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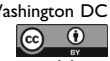

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Decent work and quality of life in primary fishing sector: A scoping review

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Abstract

The primary fishing sector, including artisanal, small-scale, coastal, inshore, offshore and industrial capture fisheries, supports millions of livelihoods worldwide. Despite its complexity, research on quality of life (QoL), a multidimensional concept encompassing physical, psychological, social, and economic well-being and decent work (DW), defined as employment ensuring fair pay, safe conditions, social protection and rights, remains limited. This scoping review synthesizes evidence from 41 studies published between 1995 and 2025, examining temporal trends, disciplinary focus, methodologies, geographic distribution and key findings. The research is concentrated on artisanal and small-scale fisheries in South America and Asia, predominantly using qualitative and cross-sectional methods. Keyword analysis highlights fisheries workers and well-being, while DW, labour rights and occupational safety are underexplored. QoL research predominates, focusing on health, psychological and economic dimensions, whereas DW is often narrowly defined, emphasizing safety and basic working conditions, with limited attention to autonomy, fair remuneration or labour protections. Socio-economic and environmental pressures, including income variability, migration and resource access, affect both QoL and DW, underscoring their interdependence. Overall, the literature is fragmented and descriptive. Future research should adopt multidimensional, participatory and longitudinal approaches, using standardized indicators to better inform policies promoting equitable, sustainable and DW in fisheries.

Keywords

Decent work, quality of life, fishing workers, occupational health, scoping review

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Introduction

Globally, approximately 61.8 million people were employed in fisheries and aquaculture in 2022, making the sector one of the world's largest providers of food, livelihoods and employment (FAO, 2024). Although these figures combine capture fisheries and aquaculture, the two sectors differ substantially in their production systems, employment arrangements, occupational hazards and working conditions. Capture fisheries, which involve harvesting wild aquatic resources, are generally characterized by greater physical risks, income instability, irregular employment and more precarious labour conditions than aquaculture (Davies et al., 2021; ILO, 2007). Accordingly, the present review focuses exclusively on the primary fishing sector, encompassing artisanal, small-scale, industrial, coastal, offshore and distant-water capture fisheries, while excluding aquaculture and primary aquatic production in the biological sense (FAO, 2020).

Despite its economic and social importance, work in capture fisheries remains among the most hazardous occupations worldwide. Fishing workers are routinely exposed to dangerous working environments, occupational accidents, unstable incomes, limited social protection and insecure employment relationships (Davies et al., 2021; Doza et al., 2022). Reflecting these challenges, the International Labour Organization (ILO, 2007) recognizes fisheries as a priority sector for promoting decent work (DW) through improved occupational safety, labour rights, formal employment, social protection and the prevention of labour exploitation.

Understanding these working conditions requires a framework that considers both the structural characteristics of employment and workers' lived experiences. The psychology of working theory (PWT; Blustein, 2013; Duffy et al., 2016) provides such a perspective by conceptualizing work as embedded within broader economic, social and political contexts. Rather than viewing work solely as an individual experience, PWT argues that access to DW is shaped by structural constraints, social marginalization and contextual opportunities, while also recognizing the role of individual resources such as work volition and career adaptability. According to the theory, access to DW enables individuals to satisfy fundamental needs for survival, social connection and self-determination, thereby promoting health, well-being and meaningful participation in work.

Within this framework, DW represents more than fair employment conditions. Consistent with the International Labour Organization (ILO, 1999) and Sustainable Development Goal 8 (United Nations, 2015), DW encompasses safe working environments, adequate remuneration, social protection, development opportunities, workers' rights and participation in decision-making. From the perspective of PWT, these employment conditions constitute essential resources that support workers' psychological functioning and overall quality of life (QoL) (Blustein et al., 2016; Duffy et al., 2016).

