



Social Determinants of Health in The Maritim Sector: A Qualitative Analysis of The Role of *Safety Culture* And Leadership on The Health and Performance of *Stevedores* at Tanjung Perak Port

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Abstract

This qualitative study investigates the critical influence of workplace culture and leadership styles on occupational health and safety (OHS) outcomes for stevedores at Tanjung Perak Port, Indonesia. Framed within the public health concept of social determinants of health, the research employed a phenomenological approach, conducting in-depth interviews with ten stevedores to capture their lived experiences. Thematic analysis revealed a pervasive normalization of risk, where a culture of machismo and fear of reprisal led to the under-reporting of hazards and the acceptance of unsafe practices as an inevitable part of the job. A stark dichotomy in leadership emerged as a pivotal factor, distinguishing between transactional "Boss" figures who prioritized production targets and fostered silence, and transformational "Leaders" who engendered psychological safety, open communication, and proactive problem-solving. The findings demonstrate that effective leadership is the primary lever for mitigating a negative safety culture, directly impacting both worker well-being and operational performance. The study concludes that sustainable port efficiency and resilience are contingent upon a safe and healthy workforce, necessitating a strategic shift from technical compliance alone towards interventions that cultivate positive safety cultures and develop transformative leadership at the supervisory level. This research provides a critical, human-centered evidence base for improving OHS policy and practice in the maritime sector and similar high-risk industries.

Keywords: *Occupational Health and Safety (OHS), Social Determinants of Health, Maritime Safety Culture, Safety Leadership, Port Management, Psychosocial Well-being.*

INTRODUCTION

The relentless rhythm of global trade is sustained by the world's ports, complex hubs where the flow of goods hinges on the physical labour of a largely invisible workforce. Among these critical actors, *stevedores*—the workers who load and unload the very lifeblood of international commerce—operate in an environment perpetually balanced between efficiency and peril. In Indonesia, the world's largest archipelagic state, whose geopolitical and economic identity is intrinsically maritime, the vitality of ports like Tanjung Perak is not merely an economic concern but a matter of national security

and public health. Yet, beneath the macro-level narratives of logistics performance and gross domestic product lies a more human, and often overlooked, reality: the safety, health, and well-being of the frontline maritime workforce. Despite decades of technological advancement and international regulation, the spectre of workplace accidents and occupational illnesses continues to haunt the maritime sector, suggesting that technical solutions alone are insufficient. This research posits that the root causes of this persistent challenge are not solely found in the failure of equipment or procedures, but deeply embedded within the social and organizational fabric of the workplace—specifically, in the intertwined domains of *safety culture* and leadership. Therefore, this study moves beyond a technical-operational analysis to investigate, through the lived experiences of *stevedores* at Tanjung Perak Port, how workplace culture and leadership styles function as critical social determinants of health, ultimately shaping both the well-being of the workforce and the operational performance of this critical national infrastructure.

While the strategic importance of seaports to the global economy is well-established, existing literature has primarily focused on macro-level and technical determinants of port performance. A substantial body of research, including studies on port efficiency (Caldas et al., 2024) and green port policies (Zhou et al., 2024), rigorously analyses economic and environmental outcomes. Similarly, frameworks for measuring port resilience (Kim et al., 2021) and risk assessment for intelligent systems (Zhang et al., 2022) underscore a growing, yet predominantly systemic, understanding of operational vulnerabilities. Collectively, this discourse often treats the human element as a managed variable—acknowledged in contexts of error or training—rather than as the foundational socio-cultural core of safety and health. This gap becomes critical in high-risk environments like ports, where the World Health Organization's (2020) concept of social determinants of health posits that workplace conditions, organizational culture, and leadership directly shape physical and psychological well-being. However, within the Indonesian maritime context—a sector vital to national ambition—there remains a significant lack of qualitative, human-centered evidence. Specifically, little is known about how the psychosocial and cultural dynamics of the workplace, such as normalized risk, peer pressure, and leadership interactions, function as lived realities that either enable or undermine occupational health, safety, and ultimately, sustainable performance. This study addresses that gap by investigating the interplay of *safety culture* and leadership as social determinants of health among *stevedores* at Tanjung Perak Port, thereby repositioning the worker from an economic unit to the central agent of port resilience and prosperity.

