

Assessment of the Impact of Mentorship-Skills Development on Women's Career Resilience in Tanzania's Maritime Sector

Wardat Mahmoud Shaaban¹ | Lucas P. Mwisila²

^{1,2} Dar es Salaam Maritime Institute, Dar es Salaam, Tanzania.

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Abstract:

Women account for less than 2% of seafaring roles worldwide and an even smaller proportion in Tanzania, underscoring persistent gendered barriers to technical training. Drawing on Social Learning and Transformational Leadership theories, this mixed methods study investigates how mentor supported skills development initiatives enhance women's career resilience at the WOMESA hub in Dar es Salaam. Quantitative analysis of survey data from 65 female maritime professionals revealed a strong correlation between skills development and resilience, with hierarchical regression confirming it as an independent predictor ($\beta = .31$, $t = 3.87$, $p < 0.001$). This effect is unusually large for social behavioral research, explaining nearly half of the variance in resilience outcomes. Qualitative themes of "tool-kit empowerment," "certification acceleration," and "confidence transference" illustrate how structured courses, simulator based training, and mentor-guided shadowing build competence and adaptive capacity. Nonetheless, entrenched "male first" sponsorship practices and limited simulator access continue to constrain equity. The findings affirm that resilience flourishes where technical mastery, mentor advocacy, and institutional support in skills development intersect.

The study recommends that Policymakers should create gender responsive sponsorships ensuring women equal access to simulators and mentorship, supported by dedicated funding and accountability

Keywords: Career Resilience, Skills Development, Mentorship, Women in Maritime, Tanzania

1.0 Introduction:

Global estimates place women at roughly 1–2 percent of the seafaring labor force, a figure that has changed only marginally over the past decade despite targeted gender mainstreaming campaigns (International Maritime Organization, 2023). Regional snapshots are even more sobering: port authority rosters and union membership logs in East Africa show that most female employees occupy junior deck, catering, or clerical posts,

with fewer than five percent holding operational or managerial licenses (Mwasala, 2022). Scholars increasingly link this under representation to *capability bottlenecks* especially restricted access to certified simulator hours, STCW ancillary courses, and specialized short programs arguing that women are often unable to satisfy promotion prerequisites regardless of their tenure or motivation (Smith & Ndume, 2019).

Within this skills deficit landscape, mentorship has been promoted as a high leverage intervention. By pairing protégées with seasoned professionals, mentor led schemes can fast track technical learning, share tacit knowledge, and steer candidates toward scarce training resources (Safety4Sea, 2024). Meta analytic evidence from STEM workplaces shows that mentored employees gain new competencies nearly twice as quickly as non-mentored peers (van Vuuren & Schlechter, 2021), while qualitative work in shipping indicates that mentors often leverage personal networks to secure simulator slots for their mentees (Kitada & Ölçer, 2020). Yet few studies have isolated skills development components within broader mentoring structures, leaving unclear *how* and *how much* technical upskilling contributes to women's long-term adaptability in maritime careers.

Existing research tilts toward barrier catalogues sexual harassment aboard vessels, lack of maternity policies, or hostile shipboard cultures (Baker et al., 2023) or toward sweeping policy reviews that insist "gender equality" without separating the micro dynamics of competence building (UNCTAD, 2021). Consequently, the mechanisms through which mentor guided training fosters career resilience defined here as the capacity to adapt, recover, and advance amid occupational shocks (Collins & Stockton, 2018) remain under examined, particularly for African maritime contexts. Addressing this lacuna is critical because technical licensure, not merely organizational goodwill, ultimately determines whether women move from junior to officer ranks.

A dual theoretical lens sharpens the inquiry. Social Learning Theory holds that individuals adopt skills and self-efficacy through observation, guided practice, and real time feedback (Bandura, 2013). Meanwhile, Transformational Leadership Theory contends that mentors who model expert performance and champion development goals can elevate mentees' aspirations beyond self-imposed ceilings (Bass & Riggio, 2014). Taken together, these frameworks suggest that skills development is *catalytic*: it supplies the human

capital base on which other mentoring benefits networking and psychosocial scaffolding can meaningfully operate (Khalid & Shanks, 2020).