Empirical evidence demonstrates that many fishing workers continue to experience substantial deficits in these dimensions of DW. Giron-Nava et al. (2021) estimated that average fishing incomes fall below national minimum wage levels in 36% to 67% of countries, representing between 69% and 95% of the global capture fisheries workforce. Job insecurity, inadequate social protection, hazardous working conditions and increasing environmental uncertainty further undermine workers' rights and well-being.

Climate change intensifies these vulnerabilities by increasing occupational risks and threatening livelihoods, whereas social protection has emerged as an important mechanism for improving workers' QoL and reducing employment precariousness (Tabe-Ojong et al., 2025; Tigchelaar et al., 2025). Likewise, inadequate working conditions have important health consequences, ranging from occupational diseases in small-scale fisheries (Dewi et al., 2023) to chronic stress and poorer mental well-being (Husain and Rauf, 2024).

QoL represents one important outcome through which these working conditions can be understood. The World Health Organization (WHO, 1995) conceptualizes QoL as individuals' perceptions of their position in life within their cultural and environmental contexts, encompassing physical, psychological, social and economic well-being. In capture fisheries, QoL reflects a complex balance between occupational resources and constraints. On the one hand, fishing often provides autonomy, a strong occupational identity and a close connection with nature, factors associated with subjective well-being and life satisfaction (Pollnac and Poggie, 2006; Smith and Clay, 2010; Trimble and Johnson, 2013). On the other hand, dangerous working conditions, economic insecurity, occupational uncertainty and work–family challenges frequently compromise health, well-being and overall life satisfaction (Lozano et al., 2024; Mehta, 2025; Myers et al., 2018; Thorvaldsen et al., 2020; Turner et al., 2019). Recent evidence further suggests that work autonomy and perceived meaningfulness may partially buffer the negative effects of precarious working conditions, reinforcing the close relationship between DW and QoL (Anna et al., 2019; Su and Chan, 2023).

Although research addressing DW and QoL in fisheries has increased in recent years, the evidence remains fragmented. Existing studies frequently examine isolated topics, including occupational accidents, fatigue, stress, income insecurity or health outcomes (Alayyannur et al., 2023; Høvdanum et al., 2014; Siame et al., 2022), without integrating these findings within a broader conceptual framework. Consequently, it remains unclear how structural employment conditions, occupational characteristics and individual experiences jointly shape DW and QoL across capture fisheries.

Drawing on the PWT as its guiding framework, this scoping review synthesizes the empirical literature on DW and QoL in the primary fishing sector. Specifically, the review maps the existing evidence, identifies dominant themes, conceptualizations, methodological trends, and research gaps, and interprets these findings through the interaction of structural, sociocultural, occupational and individual factors proposed by PWT. By integrating these dimensions, the review aims to advance the conceptualization of DW and QoL in capture fisheries while providing evidence to inform future research, policy and interventions that promote fairer, healthier and more sustainable working conditions.

Methodology

Scoping review

A scoping review was conducted to map the scope and characteristics of empirical evidence on DW and QoL in the primary fishing sector. The review followed the six-stage methodology of Arksey and O'Malley (2005), enhanced by Levac et al. (2010),

encompassing: (1) research question, (2) study identification, (3) study selection, (4) data extraction and organization, (5) analysis and reporting and (6) consultation.

Defining the research question. The overall aim of this review was to identify, examine and summarize empirical research findings on DW and QoL in the primary fishing sector, covering all types of capture-based fisheries. The review addressed the following research questions:

1. What kind of empirical evidence exists on DW and QoL across all types of fishing workers?
2. What are the descriptive characteristics of the studies?
3. How do the studies conceptualize and reflect the experiences of DW and QoL among fishing workers?

Identifying relevant studies. This review focused on studies published between January 1995 and July 2025, capturing key developments in QoL research over the last three decades. The timeline was chosen to cover the evolution of both constructs while ensuring relevance to contemporary fisheries contexts.

Studies were identified in three major databases, Scopus, Web of Science (WOS) and PubMed, using a pre-defined search strategy for each database. These databases were selected for their broad interdisciplinary coverage, enabling the inclusion of research from diverse fields; however, it is acknowledged that restricting the search to these sources may exclude relevant grey literature or regional publications not indexed in these databases.