The central problem this research addresses is the persistent gap in understanding the socio-cultural and leadership mechanisms that either enable or undermine occupational health and safety (OHS) among *stevedores* in the specific context of an Indonesian port. While accident statistics can quantify the problem, they cannot explain the "why." Why do safety procedures sometimes go unheeded? Why might a worker hesitate to report a hazard? How does the relationship with a supervisor influence not just compliance, but a worker's very sense of well-being? To unravel this complexity, this study is guided by the following central research question: How do *safety culture* and leadership styles act as social determinants of health, influencing the safety, well-being, and performance of *stevedores* at Tanjung Perak Port? From this central question flow specific objectives: first, to critically explore *stevedores'* lived experiences and perceptions of workplace culture and its impact on their health and safety behaviours; second, to analyse their narratives of leadership, distinguishing between practices that empower and protect versus those that undermine safety and dignity; and third, to

synthesize these findings into a coherent model that links organizational determinants to health and performance outcomes, providing an evidence base for more humane and effective interventions.

The rationale for this investigation is one of both profound urgency and significant novelty. The urgency is twofold. Firstly, from a public health perspective, the stevedoring workforce represents a vulnerable population whose health is disproportionately impacted by their work conditions. Ensuring their well-being is an ethical imperative and a cornerstone of a healthy, productive society. Secondly, from a socio-economic standpoint, Indonesia's ambition to become a global maritime fulcrum cannot be realized without a safe, skilled, and motivated maritime workforce. Chronic accidents and poor health degrade human capital, disrupt supply chains, and incur substantial economic costs, thereby undermining national competitiveness. The motivation for this study is to provide the qualitative, human-centered evidence necessary to bridge the gap between high-level policy and on-the-ground reality.

Methodologically, this research employs a qualitative, phenomenological approach to answer these complex questions. Recognizing that the "how" and "why" are best understood through the voices of those who live the experience, this study will conduct in-depth, semi-structured interviews with a purposive sample of ten *stevedores* from Tanjung Perak Port. This method is chosen specifically to elicit rich, narrative data on their perceptions, beliefs, and lived realities. The data will be analysed using Braun and Clarke's (2006) thematic analysis, a rigorous process that allows for the identification, analysis, and reporting of patterns (themes) within the data. This approach will move beyond superficial answers to uncover the deeply ingrained norms, unspoken rules, and relational dynamics that quantitative surveys often miss. By giving voice to the workers themselves, this research seeks to build a nuanced understanding from the ground up, ensuring that any subsequent recommendations are not only evidence-based but also contextually relevant and ethically grounded.

In summary, this introduction has established the critical role of ports in the global economy and Indonesia's national development, while highlighting a significant gap in the literature regarding the socio-cultural underpinnings of occupational health and safety. By framing workplace culture and leadership as social determinants of health, and by employing a qualitative methodology to listen to the voices of *stevedores*, this research aims to make a substantive contribution to maritime studies, public health, and organizational leadership. The findings promise to illuminate the path toward not only a safer and more efficient port, but also a more just and healthier working environment for the men who keep Indonesia connected to the world.

RESEARCH METHOD

Research Design

This study employs a qualitative research design grounded in a phenomenological approach to investigate the intricate social and organizational dynamics influencing occupational health and safety (OHS) among *stevedores*. The core objective is to understand the lived experiences and shared perceptions of the workforce, for which a qualitative methodology is uniquely suited as it prioritizes depth, context, and meaning over numerical generalization. Phenomenology, as described by Creswell and Poth (2018), seeks to understand the essence of experiences from the perspective of those who live them. This approach is particularly appropriate for exploring how *stevedores* interpret and navigate their work environment, as it allows for the uncovering of the subjective realities that shape their safety behaviors, health perceptions, and interactions with leadership.

