additionally, 85% of respondents supported initiatives that increase access to and understanding of diverse groups within the community. An overwhelming 92% of participants believed that cultural diversity leads to more effective idea generation, increased learning opportunities, a positive public image for the port, and improved problem-solving capabilities.

Table 1 summarizes the statistics for each respondent group, offering a detailed breakdown of their views and responses regarding the spread and impact of social inclusion initiatives in the port.

Table 1: Statistics according to respondent groups

	Employees (operations department)	Managers (including the Board of Directors)	Other departments (safety, quality, technical, and supply and logistics departments)	Charterers
Worker type	40%	34%	26%	----
Department	64%	----	36%	----
Measure and communicate safety, social, and sustainable activities	40%	84%	35%	----
Share their activities with society	42%	16%	36%	56%
Spread of social inclusion	20%	18%	14%	----
Lack of proper workplace conditions	16%	14%	10%	----
Lack of responsibility toward society	21%	26%	11%	----
Lack of commitment of the top management	----	15%	----	----
Improvement of port culture	41%	15%	21%	----
Working conditions	20%	----	15%	----
Maintenance of a clean environment outside the port	42%	----	34%	----
Helping the surrounding community	44%	----	24%	----
Threats and harassment at work	3%	----	3%	----
Enhance the port's ability to comply with marine regulations	27%	----	31%	----
Improvement of its safety performance	32%	----	24%	----
Cultural diversity	52%	----	40%	----

Table 2 presents the measurement model used in our study, with the three constructs (variables) and the indicators based on the questionnaire.

Table 2: Measurement model

Construct	Indicators	M	SD	Loadings
Variable 1: Port workplace diversity and inclusion $\alpha = 0.72$ $CR = 0.91$ $AVE = 0.85$	1) The port is a toxic working place.	3.56	1.52	0.745**
	2) The port has an appreciative culture in which employees appreciate each other's differences.	3.72	1.45	0.657**
	3) We work in a place where we share and learn about our differences.	4.05	1.61	0.751***
	4) The port's employees are valued for who they are.	4.11	1.54	0.815***
	5) Resources are provided to employees so they can resolve conflicts effectively.	3.87	1.69	0.897***
	6) The port values work-life balance.	3.86	1.47	0.654**
	7) The port appreciates high performance.	3.83	1.23	0.754***
	8) The port helps employees understand their feelings and attitudes about people who are different.	3.45	1.22	0.753***
	9) The port incorporates employees' diversity into its vision or mission statement.	3.87	1.15	0.715***
	10) The port creates a culture of awareness about and appreciation for diversity.	4.02	1.47	0.547*
	11) We work well with employees of diverse cultural backgrounds.	4.26	0.98	0.652**
	12) The port is committed to hiring a workforce that is representative of diversity.	4.12	0.85	0.874***
	13) The port has policies in place to promote diversity in the workplace.	4.27	0.47	0.693**
	14) The port invests in the development of all its employees.	4.18	0.54	0.724***
	15) Employees in the port are paid and treated equitably.	4.58	0.57	0.872***
Variable 2: Workplace environment $\alpha = 0.74$ $CR = 0.87$ $AVE = 0.91$	16) The port has a fair promotion process.	4.21	1.55	0.742**
	17) I am given an adequate amount of responsibility.	4.52	1.45	0.542*
	18) I get the freedom to choose my own method for getting the job done.	5.1	1.61	0.754***
	19) I get recognition for satisfactory performance.	5.17	1.54	0.815***
	20) I can judge my work performance.	3.87	1.69	0.897***
	21) There is variety in my job, so I do not get bored.	3.86	1.47	0.654**
	22) There is a chance of promotion.	3.83	1.23	0.754***
	23) There is manager and peer support.	3.45	1.22	0.753***
	24) The port provides enough safety training programs.	3.87	1.15	0.715***
	25) The port conducts frequent safety inspections.	4.02	1.47	0.547*
	26) I can count on my colleagues to help me with difficult tasks at work.	4.26	0.98	0.652**
	27) My supervisor helps me with difficult tasks at work.	4.12	0.85	0.874***

	28) My supervisor offers innovative ideas for solving job-related problems.	4.27	0.47	0.693**
	29) My supervisor encourages me to do my best.	4.18	0.54	0.724***
	30) My supervisor encourages me to work as a team with my coworkers.	4.58	0.57	0.872***
	31) My supervisor listens to me when I talk about problems at work.	4.62	0.72	0.806***
	32) The port investigates safety problems quickly.	3.87	0.68	0.741**
	33) The port provides safe working conditions and responds quickly to safety concerns.	3.25	0.67	0.650*
Variable 3: The port's responsibility toward society $\alpha = 0.73$ CR = 0.90 AVE = 0.76	34) The port maintains a clean environment outside its bounds.	5.73	1.93	0.825**
	35) The port helps maintain a clean work area.	3.69	1.78	0.654**
	36) The port helps the surrounding community.	4.05	1.61	0.751***
	37) The port provides safety equipment and safety information.	4.11	1.54	0.815***
	38) The port has positive externalities.	3.87	1.69	0.897***
	39) The port informs employees and the community of hazmat situations.	3.86	1.47	0.654**
	40) I have been threatened or harassed at work.	3.83	1.23	0.754***