In addition to the time period between January 1995 and July 2025, specific inclusion criteria were established: (i) scientific field of social sciences, as the analysis focuses on individual-level experiences rather than national-level indicators of DW; (ii) English language, as it is the main language of international scientific communication, ensuring methodological consistency and comparability across studies and (iii) document type 'article', to prioritize empirical studies published in scientific journals, ensuring the quality and robustness of the data analysed.

The following search string was developed in consultation with a Scopus consultant and modified to reflect the criteria of each database:

TITLE-ABS-KEY("decent work" OR "quality of life" OR "QoL")

AND TITLE-ABS-KEY("fishermen" OR "fisherwomen" OR "fishers" OR "artisanal fishermen" OR "commercial fishermen" OR "industrial fishermen" OR "fishing crew" OR "fishing workers" OR "small-scale fishers")

AND SUBJAREA(SOCI)

AND PUBYEAR > 1994

AND LANGUAGE(English)

AND DOCTYPE(ar)

Studies were included if they addressed workers in the primary fishing sector, covering all fishing types and worker categories. To be included, a study had to feature, in the title, abstract or keywords, at least one of the following terms: 'decent work', 'quality of life' or 'QoL'.

The search results were exported to the RAYYAN platform (https://www.rayyan.ai/), allowing the two authors and an external reviewer to access and manage all original abstracts identified by the first author.

Study selection

All abstracts were independently screened in a two-stage process: first by the first author and then by the second author. Each author evaluated the assigned abstracts based on three guiding questions:

1. Does the study report empirical research?
2. Does the sample consist predominantly of fishing workers?
3. Does the study focus on DW or QoL?

Apart from these broad criteria, no other restrictions were applied.

Disagreements were resolved via discussion and consensus. The articles were classified as 'include', 'exclude' or 'uncertain'. An article was classified as 'include' only if all responses were positive; it was classified as 'exclude' if any response was negative, and as 'uncertain' if the reviewer could not determine eligibility based on the abstract alone. In cases of disagreement between authors or when clarification was needed, all authors re-examined the abstract and discussed it until a consensus on inclusion was reached. In this phase, an external reviewer also assisted in making the final decision (see phase consultation).

As shown in Figure 1, 254 articles were found in the initial search. After removing duplicates ($n = 21$) and screening titles and abstracts ($n = 185$), 48 articles were found in full text. The full texts were obtained and checked by the first author for compliance with the inclusion criteria. After a thorough review and consensus discussion with all authors and the external reviewer, seven additional articles were excluded, resulting in a final sample of 41 studies included in the review.

Charting the data

To systematize the data from the included articles, a Microsoft Excel database was created in which each study corresponds to a row and each type of extracted information is organized in specific columns. In the complete analysis of the texts, the title, authors, year of publication, scientific journal, keywords, objective of the study and the main variables and concepts analysed were recorded.

In addition, information was collected on the focus of the study, that is, whether it focused on DW, QoL or a combination of these, the country of the sample, the sample in each study and the main relevant findings.

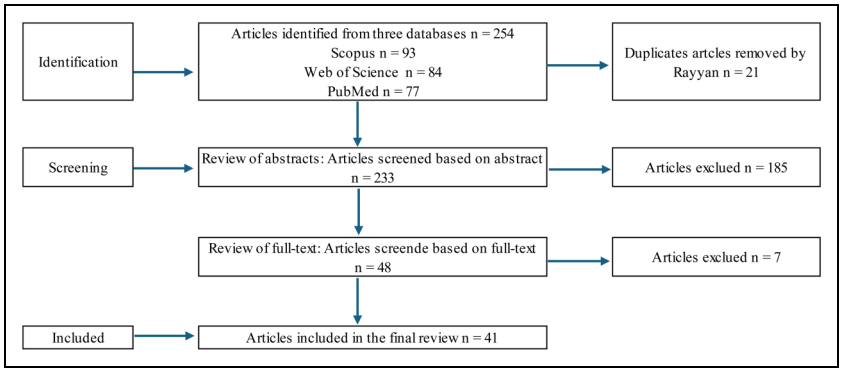

Figure 1. PRISMA flow diagram.