The research design was constructed to meticulously capture and analyze these subjective realities, ensuring that the findings are both academically rigorous and deeply rooted in the specific socio-cultural and operational context of Tanjung Perak Port. The design moves beyond a technical audit of safety procedures to explore the underlying norms, values, and power relations that constitute the workplace "lifeworld" of the *stevedores*.

Population and Sampling

The defined population for this research encompasses all *stevedores* engaged in loading and unloading operations at Tanjung Perak Port, Surabaya. From this population, a purposive sampling strategy was employed to select a sample of ten (10) individuals. The rationale for this strategy was to ensure the selection of information-rich cases—individuals who possess direct, extensive, and varied experience with the phenomena of *safety culture* and leadership under investigation.

Participants were selected to represent a strategic range of key characteristics considered relevant to the study's objectives. Diversity was sought across:

1. Years of Service: To capture perspectives from both newer workers and seasoned veterans.
2. Type of Cargo Handled: Including those working with containers, bulk goods, and general cargo.
3. Employment Arrangement: Including workers directly employed by the port authority and those working under subcontracting firms.
4. Work Team/Foreman: To gather experiences under different supervisory styles and team dynamics.

This purposive diversity was crucial for capturing a wide spectrum of experiences and perspectives, thereby strengthening the transferability and conceptual depth of the findings. The urgency of gathering data from this specific group stems from their position as the primary actors who directly navigate the daily physical risks and social pressures of the port environment. Their firsthand, embodied accounts are indispensable for understanding how abstract concepts like "*safety culture*" and "*leadership*" are concretely enacted, interpreted, and resisted on the front lines, making them the ultimate experts on the subject of their own working lives. Recruitment continued until data saturation was achieved, meaning that subsequent interviews no longer yielded new thematic insights or substantially different perspectives on the core themes.

Participant Characteristics

To contextualize the participants' backgrounds and experiences, an anonymized profile of the sample is provided below. This demographic and experiential context is vital for readers to assess the grounding of the study's findings.

| Partisipant | Age | Years of Service | Primary Cargo Handle | Employment Type |
|-------------|-----|------------------|----------------------------|----------------------------|
| P01 | 35 | 10 | Containers & General Cargo | Contract (Subcontracted) |
| P02 | 41 | 12 | Bulk Goods | Permanent (Port Authority) |
| P03 | 28 | 6 | Containers | Contract (Subcontracted) |
| P04 | 53 | 20 | General Cargo | Permanent (Port Authority) |
| P05 | 30 | 8 | Bulk Goods | Contract (Subcontracted) |

| | | | | |
|-----|----|----|-------------------|----------------------------|
| P06 | 48 | 18 | Containers | Permanent (Port Authority) |
| P07 | 38 | 15 | General Cargo | Contract (Subcontracted) |
| P08 | 33 | 9 | Containers & Bulk | Permanent (Port Authority) |
| P09 | 50 | 22 | General Cargo | Permanent (Port Authority) |
| P10 | 27 | 4 | Containers | Contract (Subcontracted) |

Research Instrument and Data Collection

The primary research instrument was a semi-structured interview protocol, developed by the researcher to guide in-depth conversations while allowing flexibility to explore emerging topics. This instrument was designed around the study's core conceptual variables:

1. Independent Variable 1: *Safety culture*
 - *Indicators*: Peer norms regarding risk-taking; openness of safety communication; collective commitment to safety vs. production; socialization of new workers.
2. Independent Variable 2: Leadership Style
 - *Indicators*: Supervisory support and feedback; fairness and approachability in incident response; visibility and prioritization of safety versus production targets; communication style (one-way vs. dialogic).
3. Dependent Variable: OHS Outcomes and Worker Well-being
 - *Indicators*: Perceived physical and psychological safety; self-reported adherence to safety protocols; experiences of near-misses or incidents; reported physical health symptoms (e.g., pain, fatigue); psychological well-being (e.g., stress, job satisfaction).