The Women in Maritime East and Southern Africa (WOMESA) hub in Dar es Salaam offers a strategic test bed for these propositions. Situated in Tanzania's busiest port complex, the hub organizes periodic electronic-chart-display (ECDIS) courses, STCW refresher modules, and negotiation workshops. Yet preliminary audits reveal gender biased sponsorship and limited simulator capacity, frequently "triaged" in favor of male deck officers or senior female insiders (Maganga & Simon, 2023). Evaluating the tangible effect of such initiatives on women's resilience therefore carries immediate relevance for maritime regulators, training academies, and Blue-Economy policy architects.

Accordingly, this paper pursues one core objective: to assess the impact of mentorship supported skills development initiatives on women's career resilience in Tanzania's maritime sector. By triangulating survey evidence, interview narratives, and documentary analysis, the study contributes (a) empirical grounding for advocacy claims about training equity, (b) theoretical refinement of mentorship models in resource constrained environments, and (c) actionable guidance for stakeholders intent on cultivating a gender balanced, resilient maritime workforce.

2.0 Literature Review:

2.1 Skills Development and Career Resilience

Career resilience the capacity to adapt, recover, and grow in the face of career shocks rests heavily on accumulated human capital. Empirical work by Lengnick-Hall, Beck, and Lengnick-Hall (2011) argues that specialized knowledge and technical proficiency equip employees with the confidence to tackle evolving job demands, thereby buffering them against volatility. Subsequent studies in knowledge intensive industries confirm that targeted training not only raises task competence but also fosters the cognitive reframing skills necessary to interpret setbacks as learning

opportunities (Collins & Stockton, 2018; Khalid & Shanks, 2020). Taken together, these findings position skills development as an indispensable pillar in any resilience building strategy.

Maritime research echoes this pattern. Simulator based navigation courses, advanced radar plotting, and short leadership accelerators have been shown to double the likelihood that women pass officer level competency exams on their first attempt (IMO, 2023). Similar results emerge from port operations contexts, where women who complete cargo handling certifications report higher self-efficacy and a 30 % reduction in turnover intentions relative to uncertified peers (Mwasala, 2022). These outcomes suggest that technical upskilling is more than a résumé enhancer; it is a resilience catalyst that enables women to withstand the twin pressures of demanding physical environments and persistent gender stereotypes.

2.2 Mentorship as a Skills Development Conduit

Although formal courses deliver foundational competence, mentorship magnifies their impact by embedding learning in real operational contexts. Drawing on Social Learning Theory, Bandura (2013) posits that observational learning and guided practice accelerate mastery far beyond classroom instruction alone. Panel data from elite MBA programs corroborate this view: women's post-graduation salary gains hinge less on the number of electives completed than on the integration of course concepts through mentor feedback loops (Yang, Keller, & Burt, 2019). Mentors thereby function as "sense-making agents," helping protégées translate theory into practice, troubleshoot in real time, and reflect on performance.

Maritime specific evidence is growing. The IMRF #Women In SAR pilot showed that mentees who paired online simulators with structured debriefs reported significantly higher self-efficacy and faster deployment readiness than peers who used simulators in isolation (International Maritime Rescue Federation, 2025). Likewise, a

longitudinal study of female deck cadets in the Philippines found that mentor facilitated skills clinics reduced licensure exam anxiety by 22 % (Lopez & Rivera, 2021). These findings underscore the synergies between formal training and mentor guided experiential learning, highlighting mentorship as a conduit through which technical upskilling is internalized and applied.

2.3 Barriers to Women's Skill Acquisition in Maritime

Despite the demonstrated benefits, women's access to skill building opportunities often remains gender biased. Kitada and Ölçer (2020) identified "male-first sponsorship" norms that funnel scarce training funds to men, effectively rationing simulator hours and ancillary courses. Pham and Loke (2021) documented similar patterns in Southeast Asian maritime academies, where women received only 15 % of available bridge resource management slots despite comprising 28 % of the cadet cohort. Such disparities curtail women's ability to convert mentorship into tangible competence, thereby weakening potential resilience gains.

Structural barriers extend beyond sponsorship. Organizational cultures that question women's technical aptitude can discourage them from even applying for advanced courses (Baker, Hammond, & Ndume, 2023). Logistical hurdles such as lack of childcare during residential training and limited female only accommodation further erode participation (UNCTAD, 2021). Without systemic reforms that guarantee equitable resource allocation, mentorship driven training risks reinforcing, rather than disrupting, existing gender hierarchies.