Analysis and reporting

Data analysis and reporting were conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-analyses, adapted for Scoping Reviews (PRISMA-ScR) checklist (Moher et al., 2015; Tricco et al., 2018). The analysis consisted of a descriptive report of the quantitative and qualitative information extracted from the included articles and allowed a systematic presentation of the existing evidence on the DW and QoL in fishing workers. This process enables the identification of patterns, trends and gaps in literature and provides a solid foundation for future research and knowledge production in this area (Levac et al., 2010; Pollock et al., 2023).

Consultation

As described in the study selection phase, and to incorporate the knowledge, experience and perspectives of different stakeholders to enhance the rigour, relevance and quality of the review process (Arksey and O'Malley, 2005; Levac et al., 2010; Pollock et al., 2023), an external reviewer was included to provide expert advice. The consultation provided structured feedback on study inclusion and interpretation of findings, ensuring that contextual nuances in fishing communities were considered.

This external reviewer was a human resource professional with experience in research on DW and QoL. An assistant professor in work psychology and a master's student in social, work and organizational psychology joined the two authors in data extraction, organization and interpretation, holding regular meetings to reach consensus on study inclusion. The consultation provided structured feedback on study inclusion and interpretation of findings, ensuring that contextual nuances in fishing communities were considered.

Results

This section presents the findings from the 41 selected studies, organized according to research objectives, covering temporal trends, disciplinary areas, methodologies,

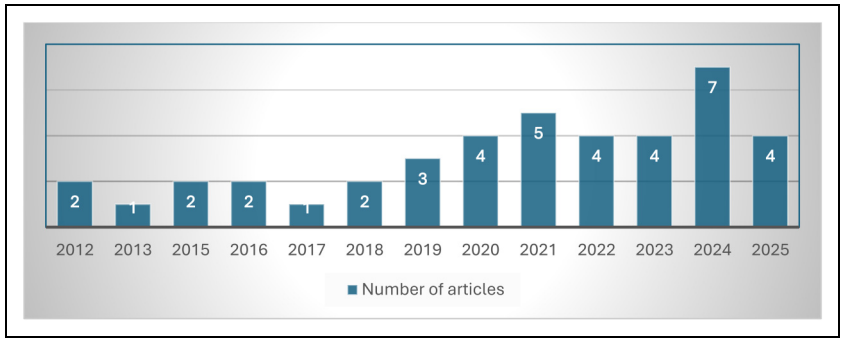

Figure 2. Publications per year.

geographic distribution, sample characteristics and key evidence. The aim is to map patterns, highlight gaps and describe the current state of research on DW and QoL in the primary fishing sector, without inferring causality beyond the available.

Temporal trends

Temporal analysis shows a progressive increase in scholarly output on DW and QoL in the primary fishing sector (Figure 2). No eligible studies were identified between 1995 and 2011. Research activity remained limited in 2012 to 2013 (one to two publications annually) before increasing steadily during 2015 to 2017 (five publications). Scholarly output accelerated between 2018 and 2020 (nine publications), remained relatively stable during 2021 to 2022 (nine publications) and continued to expand in 2023 to 2025, with seven publications in 2024 and four identified by July 2025 (Supplemental Table 1). This temporal pattern suggests that research interest has intensified in recent years, likely reflecting the growing international emphasis on sustainable fisheries, DW, labour rights and worker well-being within global policy agendas. Nevertheless, the relatively recent emergence of this literature indicates that the field remains in an early stage of theoretical and empirical development.

Disciplinary areas

To examine publication patterns and thematic focus on DW and QoL in primary fishing sector, we analysed the journals of the included studies, classifying them by scope and editorial aims.