The interview protocol consisted of open-ended questions and probing prompts organized thematically (e.g., "Can you describe a typical workday and the safety challenges you face?"; "Tell me about a time you felt unsafe at work—what happened and how was it handled?"; "How would you describe your relationship with your foreman/supervisor?"). This primary instrument was supplemented by:

1. A brief demographic questionnaire to formally record participant background information.
2. A researcher journal for documenting detailed observational notes and reflexive thoughts immediately before, during, and after each interview.

The data collection process was conducted with meticulous attention to ethical and methodological best practices:

1. Ethical Approval and Informed Consent: Following institutional ethical review, potential participants were approached. The study's purpose, procedures, confidentiality guarantees, voluntary nature, and their right to withdraw at any time were explained in detail in Bahasa Indonesia. Written informed consent was obtained from all participants.
2. Interview Setting: Interviews, lasting approximately 60–90 minutes each, were conducted in Bahasa Indonesia in a private, comfortable, and neutral setting to encourage candid and reflective responses.
3. Recording and Documentation: With explicit permission, all interviews were audio-recorded. These recordings were supplemented by the researcher's contemporaneous field notes on non-verbal cues (body language, tone, pauses) and contextual observations about the interview setting and dynamics.

Data Analysis Procedures

Data analysis followed the six-phase thematic analysis framework by Braun and Clarke (2006, 2022), chosen for its systematic yet flexible approach to identifying, analyzing, and reporting patterns within qualitative data. The process was conducted iteratively as follows:

a. Phase 1: Transcription and Familiarization

All audio recordings were transcribed verbatim in Bahasa Indonesia to preserve linguistic nuance. The research team then immersed themselves in the data by reading and re-reading the transcripts while listening to the recordings, noting initial impressions and potential patterns.

b. Phase 2: Generating Initial Codes

Significant statements, phrases, and segments of data relevant to the research questions were systematically identified. Descriptive codes were assigned to these features (e.g., "fear of reporting," "*machismo* talk," "leader present on floor," "pain normalization," "blame after incident").

c. Phase 3: Searching for Themes

The initial codes were collated and grouped into broader, candidate themes that captured something important about the data in relation to the research questions (e.g., "Normalization of Risk," "The Boss-Leader Dichotomy," "Well-being as Efficiency").

d. Phase 4: Reviewing Themes

The candidate themes were reviewed and refined at two levels. First, all coded data extracts for each theme were checked to assess if they formed a coherent pattern. Second, the entire dataset was re-examined to ensure the thematic map accurately reflected the meanings evident in the data as a whole. Themes were merged, split, or discarded as necessary.

e. Phase 5: Defining and Naming Themes

Each theme was clearly defined and given a concise, informative name that captured its essence. A detailed analysis was written for each theme, describing its scope, content, and relationship to other themes, and selecting vivid, illustrative data extracts.

f. Phase 6: Producing the Report

The final analysis was woven into a coherent scholarly narrative. This narrative not only presented the themes but interpreted them, linking the *stevedores'* perspectives back to the research questions and the wider literature on maritime safety, social determinants of health, and organizational leadership.

g. Analytical Enhancement: Cross-Group Comparison

During phases 3-5, a cross-group comparative lens was applied. Data were examined for patterns and distinctions across sub-groups within the sample (e.g., comparing narratives of permanent vs. contract workers, or older vs. younger *stevedores*). This helped identify whether certain experiences or perceptions were widespread or contingent on specific contextual factors like job security or seniority.

Trustworthiness and Validation

To ensure the credibility, dependability, confirmability, and transferability of the findings—the qualitative equivalents of validity and reliability—several strategies were employed throughout the research process (Lincoln & Guba, 1985; Tracy, 2019):

1. Member Checking (Credibility): Preliminary thematic interpretations and summaries were shared with three selected participants from different sub-groups. Their feedback was sought to confirm whether the analysis resonated with their experiences and accurately captured their intended meanings. This feedback was incorporated to refine and, in some cases, re-frame the thematic analysis.