2.4 Tanzania's Knowledge Gap

Tanzania's Maritime Education and Training Regulations formally guarantee equal access to certification pathways, yet implementation remains inconsistent (Maganga & Simon, 2023). Evidence from port training records shows that women secure less than one in five sponsorships for advanced simulator courses, while informal

gatekeeping by predominantly male training officers continues to restrict opportunities. Although local studies have explored women's perceptions of maritime careers (Mussa & Salum, 2019) and highlighted workplace harassment (Kabendera, 2022), there is still no peer reviewed research quantifying how mentor guided skills development directly influences women's career resilience.

This gap carries significant implications. In the absence of context specific evidence, policy makers risk relying on generic gender mainstreaming frameworks that fail to address Tanzania's resource limitations and entrenched cultural norms.

3.0 Methodology:

3.1 Research design and sampling

This study employed a mixed methods, descriptive design to triangulate numerical patterns with contextualized narratives an approach recommended for complex, under researched phenomena where neither quantitative nor qualitative data alone provide sufficient explanatory power (Creswell & Plano Clark, 2018). The quantitative strand surveyed 65 women maritime professionals representing a 97 percent response rate drawn from WOMESA's Dar es Salaam roster of 80 members. Stratified sampling was used to ensure proportional representation across (a) job hierarchies management, mid-level and junior and (b) five occupational clusters: port operations, maritime education, maritime administration, logistics and student cadets. This dual stratification follows Saunders, Lewis and Thornhill's (2019) guidance for maximizing external validity when population sub groups differ in access to training and promotion ladders. A priori power analysis (G*Power 3.1) indicated that a minimum sample of 55 would be adequate to detect a medium effect ($f^2 = .15$) at $\alpha = .05$ and power = .80 in regression; the achieved sample of 65 exceeded this threshold, bolstering statistical confidence.

Complementing the survey, 18 semi structured interviews were conducted using maximum

variation selection to capture diverse perspectives on training access and mentorship quality. Interviewees included six management level officers, seven mid-level supervisors and five junior cadets, mirroring the proportionate distribution in the survey. This qualitative subsample size aligns with Guest, Namey and Sunley's (2020) recommendation that data saturation for homogeneous groups often occurs within 12–18 interviews. Together, the quantitative and qualitative samples provide both breadth and depth, enabling the study to disentangle aggregate trends from lived experience.

3.2 Data Collection Instruments

The survey instrument comprised three sections. Section A recorded demographic variables (age, rank, years of service). Section B contained a four-item Skills-Development Scale adapted from Mlambo (2017), covering simulator access, short course participation, on-the-job coaching and perceived proficiency gains; prior studies report alphas above .80 for this scale. Section C deployed a six-item Career-Resilience Scale modified from Connor and Davidson (2003), capturing adaptability, persistence and confidence in future promotion. Responses were rated on a five-point Likert continuum (1 = Strongly Disagree, 5 = Strongly Agree). Pilot testing with ten non sample WOMESA members produced Cronbach's α values of .88 for skills development and .90 for career resilience, satisfying Nunnally and Bernstein's (1994) .70 benchmark for internal consistency. A back translation check ensured semantic clarity for both English and Kiswahili versions.

For the qualitative strand, a semi-structured interview guide explored three domains: (a) experiences with simulator courses and STCW ancillary modules; (b) perceptions of mentorship in securing sponsorships; and (c) personal narratives of skill related confidence shifts. Open-ended prompts ("Walk me through how you obtained your last certification") encouraged rich, reflective responses, while targeted probes ("What

role did your mentor play?”) ensured alignment with the study’s analytic focus. Interviews lasted 45–60 minutes, were audio recorded with consent and transcribed verbatim. Reflexive journaling by the lead researcher documented non-verbal cues and contextual factors, aiding credibility and confirmability (Lincoln & Guba, 2013).

3.3 Analytical Procedures

Quantitative analysis followed a three stage sequence. First, descriptive statistics (means, standard deviations, skewness and kurtosis) provided an overview of item trends. Second, Pearson’s *r* coefficients gauged bivariate associations between skills development and career resilience. Third, a hierarchical regression entered skills development in Step 1, followed by networking and psychosocial support in Step 2, to isolate the unique variance attributable to skills after controlling for the other mentorship dimensions. Assumption checks verified model robustness: Shapiro–Wilk test indicated normal residuals ($W = .97, p = .11$); scatter-plots showed linearity and homoscedasticity; and variance inflation factors ranged from 1.42 to 1.60, well below the multicollinearity threshold of 5 (Field, 2018). Analyses were run in SPSS v28, and effect sizes were interpreted using Cohen’s (2013) conventions.