The 41 studies were published across 29 journals spanning six disciplinary areas, illustrating the multidisciplinary nature of research on DW and QoL in fisheries (Table 1). Marine and Environmental Sciences was the most represented field (29%), followed by Ecology, Sustainability and Environmental Development and Health, Psychology and Occupational Safety (both 19.5%). Development, Public Policy and Society contributed 17% of the publications, whereas Social Sciences, Indicators and Economics and multidisciplinary journals accounted for comparatively fewer studies. This distribution suggests that research has primarily developed within environmental and health-oriented

Table 1. Distribution of articles by thematic area and journals.

Thematic area	Number of study	Journals (number of articles)
Marine and Environmental Sciences	12	Marine Policy – 5; Ocean & Coastal Management – 3; Fish and Fisheries – 1; Journal of Fisheries – 1; Frontiers in Marine Science – 1; Maritime Studies – 1
Ecology, Sustainability and Environmental Development	8	Ecology and Society – 1; Human Ecology – 2; Sustainability (Switzerland) – 2; WSEAS Transactions on Environment and Development – 1; World Development Perspectives – 1; Life Science Journal – 1
Health, Psychology and Occupational Safety	8	International Archives of Occupational and Environmental Health – 1; International Journal of Environmental Research and Public Health – 2; International Maritime Health – 2; Healthcare – 1; Frontiers in Psychology – 1; Journal of Happiness Studies – 1
Development, Public Policy and Society	7	Development in Practice – 2; Global Social Policy – 1; Journal of Rural Studies – 1; International Journal of Public Law and Policy – 1; Opcion – 1; Man in India – 1
Social Sciences, Indicators and Economics	4	Journal of the Knowledge Economy – 1; Social Indicators Research – 1; Journal of Anthropological Research – 1; Media Education – Mediaobrazovanie – 1
Multidisciplinary Science	2	Heliyon – 2

traditions, whereas labour studies and broader social science perspectives remain comparatively underrepresented. Consequently, DW is more often examined through environmental sustainability, occupational health or socio-economic outcomes than as an explicit labour construct.

Keywords analysis

A keyword analysis was conducted to map the conceptual structure of the literature by grouping synonymous keywords into broader thematic categories (Table 2). This approach enabled the identification of dominant research topics as well as conceptual gaps.

The analysis revealed a strong emphasis on fisheries workers (25 studies). Although some studies referred specifically to artisanal, coastal or migrant fishers, others used broader terms such as *fisheries workers* or *fishing communities*. These terms were grouped into a single category to identify overarching patterns in working conditions and well-being. Similarly, QoL emerged as one of the dominant themes (22 studies), encompassing physical, psychological, social and economic well-being, including health, life satisfaction, social support and coping strategies. In contrast, concepts directly related

Table 2. Keywords reflecting the focus of the research.

Category	Keywords / synonyms	Occurrences
Fishing workers	Small-scale fisheries, artisanal fishing, artisanal fisherwomen, coastal communities, migratory fisher communities, fishers, fishermen, fisher communities	25
Well-being and QoL	QoL, HRQOL, subjective well-being, well-being, life satisfaction, social well-being, alertness, coping strategy, lived experiences, actual needs, QoL indicators	22
Policy, governance and resource management	Fisheries management, governance, environmental policy, sustainable territorial development, blue economy, Sustainable Development Goals, sustainable livelihoods, just transitions, social equity, minimum living wage, policy, regulations, community engagement	15
Culture, locality and environment	Place attachment, place selection, seasonality, migration, local ecological knowledge, environmental integrity, conservation, natural resources, biodiversity, mangroves, environmental degradation	12
Socio-economic and local development	Household income, livelihood assets, poverty reduction, economic benefit, economic conversion, fishing revenue, access to livelihood capital, socio-economic factors, government policies	11
Work, labour conditions and DW	DW, dignity at work, labour, job satisfaction, work in fishing, fisheries work, employment conditions	10
Occupational health and risks	Musculoskeletal pain, occupational exposure, occupational health, cardiovascular health, dyssomnia, stress, addictive behaviours, alcohol, gambling, depression, health status, chronic diseases	8
Technology and innovation	Mobile phone, internet access, marketing information, knowledge transfer, social innovation, co-design, Ophelia process, health literacy	6
Human rights and survival	Right to food, right to work, human rights, social responsibility, survival	5