*** $p < 0.001$, ** $p < 0.05$ (two-tailed).

α : Cronbach's alpha; CR: composite reliability; AVE: average variance extracted; M: mean; SD: standard deviation.

We evaluated H_0 and found a p-value of 0.365 based on the Chi-squared test of independence and association. This result indicates that there is no statistically significant relationship between the variables at a significance level of $\alpha = 0.05$. Furthermore, the data revealed that greater diversity and inclusion in the workplace correlates with improved working conditions, and enhancing the port's responsibility toward society promotes the spread of social inclusion within the port. The estimated C value was 0.214, suggesting a positive, albeit weak, association between workplace diversity and inclusion, workplace environment, and the port's responsibility toward society (independent variables) and the spread of social inclusion (dependent variable). Consequently, we fail to reject the null hypothesis ($X^2 = 4.798$, $p = 0.365$). For H_1 , the p-value was 0.0048, which is below the significance level of $\alpha = 0.005$. This result implies the absence of a statistically significant relationship between the variables. Thus, we reject the alternative hypothesis ($X^2 = 12.587$, $p = 0.0048$). Additionally, the C value was found to be 0.525, indicating a moderate correlation. Given that the correlation is statistically significant ($p < 0.05$), the data suggest consistency between workplace diversity and inclusion, workplace environment conditions, and the port's responsibility toward society (independent variables) and the spread of social inclusion (dependent variable).

These findings underscore that fostering social inclusion in maritime ports encourages the establishment of workplace diversity and inclusion initiatives, enhances workplace environments, and reinforces a port's social responsibility. The results of the Chi-squared tests of independence and the contingency coefficient are summarized in Table 3.

Table 3: Chi-squared test of independence and contingency coefficient for the two hypotheses

Hypotheses	p-value	X ²	C	H ₀ rejection
H ₀ : There is a positive relationship between the spread of social inclusion, on the one hand, and workplace inclusion and diversity, working conditions, and the port's social impact, on the other.	0.365	4.798	0.214	No
H ₁ : There is no positive relationship between the spread of social inclusion, on the one hand, and workplace inclusion and diversity, working conditions, and the port's social impact, on the other.	0.0048*	12.587	0.525	Yes

H₀ is rejected at the level of significance $p < 0.05$.

We fail to reject H₀, indicating a positive relationship between workplace inclusion and diversity, working conditions, the port's social impact, and the spread of social inclusion.

5. Discussion

The existing literature highlights the potential of social inclusion as a transformative practice within the maritime industry. Building on this foundation, the present study aimed to examine the variables influencing the spread of social inclusion in the port of Montreal. This quantitative investigation revealed a significant barrier: the port's lack of a robust corporate culture and insufficient commitment from senior management. This factor was identified as the sixth most critical impediment to social inclusion, accounting for 34% of the responses.

Furthermore, the alternative hypothesis, H₁, was rejected ($p = 0.0048 < 0.05$). This result suggests that while maritime ports may express a willingness to adopt social inclusion practices and adhere to industry standards, their primary focus has often been on compliance with regulatory demands rather than leveraging social inclusion as a strategy for business expansion. As noted by Kurucz et al. (2008), regulatory pressures often divert attention from proactive social initiatives. The relatively recent introduction of social inclusion policies in the shipping industry, particularly within sectors like tankers and dry bulk shipping, underscores this point (Evangelista, 2014). Ports are still in the early stages of understanding and implementing social inclusion principles and standards. The limited body of research exploring the long-term benefits and value of social inclusion in the maritime context further compounds this challenge (Lund-Thomsen et al., 2016). Consequently, in the nascent field of marine social inclusion, the absence of a supportive corporate culture and the lack of senior management commitment are significant, though secondary, hurdles to progress.

The literature identifies key variables that ports can utilize to manage stakeholder relationships effectively, including workplace diversity and inclusion, the workplace environment, and social responsibility (Kunnaala et al., 2013). Our

findings support this view, suggesting that maritime ports can significantly contribute to the spread of social inclusion by aligning their practices with industry standards and community expectations. Moreover, the null hypothesis, H_0 , was accepted ($p = 0.365 > 0.05$), indicating the critical role of stakeholder interactions in fostering social inclusion. Ports engage with a diverse range of stakeholders—flag administrations, port state controls, labor unions, and industry associations—all of whom have heightened expectations regarding diversity, inclusion, and social responsibility (Roe, 2013). Employees, as key stakeholders, also play a pivotal role. Our findings demonstrate that social inclusion practices can strengthen employee confidence and enhance the connection between a port and its workforce, making their implementation a strategic imperative for management.