2. Peer Debriefing (Confirmability): The research team engaged in regular, structured discussions with two academic peers experienced in qualitative and occupational health research. These sessions served to challenge the researchers' assumptions, explore alternative interpretations of the data, and reduce the potential for researcher bias.
3. Triangulation (Dependability): Data triangulation was achieved through the cross-referencing of multiple data sources:
 - a. Interview transcripts (the primary data).
 - b. Researcher field notes documenting contextual observations and reflexive insights.
 - c. Demographic data providing background on participants.This convergence strengthened the robustness of the emerging themes.
4. Thick Description (Transferability): The research report provides rich, contextual descriptions of the participants, the Tanjung Perak Port environment, and the social dynamics observed. This allows readers to assess the degree to which the findings may be transferable to other similar settings, such as ports in Indonesia or other developing maritime economies, rather than claiming generalizability.
5. Audit Trail (Dependability): A detailed audit trail was maintained, including raw audio files, transcripts, coded data, thematic maps, memos, and reflective journal entries. This provides a transparent record of the analytical journey from raw data to findings.

Ethical Considerations

This research adhered to the highest ethical standards. Key considerations included:

1. Informed Consent: Obtained in writing after a clear verbal explanation.
2. Confidentiality and Anonymity: All identifying information (names, specific team identifiers) was removed from transcripts and the final report. Participants are referred to only by codes (P01-P10).
3. Minimization of Harm: The interview protocol was designed to be respectful and avoid re-traumatization. Participants were reminded they could skip any question or pause/terminate the interview at any time without consequence.
4. Beneficence: The study aimed to produce knowledge that could ultimately improve working conditions and policies for *stevedores*.

This comprehensive methodological approach ensures that the study provides a valid, reliable, and ethically sound exploration of the social determinants of health in the maritime sector at Tanjung Perak Port.

RESULTS AND DISCUSSION

This chapter presents the findings from the thematic analysis of in-depth interviews with ten *stevedores* at Tanjung Perak Port. The results provide a rich, nuanced understanding of the social and organizational dynamics influencing Occupational Health and Safety (OHS) as experienced by the frontline workforce. The analysis is structured around the three core themes that emerged from the data, which directly address the research questions concerning *safety culture*, leadership, and their impact on worker well-being and performance. Following the presentation of results, an integrated discussion interprets these findings, connecting them to the wider literature while grounding them in the specific socio-cultural and structural context of Indonesia's maritime sector.

Results & Analysis

Thematic analysis revealed three central, interlocking themes that form a cascading narrative of cause, mediation, and effect: a foundational culture of normalized risk, the pivotal role of leadership as either a mitigator or exacerbator of this culture, and

the consequent impact on the physical, psychological, and operational dimensions of work.

Theme 1: The Normalization of Risk: "Biasa, Mas" (It's Normal)

The most pervasive theme was the deep-seated normalization of risk. Safety was often framed not as an absolute value, but as a negotiable commodity balanced against the imperative of speed. This culture manifested through several key indicators:

Table 1. Analysis of *Safety culture* Theme

| Indicator | Description & Analysis | Illustrative Quotation |
|--------------------------------------|---|---|
| Peer Pressure & Machismo | A strong, unspoken masculine code actively discouraged overt caution, which was perceived as a sign of weakness (<i>lemah</i>) or a lack of competence (<i>tidak jago</i>). Newer workers were socialized into accepting hazards as an inevitable "part of the job" (<i>bagian dari pekerjaan</i>). | "Kalau terlalu hati-hati, yang senior bakal ngetawain. Mereka bilang, 'jangan cari aman' atau 'jadi orang jangan cemen'. Mau nggak mau, kamu harus tunjukin kalau kamu kuat, bisa tekan tekanan." (P05, 8 years experience) |
| Silence & Under-Reporting | A pervasive reluctance to report hazards, near-misses, or minor injuries was evident. The primary drivers were: fear of blame (<i>disalahin</i>), fear of causing trouble or delay for the team, and fear of being labeled a troublemaker or incompetent. | "Lapor masalah kecil aja, mandor bisa marah. Jadwal kapal ketat. Lebih baik hati-hati sendiri daripada bikin laporan yang bikin kerjaan berhenti. Nanti dibilang merepotkan." (P02, 12 years experience) |