DW: decent work; HRQOL: health-related quality of life; QoL: quality of life.

to DW, including labour conditions and labour rights, appeared in only 10 studies. Governance and policy issues were identified in 15 studies but were rarely examined in relation to employment conditions or workers' rights. This suggests that governance has largely been examined from a resource management perspective rather than as a determinant of DW. Collectively, these patterns indicate that the literature has primarily conceptualized workers' experiences through well-being outcomes, whereas the structural

dimensions of DW remain comparatively underexplored. This finding reinforces the conceptual imbalance identified throughout the review, whereby DW is frequently examined indirectly through proxies such as income, job satisfaction or occupational safety rather than as a multidimensional construct.

Other emerging themes included occupational health and safety (eight studies), human rights and livelihoods (five studies) and technology and innovation (six studies). Although less frequently examined, these themes illustrate an expanding research agenda that moves beyond traditional health and economic outcomes to consider broader determinants of DW. For example, studies explored how communication technologies may improve access to information and resources, how human rights frameworks can strengthen labour protections, and how occupational safety interventions may reduce work-related risks. Together, these findings suggest a gradual shift towards more comprehensive conceptualizations of working conditions, although research remains more strongly oriented towards well-being outcomes than towards DW as a multidimensional construct.

Methodological overview

Methodological analysis of the 41 studies shows substantial heterogeneity in design (Table 3). Cross-sectional studies were most common ($n = 11$; 27%), followed by qualitative and case studies ($n = 15$; 37%) and mixed methods approaches ($n = 5$; 12%). Less frequent designs included action research, participatory studies and community interventions ($n = 4$; 10%), policy evaluations or secondary data analyses ($n = 5$; 12%) and longitudinal studies ($n = 1$; 2%), reflecting methodological diversity but also the absence of a dominant research tradition for examining DW and QoL in the primary fishing sector.

Cross-sectional studies primarily examined health, QoL and occupational behaviours, occasionally using advanced quantitative techniques (e.g. structural equation modelling), but their cross-sectional nature precluded causal inference. Qualitative and case studies provided rich accounts of workers' perceptions, cultural practices and lived experiences, although findings were often context specific. Mixed methods design offered more comprehensive perspectives by integrating quantitative and qualitative evidence yet remained relatively uncommon. Likewise, action research, participatory studies, community interventions and policy evaluations demonstrated the potential to bridge research and practice but were infrequently employed. The near absence of longitudinal studies limits understanding of how working conditions and QoL evolve over time, particularly in response to environmental, economic and policy changes. Taken together, these methodological patterns indicate that the evidence base remains predominantly descriptive and exploratory, underscoring the need for more longitudinal, participatory and theory-informed research capable of examining the dynamic relationships between DW and QoL.

Geographic patterns and sample composition

The 41 studies covered 26 countries (excluding one global-sample study – article 13), with a clear concentration in regions where fisheries are socio-economically significant (Supplemental Table 2). Although the review included 26 different countries, several

Table 3. Study designs and methodological notes.