Ensuring port sustainability requires the identification and mitigation of risks associated with stakeholder interactions, including the potential loss of confidence and economic viability (Poulovassilis & Meidanis, 2013). Improved workplace conditions are among the notable benefits that incentivize shipping businesses to adopt social inclusion policies (Kunnaala et al., 2013). Consistent with this view, our research identified a strong positive correlation ($C = 0.525$) between the spread of social inclusion and variables such as workplace inclusion and diversity, working conditions, and the social impact of the port.

The study also highlighted the port of Montreal's efforts to provide a supportive working environment. Employees reported feeling valued and appreciated, despite occasional pressure from supervisors. Diversity is welcomed, and employees generally feel safe at work. However, there is a clear need for enhanced guidance, better training, and more frequent updates to equipment. The presence of a conducive corporate culture and the active commitment of senior management were identified as pivotal factors facilitating the successful implementation of social inclusion policies. During the study, observations revealed improved trust and relationships with stakeholders, as well as enhanced ethical standards, economic transparency, social impact, and employee relations.

Ultimately, the findings underscore the importance of fostering a positive and supportive attitude toward social inclusion among key maritime stakeholders. Such an approach will motivate and facilitate the broader adoption of social inclusion initiatives in ports. By aligning organizational practices with stakeholder expectations and community needs, ports can not only enhance their operational efficiency but also contribute meaningfully to social progress and sustainability. Future research should continue to explore these dynamics, focusing on actionable strategies to overcome existing barriers and further embed social inclusion in the maritime industry.

6. Implications

6.1. Theoretical Implications

This research contributes significantly to the theoretical understanding of social inclusion within the maritime industry. First, the study introduces and applies the concept of social inclusion to the maritime sector, a domain where such considerations have been relatively underexplored. By proposing a unified framework, it illustrates the maritime industry's transitional journey towards

sustainability from a social-inclusion perspective. This framework is grounded in two key dimensions: the comprehensiveness of sustainability efforts (basic or extended) and the level of value-chain collaboration. By doing so, the research provides a structured lens through which the industry's efforts toward social inclusion can be assessed and contextualized.

Second, this study identifies and examines several variables associated with the spread of social inclusion within the maritime industry. It stands as one of the few studies that analyze the social impact of port activities, thereby addressing a gap in existing literature and expanding our understanding of the industry's role in societal inclusion. Crucially, the findings reveal that inadequate governance mechanisms at ports can act as significant barriers to incorporating the surrounding community in port operations and planning. This insight underscores the importance of governance structures in fostering social inclusion.

Furthermore, the study highlights the widespread lack of knowledge about social inclusion among port stakeholders, as well as the limited willingness to learn and implement such practices. These deficiencies hinder the broader adoption of social inclusion initiatives. However, the research also identifies stakeholders—particularly employees and the broader society—as critical drivers of social inclusion. This reinforces the idea that fostering community involvement and stakeholder engagement can catalyze the spread of social inclusion in the maritime sector.

6.2. Policymaking Implications

The findings of this study offer actionable insights for policymakers, including port authorities and federal and provincial governments, to address the challenges and opportunities associated with social inclusion in the maritime industry. Policymakers can leverage this research to design targeted policies that address the knowledge gaps and lack of awareness regarding social inclusion. Such policies may include the development of educational and training programs tailored to port authorities, equipping them with the tools to recognize and capitalize on the long-term benefits of social inclusion for their operations.

Policymakers should also focus on creating programs that highlight the positive externalities of social inclusion, such as stronger relationships with stakeholders and enhanced reputational standing. By emphasizing these advantages, port authorities can be incentivized to adopt and integrate social-inclusion practices into their operations. This may contribute to the long-term sustainability and viability of ports, fostering a culture of inclusion that benefits both the ports and the surrounding communities.

Transparent and effective communication is another critical area for policymakers to address. Encouraging ports to openly report on their social operations and engage with stakeholders can build trust and enhance collaboration. Stakeholder engagement—ranging from employees and local communities to business partners—should be actively encouraged and facilitated. This collaboration is vital for aligning port activities with societal expectations and for driving the more effective spread of social inclusion practices.