Conceptual Scoring & Effectiveness: Mapping these findings onto established *safety culture* maturity models (e.g., from pathological to generative), the culture at Tanjung Perak Port leans heavily towards the calculative and pathological stages. Safety is largely viewed as a procedural burden or a set of rules to be circumvented for efficiency, rather than a shared value. This creates an environment where risk is not proactively managed but is reactively and fatalistically endured. The operational efficiency observed is, therefore, a fragile efficiency, built upon the constant, unacknowledged acceptance of preventable risk.

Theme 2: Leadership in Action: The "Boss" vs. The "Leader"

The data revealed a stark dichotomy in leadership styles, which profoundly influenced the safety climate. Workers' narratives clearly distinguished between two archetypes figures:

Table 2. Analysis of Leadership Style Theme

| Indicator | The "Boss" (Transactional/Pathological) | The "Leader" (Transformational/Supportive) |
|-------------------------------------|--|---|
| Communication & Feedback | One-way commands; emphasis on output targets; dismissive of questions or concerns. " <i>Lurus saja, jangan banyak tanya! Cepat!</i> " (Just go straight, don't ask questions! Faster!) | Engages in two-way dialogue (<i>dialog</i>); explains the "why" behind safety procedures; provides constructive feedback. " <i>Dia jelasin kenapa helm wajib, bukan cuma suruh pakai.</i> " |

| Indicator | The "Boss" (Transactional/Pathological) | The "Leader" (Transformational/Supportive) |
|--|--|--|
| Response to Incidents | Primary focus on assigning blame (<i>cari siapa salah</i>); punitive and intimidating approach. " <i>Siapa yang salah? Kenapa bisa terjadi?</i> " (Who is at fault? Why did this happen?). | Focus on systemic problem-solving and learning; supportive approach. " <i>Dia tanya, 'Apa yang bisa kita perbaiki supaya nggak kejadian lagi?'</i> Bukan cari kambing hitam." |
| Visibility & Prioritization | Distant, office-bound, or only visible when demanding results; safety is clearly secondary to speed and deadlines. | Present on the frontline (<i>turun ke lapangan</i>); leads by example by consistently wearing PPE and following protocols; visibly prioritizes safety checks. |
| Illustrative Quotation | " <i>Bos kami cuma muncul kalau ada keterlambatan. Dia teriak soal deadline kapal, tidak pernah soal lantai basah atau tangga yang rusak.</i> " (P04) | " <i>Mandor saya, Pak Agus, dia kerja bareng kita. Kalau lihat kondisi tidak aman, dia sendiri yang berhentiin kerjaan. Dia bikin kita merasa dihargai, bukan cuma alat.</i> " (P08) |

Scoring & Effectiveness: The presence of a "Pemimpin" (Leader) archetype was strongly correlated with participants reporting markedly higher levels of perceived safety, psychological safety (feeling able to speak up), and team cohesion. Groups under such leadership described fewer minor incidents and a greater willingness to collaboratively solve problems. Conversely, teams led by a "Bos" (Boss) exhibited higher levels of stress, concealed problems until they escalated, and demonstrated the **fragile** efficiency mentioned earlier—achieving short-term productivity at a high and unsustainable human cost.

Theme 3: The Nexus of Well-being and Performance

The interplay of culture and leadership directly shaped two key outcomes: worker well-being and operational performance. The data clearly refuted the notion that pressuring workers leads to superior results.