Qualitative data were processed in NVivo 14 using Braun and Clarke’s (2014) six-step thematic

analysis: familiarization, initial coding, theme generation, review, definition and reporting. Two coders independently analyzed 20 percent of transcripts, achieving an intercoder agreement of 89 percent; discrepancies were resolved through negotiated consensus. Coding produced three overarching themes tool-kit empowerment, certification acceleration and confidence transference each grounded in multiple data extracts. Methodological triangulation was achieved by juxtaposing thematic patterns with documentary evidence (e.g., training sponsorship registers) and survey metrics, enhancing analytic rigour. Ultimately, the mixed-methods strategy provided a nuanced, multi-layered picture of how mentorship-facilitated skills development shapes women’s career resilience in Tanzania’s maritime sector.

4.0 Results and Findings:

4.1 Descriptive Statistics

Table 1 expands the basic item level results by showing how perceptions of skills development quality vary across job hierarchies. Mean scores are consistently above the scale midpoint of 3, indicating overall endorsement; nonetheless, junior women rate three of the four items about 0.25 points lower than their mid-level and management counterparts, hinting at uneven access to structured training.

Table 1. Descriptive Statistics for Skills-Development Items (N = 65)

Item	Management (n = 9)	Mid-level (n = 19)	Junior (n = 37)	Total (n = 65)
Mentoring programs are well-structured	3.89	3.79	3.46	3.62 ± 0.91
Access to skilled mentors	4.11	3.95	3.57	3.75 ± 0.83
Organisation promotes learning culture	3.67	3.53	3.16	3.34 ± 0.97
Skills training expands my network	4.00	3.95	3.78	3.88 ± 0.80

Scale: 1 = Strongly Disagree, 5 = Strongly Agree

Source: Field Data (2025)

Results show that respondents view the skills-development component of mentorship favorably across all four survey items. Means fall well above the neutral midpoint of 3, with the highest endorsement given to “Skills training expands my network” (M = 3.88) and “Access to skilled mentors” (M = 3.75). These two items point to the twin channels through which women accrue human capital direct technical coaching and indirect competency gains via networking opportunities embedded in training events. Standard deviations range from 0.80 to 0.97, indicating moderate dispersion: most women share broadly positive perceptions, but some report markedly weaker or stronger experiences, a clue to possible access inequities explored later in the chapter.

The item “Organization promotes a learning culture” records the lowest mean (M = 3.34) and the widest spread (SD = 0.97), hinting that institutional support for continuous learning is uneven across employers. Nevertheless, the composite skills score of 3.65 signals an overall “positive” stance toward mentorship-driven upskilling. This baseline endorsement provides quantitative context for subsequent inferential tests, where skills development demonstrates a substantial correlation ($r = .71$) and a significant regression weight ($\beta = .31$) in predicting career resilience.

4.2 Inferential Statistics

The correlation results underscore the centrality of skills development to women’s ability to adapt

and advance. A large, positive association between skills and career resilience ($r = .71, p < .01$) indicates that respondents who rated their training experiences highly also reported markedly greater confidence in handling job shocks and pursuing promotions. Although skills development overlaps with the other mentoring dimensions networking ($r = .66$) and psychosocial support ($r = .28$) the correlation sizes reveal conceptual distinctiveness: skills shares only 44 percent (i.e., $.66^2$) of its variance with networking and a mere 8 percent with psychosocial support. These patterns justify a multivariate test, because they suggest that each dimension could retain unique explanatory power rather than merely duplicating the others.

Hierarchical regression analyses confirm this expectation. Entering skills development alone (Step 1) accounted for 50 percent of the variance in career resilience, far surpassing Cohen’s (2013) threshold for a large effect and signaling a robust bivariate relationship. Step 2 introduced networking and psychosocial support simultaneously, pushing the model’s R^2 to 0.67 ($\Delta R^2 = .17, p < .001$). Crucially, the standardized beta for skills development remained significant ($\beta = .31, p < .001$) despite the added predictors, contributing an incremental 9 percent of unique variance when semi-partialled. Variance-inflation factors stayed below 2, ruling out multicollinearity concerns and confirming that skills development exerts an independent influence on resilience over and above the social and emotional facets of mentoring.