Finally, policymakers can use the insights from this research to recognize areas for improvement, such as fostering better education on social-inclusion principles and ensuring the practical application of these principles across the shipping industry. Such efforts should include strategies for identifying, measuring, and appreciating the long-term societal benefits of social-inclusion initiatives. These measures can serve as foundational steps toward integrating social inclusion more deeply into the operational and strategic frameworks of the maritime sector.

7. Conclusion

This article investigates and examines the spread of social inclusion in ports. Unlike other industries where the implementation of social inclusion is more advanced, the shipping industry is only beginning to show gradual signs of adopting social-inclusion practices. The adoption of the UN Sustainable Development Goals (SDGs) has played a significant role in prompting governments to incorporate social inclusion into their legislation and policies, which has influenced the shipping industry's direction. According to this study, the Port of Montreal has aligned itself with these global trends and, as part of its commitment to sustainable port activities, has envisioned using social-inclusion principles as a vehicle to achieve and maintain a sustainable shipping industry (International Maritime Organization, 2021).

The study identifies three variables influencing the spread of social inclusion: workplace diversity and inclusion, the workplace environment, and a port's societal responsibility. A key finding is the need for port governance and sustainability approaches to incorporate additional social inclusion initiatives. Empirical findings indicate that shipping businesses require more information and practical understanding of social inclusion practices. Effective implementation should not rely solely on creating new legislative frameworks but rather on enhanced instructions and guidance.

A critical obstacle to social inclusion is the lack of understanding regarding its long-term benefits for ports. Addressing this gap is essential for advancing social-inclusion efforts. Conversely, effective communication about a port's social impact and its contributions to surrounding communities significantly drives social-inclusion efforts. Policymakers should promote this positive factor, offering specialized guidance and training to assist ports and the broader shipping industry in overcoming the challenges of implementing social-inclusion policies.

Future studies should propose practical solutions to encourage ports to engage in activities with a positive social impact on their communities. This includes involving all relevant stakeholders in decision-making processes. Despite its contributions, this study has several limitations.

First, the findings are specific to maritime port settings. Future research should expand its scope to include other maritime stakeholders, such as flag administrations, charterers, and suppliers. Second, because the study focused on a single port, its results cannot be generalized to other ports. Third, the study did not explore ways to address the spread of social inclusion in port activities comprehensively, nor did it provide recommendations for managing and disseminating social-inclusion practices to broader society. Further research is

needed to propose realistic solutions to these limitations while maintaining the positive social impacts of port activities. Such studies can enhance the understanding and application of social inclusion, ultimately benefiting the shipping industry and its stakeholders.

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Appendix: Questionnaire

Dear participant,

The questionnaire is designed to gather data on the social impact of the port's activities on both employees and the community.

Your responses will remain anonymous and will be used solely for research purposes. We sincerely appreciate your cooperation in completing the questions.

Position Title:

	Questions	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
1	The port is a toxic working place.					
2	The port has an appreciating culture in which employees appreciate the differences of each other.					
3	We work in a place where we share and learn about our differences.					
4	Port's employees are valued for who they are.					
5	Resources are contributed to employees so they can resolve conflicts effectively.					
6	The port values work-life balance.					
7	The port appreciates high performance.					
8	The port helps employees understand their feelings and					

	attitudes about people who are different.					
9	The port incorporates employees' diversity into the port's vision or mission statement.					
10	The port creates a culture of awareness and appreciation about diversity.					
11	I collaborate well with employees of diverse cultural backgrounds.					
12	The port is committed to hiring a workforce that is representative of diversity.					
13	The port has policies in place to promote diversity in the port workplace.					
14	The port invests in the development of all its employees.					
15	Employees in the port are paid and treated equitably.					
16	The port has a fair promotion process.					
17	I am given an adequate amount of responsibility.					
18	I get the freedom to choose my own method of getting the job done.					
19	I get recognition for superior performance.					
20	I can judge my work performance.					
21	There is variety in my job, so I am not getting bored.					
22	There is a chance of promotion.					
23	There is the manager and peer support.					
24	The port provides enough safety training programs.					

25	The port conducts frequent safety inspections.					
26	I can count on my colleagues to help me with difficult tasks at work.					
27	My supervisor helps me with difficult tasks at work.					
28	My supervisor offers innovative ideas for solving job-related problems.					
29	My supervisor encourages me to give my best of me.					
30	My supervisor encourages me to work as a team.					
31	My supervisor listens to me when I talk about problems at work.					
32	The port investigates safety problems quickly.					
33	The port provides safe working conditions and responds quickly to safety concerns.					
34	The port maintains a clean environment outside the port.					
35	The port helps maintain a clean work area.					
36	The port helps the surrounding community.					
37	The port provides safety equipment and safety information.					
38	The port provides positive externalities.					
39	The port informs employees and the community of hazmat situations.					
40	I have been once threatened or harassed at work.					