Table 3. Analysis of Impact on Well-being and Performance

| Outcome Domain | Manifestations in a Negative Climate | Manifestations in a Positive Climate |
|--|--|---|
| Physical & Psychological Well-being | Chronic fatigue, untreated musculoskeletal pain, high anxiety, sleep disturbances related to job insecurity and stress, pervasive sense of helplessness. | Higher reported energy levels, proactive management of minor aches through reported early, lower stress, greater job satisfaction and professional pride. |
| Performance & Productivity | Presenteeism: Working while injured or ill due to financial pressure. Hidden Delays: Caused by unaddressed hazards or covert workarounds. High Error Potential: Due to fatigue | Sustainable Performance: Fewer unplanned work stoppages from incidents. Higher Quality Work: Due to better focus and coordination. Proactive Problem-Solving: Teams |

| Outcome Domain | Manifestations in a Negative Climate | Manifestations in a Positive Climate |
|-------------------------------|--|---|
| | and Fragile Efficiency. | fear. identify issues Resilient Efficiency. early. |
| Illustrative Quotation | <i>"Punggung saya selalu sakit, tapi kalau nggak kerja, nggak dibayar. Ya minum obat sakit aja. Kadang kami salah ambil container karena terlalu capek."</i> (P03) | <i>"Kalau tim merasa aman dan dihargai, kerjaan jadi lancar. Kami nggak buang waktu untuk sembunyikan masalah. Kami selesaikan bersama, dan pekerjaan justru selesai lebih cepat dan rapi."</i> (P08) |

Scoring & Effectiveness: The findings decisively indicate that true, sustainable efficiency is intrinsically linked to a healthy and secure workforce. The negative climate scores high on detrimental indicators like presenteeism and error likelihood, which are latent threats to major accidents. The positive climate scores high on indicators of sustainable productivity, quality, and organizational resilience. This directly challenges the traditional, false trade-off between safety and speed, demonstrating they are synergistic, not antagonistic, goals.

Discussion

The findings from Tanjung Perak Port provide a compelling, ground-level view of how OHS is lived, negotiated, and embodied. This discussion interprets these results, connecting them to existing literature while deeply contextualizing them within the unique socio-cultural fabric of Indonesia's maritime industry, thereby addressing the "why" behind the observed phenomena.

"Biasa, Mas": Beyond Normalization to Cultural Embeddedness

The pervasive normalization of risk ("Biasa, Mas") confirms established concepts like Reason's (1990) "resident pathogens" in organizational culture. However, to view this merely as a safety management failure is to miss its deeper socio-cultural roots. In the Indonesian context, this normalization is reinforced by a triad of intersecting forces:

1. **Societal *Machismo* & Collectivism:** The pressure to demonstrate toughness (*tahan banting*) is a key component of masculine identity in many Indonesian work contexts. Showing caution can be seen as failing one's role as a reliable provider (*pencari nafkah*). Furthermore, in a collectivist culture, not wanting to "cause trouble" (*merepotkan*) or delay the team often overrides individual safety concerns, making under-reporting a perverse form of social solidarity.
2. **Economic Precarity and Contractualization:** The prevalence of subcontracting, as seen with half our sample, creates acute job insecurity. For contract workers, reporting a hazard that might stop work directly threatens their daily wage. This economic calculus makes accepting risk a rational, if dangerous, survival strategy, embedding the "biasa" attitude in material necessity.
3. **Fatalism as a Coping Mechanism:** The invocation of *nasib* (fate) is not merely passivity. In a high-risk environment where workers feel a lack of control over systemic factors (aging equipment, tight schedules), fatalism functions as a psychological coping mechanism. It is a way to mentally reconcile the dissonance between the danger faced and the perceived absence of effective systemic protection. This differs from individualist models where personal responsibility is emphasized; here, risk is partly externalized to destiny.

This complex embedding explains why top-down safety rules often fail. Interventions must therefore target these root causes: transforming *machismo* into a pride in safe workmanship, addressing job precarity, and reframing safety not as an individual duty but as a collective right and achievement.