Study design	Number of studies	Methodological notes
Cross-sectional/survey	11	Structured surveys or questionnaires; focus on QoL and health; quantitative analyses; single-point studies without longitudinal follow-up
Longitudinal	1	Assessment of job satisfaction over time; allows analysis of changes
Qualitative/case study	15	Interviews, focus groups, participant observation; includes case studies; focus on perceptions, cultural practices and subjective well-being
Mixed methods	5	Combination of qualitative and quantitative approaches; data triangulation; comprehensive analyses
Action research/ participatory/ intervention	4	Direct community involvement; co-creation of interventions; practical improvement of working conditions and well-being
policy evaluation/secondary data analysis	5	Policy analysis, use of secondary data; focus on sustainability, blue economy and DW

DW: decent work; QoL: quality of life.

countries were represented by more than one study. Considering study occurrences rather than unique countries, South America and Asia were the most represented regions (13 occurrences each, 28.3%), with Brazil alone accounting for seven studies (15.2%), followed by North America and the Caribbean (10 occurrences, 21.7%), Africa (6, 13.0%), Oceania (2, 4.3%) and Europe (1, 2.2%).

This geographic distribution (Supplemental Table 3) indicates that evidence on DW and QoL is derived predominantly from artisanal and small-scale fisheries in developing regions, where fishing constitutes a major source of livelihoods. Conversely, industrial, commercial and distant-water fisheries remain comparatively underrepresented, particularly in high-income countries and Pacific Island contexts, limiting understanding of how different employment systems, labour protections and occupational risks shape workers' experiences.

Most studies focused on artisanal or coastal fishers, reflecting both the socio-economic importance and vulnerability of these populations. Some studies included commercial fishers or migrant crews, particularly in Oceania and North America and the Caribbean, while others incorporated women, family members and fish-processing workers, highlighting that fishing livelihoods extend beyond fishers themselves. Mixed samples combining fishers, community members and other stakeholders enabled broader analyses of community well-being and structural determinants.

Methodological approaches also varied geographically. Studies conducted in high-income countries (e.g. the United States, the United Kingdom and Canada) more frequently employed longitudinal surveys and advanced statistical analyses, whereas studies from developing countries predominantly used qualitative and mixed methods approaches to examine local socio-economic conditions and community contexts.

Taken together, these patterns suggest that current knowledge about DW and QoL is strongly shaped by the geographic and socio-economic contexts in which research has been conducted, highlighting the need for broader comparative evidence across fisheries, regions and employment systems.

Research objectives, focus, variables and findings

To move beyond a descriptive synthesis, findings were organized into thematic sub-areas reflecting recurring conceptual and empirical patterns across the included studies. Details on each study's research objectives, focus, main evidence and results are available in Supplemental Table 4.

Predominance of QoL over DW. The review highlights a clear imbalance: approximately 14 studies focused exclusively on QoL, examining physical, psychological, economic, social and subjective well-being (articles 1, 2, 4, 5, 9, 16, 21, 26, 35–39), while only seven studies addressed DW directly, emphasizing working conditions, safety, remuneration and labour dignity (articles 8, 13, 28, 31–33). About 20 studies considered both QoL and DW, but DW was often represented indirectly through proxies such as income, job satisfaction or socio-economic rights (e.g. articles 3, 7, 10, 14, 18, 20, 29).

This imbalance suggests that, while QoL is a well-established outcome in the literature, DW remains underdeveloped as an explicit analytical construct. The limited attention given to labour rights, social protection and fair remuneration suggests that the literature has predominantly conceptualized workers' experiences through well-being outcomes rather than through the structural dimensions of DW.

Health-centred approach to well-being. QoL research is strongly dominated by a biomedical and psychological perspective. Physical and mental health dimensions, such as musculoskeletal disorders, fatigue, sleep disturbances and comorbidities, are heavily explored (articles 1, 2, 16, 25). Subjective well-being, including life satisfaction, happiness and job satisfaction, is also widely analysed (articles 3–6, 18, 24, 26–27, 29, 39–41).

Material and economic conditions (e.g. income, housing, and sustainability) are consistently examined (articles 3, 7, 9, 10, 14, 17, 18, 20, 21, 29, 35, 36, 38, 39), reflecting the dependence of QoL on economic factors. However, social and community dimensions (e.g. social support, participation, and cohesion) and environmental/community impacts (e.g. modernization, tourism, and environmental change) are less explored (articles 5, 11, 18, 19, 23, 26, 27, 30, 34, 37).