Table 2. Hierarchical Regression Predicting Women’s Career Resilience (N = 65)

Step	Predictor	β	SE β	t	p	ΔR^2
1	Skills development	.31	.08	3.87	< .001	

ΔR^2 significant at $p < .001$. Final model: $R^2 = .67$; Adjusted $R^2 = .65$; $F(3, 61) = 41.19, p < .001$. VIF range = 1.42–1.60.

Source: Field Data (2025)

Skills development stands out as the strongest predictor of women’s career resilience, with a standardized coefficient of $\beta = .31$ ($t = 3.87, p <$

0.001). This means that a one standard deviation increase in skills development is associated with a 0.31 standard deviation increase in women’s

resilience, explaining nearly half the variance in outcomes. Such an effect is unusually large in social-behavioral studies, underscoring the transformative role of upskilling. Simulator training, targeted short courses, and structured mentor coaching strengthen women's capacity to withstand career shocks, particularly when reinforced by social capital networks and emotional support systems.

4.3 Qualitative Themes

Theme 1 – Tool-Kit Empowerment

Across all hierarchies, interviewees portrayed mentor facilitated short courses such as Electronic Chart Display and Information Systems (ECDIS), maritime law primers, and negotiation workshops as catalytic “tool kits” that transformed them from passive observers into confident actors on deck and ashore. Mid-level officers emphasized that mastering ECDIS not only unlocked operational competence but also conferred credibility in mixed gender watch teams: “*After the ECDIS weekend course, I was no longer just observing the guys; I could plot routes on watch*” (Interview 07). Junior cadets echoed this sentiment, noting that hands-on radar or cargo-stowage simulations enabled them to “speak the same technical language” as male peers, thereby reducing stereotype threat and self-doubt. Managers likewise valued refresher courses in maritime law and dispute resolution, which equipped them to negotiate charter-party clauses or handle port-state-control inspections with renewed authority. Collectively, these narratives illustrate Social Learning Theory's premise that observable skill mastery boosts self-efficacy; they also reveal a virtuous loop whereby technical fluency feeds professional visibility, further strengthening career resilience.

Theme 2 – Certification Acceleration

Participants especially juniors and mid-levels described mentors as crucial gate-openers who “fast-tracked” them through congested certification pipelines. STCW ancillary modules (e.g., firefighting, medical first aid) were often fully booked months in advance, with informal

sponsorship lists favoring men; mentors used their social capital to “jump the queue,” thereby shortening the time to officer eligibility. A junior cadet recounted, “*Normally you wait six months for the firefighting module. My mentor spoke to the training manager and I got in the next cohort*” (Interview 12). Others cited mentors who shared out-of-cycle scholarship notices or lobbied HR to allocate simulator hours during off-peak slots. These interventions illustrate Transformational Leadership Theory's concept of *individualized consideration*: mentors tailor support to protégées' developmental bottlenecks, converting structural obstacles into stepping-stones. The acceleration effect is doubly significant in contexts where promotion hinges on time-sensitive certificates; by compressing training timelines, mentors directly bolster protégées' resilience against attrition and stagnation.

Theme 3 – Confidence Transference

Beyond technical credentials, mentees consistently highlighted how shadowing mentors during live operations instilled composure and adaptive thinking what scholars label *behavioral resilience*. Management level interviewee 03 recalled a machinery breakdown: “*When the winch jammed, I copied how my mentor stayed calm and ran the checklist. That's when I realized I could handle crises too.*” Such vicarious learning events allowed mentees to internalize problem solving scripts fault isolation, emergency communication, crew coordination that are rarely captured in manuals. Confidence transference surfaced across ranks but was most vivid where mentors deliberately debriefed incidents, converting tacit know how into explicit lessons (“What we did, why it mattered, how you'd do it next time”). This process aligns with Bandura's notion of *modelling* and underscores mentorship's role in transferring not just skills but also the emotional regulation required to deploy them under pressure. By reinforcing self-belief during high stakes scenarios, mentors equip women to weather future shocks, completing the triad of technical competence, opportunity access, and

psychological readiness that underpins career resilience.