The "Bos" and the "Pemimpin": Leadership Within a Hierarchical Culture

The stark leadership dichotomy brings theoretical models of transformational vs. transactional leadership (Clarke, 2013) to life in a culturally specific way. The persistence of the "Bos" style is reinforced by Indonesia's traditionally high power-distance (Hofstede, 2011), where hierarchical authority is rarely questioned. The "Bos" embodies this expected distance, and subordinates may view a more approachable style with initial suspicion.

The "Pemimpin" who earns respect does so not by abandoning hierarchy, but by infusing it with care (*asah, asih, asuh*) and competence. Their visibility on the frontline (*turun ke lapangan*) is a powerful symbolic act that bridges the status gap. By explaining the "why" behind rules, they foster internalized compliance rather than fearful obedience. This finding is crucial for leadership training: effective programs cannot simply import Western participatory models; they must develop leaders who can navigate the local cultural expectation of authority while embodying protection and respect, becoming a "pemimpin yang melayani" (servant leader).

Well-being as the Foundation of Resilient Performance: A Paradigm Shift

The link between well-being and sustainable performance dismantles the corrosive myth of the safety-efficiency trade-off. The "fragile efficiency" observed under negative conditions is a liability, not an asset. It is characterized by hidden costs: presenteeism leading to chronic injury, fear causing information bottlenecks, and stress degrading decision-making.

Conversely, the "resilient efficiency" observed in positive climates aligns with the growing concept of organizational resilience (Kim et al., 2021), but centers it on human and social capital. A team that communicates openly, trusts its leader, and feels physically secure is inherently more adaptable and reliable. Their performance is not extracted through pressure but emerges from capability and engagement. This aligns with the Indonesian principle of "gotong royong" (mutual assistance), where collective well-being enables collective achievement. Port management must therefore redefine KPIs to value leading indicators like safety climate surveys, near-miss reports, and crew wellness metrics alongside traditional lagging indicators like tonnage and turnaround time.

Limitations and Avenues for Future Research

While this study provides deep qualitative insights, it is limited by its focus on a single port and a male-only workforce, reflecting the sector's current gender composition. The purposive sample, while information-rich, does not claim statistical generalizability. Future research should:

1. Employ mixed-methods designs across multiple Indonesian ports to quantify the prevalence of the themes identified here and measure the economic cost of "fragile efficiency."
2. Investigate the specific effectiveness of leadership development programs tailored to the Indonesian maritime context.
3. Explore the potential of technology (e.g., anonymous mobile reporting apps) to circumvent cultural barriers to hazard reporting.

4. Conduct longitudinal studies to assess the long-term impact of cultural and leadership interventions on both safety records and operational performance metrics.

This chapter has presented and discussed the core findings of the study. The results paint a clear and interconnected picture: the health, safety, and performance of *stevedores* at Tanjung Perak Port are not predetermined by the inherent dangers of the work but are actively constructed by the daily interplay of a culturally embedded risk-normalizing culture and the quality of frontline leadership. By moving the OHS conversation from one of technical compliance to one of socio-organizational and cultural dynamics, this research provides a robust, human-centered foundation for building ports that are not only more efficient and competitive but also more just, healthy, and resilient. The following chapter will present the overall conclusions and recommendations derived from this analysis.

CONCLUSION

This study concludes that the occupational health and safety (OHS) outcomes for *stevedores* at Tanjung Perak Port are fundamentally shaped by the intertwined dynamics of workplace culture and leadership, rather than by technical failures alone. The research identified a pervasive culture of normalized risk, where safety is often subordinated to production pressures and reinforced by peer dynamics. Crucially, leadership emerged as the pivotal factor capable of either mitigating or exacerbating this culture; transformational leadership fostered psychological safety and sustainable performance, while transactional leadership entrenched risk-taking and silence. These findings demonstrate that safety and efficiency are not a trade-off but are mutually reinforcing. Therefore, enhancing port safety and productivity necessitates a paradigm shift from purely technical compliance to strategic interventions that cultivate positive *safety cultures* and develop transformative leadership at the supervisory level, ultimately recognizing that the well-being of the workforce is the true foundation of a resilient and competitive port.

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