5.0 Discussion:

The present study provides compelling evidence that skills development is a foundational pillar of women's career resilience in Tanzania's maritime sector. Quantitatively, the skills-development coefficient ($\beta = .31, p < .001$) explains an additional nine percent of variance in resilience after the other mentoring dimensions are controlled an effect comparable to outcomes reported for IMO sponsored leadership accelerators, where skills focused mentoring doubled women's promotion rates (IMO, 2023). Qualitatively, nearly every interviewee described "tool-kit empowerment" moments in which competency gains whether plotting routes on Electronic Chart Display and Information Systems (ECDIS) or negotiating demurrage clauses translated directly into heightened self-efficacy. These accounts dovetail with Yang, Keller, and Burt's (2019) longitudinal MBA data, which demonstrate that technical mastery combined with mentor feedback loops is a reliable pathway to leadership appointments. Together, these findings highlight that human capital accumulation is not merely additive but catalytic in building adaptive strength.

The results further reveal that resource access moderates the skills resilience link, echoing Kitada and Ölçer's (2020) warning that training initiatives falter when sponsorship funds and simulator slots are informally earmarked for men. Interview data on "certification acceleration" illustrate that mentors can mitigate this inequity by leveraging social capital to fast track protégées into oversubscribed firefighting or medical-first-aid modules. Yet structural barriers persist: junior women scored access to skilled mentors and organizational learning culture approximately 0.25 Likert points lower than managers, indicating that sponsorship gatekeeping remains entrenched. Similar bottlenecks in Southeast Asian maritime academies, where women receive only 15 percent of bridge resource management seats (Pham &

Loke, 2021), reinforce the external validity of this constraint and suggest that Tanzania's challenge is infrastructural rather than curricular.

A third insight concerns the behavioral dimension of resilience. The "confidence transference" theme shows mentees absorbing mentors' calm routines during machinery breakdowns and cargo delays an empirical manifestation of Bandura's (2013) Social Learning Theory. Such vicarious mastery strengthens emotional regulation and situational judgement, competencies that quantitative surveys rarely capture but which qualitative accounts deem indispensable. Goldenhar, Shen, and Hecker (2021) report parallel findings in construction: mentees who shadowed foremen during crisis drills exhibited a 40 percent reduction in near miss incidents. The pattern underscores that resilience is simultaneously technical, cognitive, and behavioral, and that mentorship programs must embed practical debriefs and live shadow assignments to transmit tacit knowledge.

Importantly, the study's mixed methods design clarifies how these mechanisms interact. Skills development supplies the technical foundation; mentors' social capital secures access to scarce courses; and behavioral modelling cements composure under stress. This triad aligns with Lengnick-Hall, Beck, and Lengnick-Hall's (2011) model of resilience as a blend of human, social, and psychological capital. It also advances Transformational Leadership Theory by showing that mentors act not only as inspirational figures but also as logistical facilitators who dismantle systemic gatekeeping.

From a practical standpoint, the findings signal that policy interventions must pair infrastructure funding with mentor advocacy. Expanding simulator capacity, ring fencing STCW sponsorships for junior women, and training mentors in resource navigation tactics would amplify the $\beta = .31$ advantage documented here. At the organizational level, embedding skills development targets into senior officers' key performance indicators can institutionalize this catalytic effect, ensuring that technical upskilling

becomes a standard rather than discretionary component of maritime mentorship. Theoretically, the study extends Social Learning and Transformational Leadership frameworks to a developing-country maritime context, demonstrating that when technical, social, and behavioral levers align, women's career resilience is not merely feasible but sustainable.

6.0 Conclusion and Recommendation:

6.1 Conclusion:

This study found that mentorship skills development is the most significant factor in strengthening women's career resilience within Tanzania's maritime sector. The analysis reveals that skills development carries a standardized effect of $\beta = .31$ ($t = 3.87$, $p < 0.001$), meaning that a one standard deviation improvement in upskilling is associated with a 0.31 standard deviation increase in resilience an unusually strong effect for social behavioral research, accounting for nearly half of the variance in outcomes. Technical mastery gained through structured courses, simulator based training, and experiential mentoring enhances competence and crisis management behaviors, thereby converting human capital into adaptive capacity. However, resilience gains depend on dismantling entrenched "male-first" sponsorship cultures and expanding simulator and training infrastructure. By quantifying this independent effect and its mechanisms, the study affirms that resilience emerges where technical upskilling, mentor advocacy, and institutional support unite, offering a blueprint for inclusive, future ready maritime workforce development.

6.2 Recommendation:

Maritime policymakers should establish a gender responsive sponsorship framework that guarantees women equitable access to simulator training and structured mentorship, reinforced by ring fenced funding and transparent accountability mechanisms to ensure lasting impact.

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