This pattern reflects a predominance of health-oriented research traditions, privileging measurable individual outcomes while giving comparatively less attention to the structural and community conditions through which well-being is produced.

Weak operationalization of DW. The DW dimension is inconsistently addressed. Working conditions, particularly safety, occupational risks and informality, are among the most frequently examined subcategories (articles 8, 16, 31, 32, 33, 41), reflecting the hazardous nature of fishing activities.

However, other core aspects of DW remain underrepresented. Participation and autonomy, including involvement in decision-making and worker representation, are addressed in only a few studies (articles 12, 28, 33). Legal and ethical aspects, often linked to compliance with international labour standards and human rights, appear sporadically (articles 8, 22, 32, 33). Compensation, benefits and sustainability of employment are also inconsistently examined (articles 7, 13, 30, 31, 38).

Overall, DW is predominantly operationalized through isolated employment conditions rather than as a multidimensional construct encompassing labour rights, agency, participation, social protection and dignity.

Influence of socio-economic and environmental pressures. Several studies explore the impact of socio-economic and environmental factors on fishing workers' livelihoods and well-being (articles 3, 6–7, 9, 10, 14, 17, 20, 22–23, 29, 38, 39). These studies consistently highlight the prevalence of poverty, income instability, limited access to resources and exposure to environmental changes.

Income and livelihood diversification emerge as critical determinants of QoL, while modernization, tourism and economic restructuring produce ambivalent effects, generating both opportunities and vulnerabilities (articles 19, 30, 38). Migration and labour mobility are examined primarily as adaptive strategies through which fishing households respond to declining fish stocks, seasonal variability, environmental degradation and limited local employment opportunities. Studies also examine how mobility influences access to fishing grounds, alternative livelihoods, social protection and economic resources while simultaneously increasing employment insecurity and vulnerability among migrant fishing workers (articles 6, 10, 22, 40).

Interventions based on capacity building, health literacy, social innovation and access to credit show positive impacts on resilience and well-being (articles 14–15, 18). However, studies on governance and public policy reveal discrepancies between macro-level decisions and local needs (articles 8, 13, 31, 32), reinforcing the importance of inclusive and context-sensitive approaches.

Although these studies consistently identify socio-economic and environmental pressures as key contextual factors, they rarely examine how these structural conditions translate into specific DW outcomes, limiting understanding of the mechanisms linking context, work and well-being.

Interdependence between QoL and DW. Despite these limitations, the findings consistently highlight the interdependence between QoL and DW. Poor working conditions, such as job insecurity, low income, occupational hazards and lack of social protection, are associated with negative health outcomes and reduced well-being (articles 1, 2, 4, 16, 31–33, 41).

Conversely, improvements in working conditions, social support and institutional frameworks contribute to better QoL outcomes. Evidence from policy and intervention studies demonstrates that targeted strategies, such as strengthening labour protections, promoting community engagement and supporting migrant workers, can enhance both DW and QoL (articles 8, 13, 15, 18, 33).

Overall, the evidence indicates that QoL and DW are closely interconnected and should be examined as complementary rather than independent constructs, requiring analytical approaches that integrate individual, occupational and structural dimensions of work.

Fragmented and descriptive nature of the evidence base. The literature remains heterogeneous and largely descriptive. Most studies rely on cross-sectional designs ($n = 11$) or qualitative and case study approaches ($n = 15$), focusing on specific local contexts – particularly artisanal and small-scale fishing communities.

While these approaches provide rich insights into lived experiences, they limit generalizability and comparative analysis. Longitudinal research is scarce (article 24), restricting the ability to assess changes over time. Policy evaluations and secondary data analyses are also limited (articles 8, 13, 31, 32), reducing the capacity to evaluate the effectiveness of interventions.

The absence of standardized indicators for DW and QoL further complicates cross-study comparisons. Taken together, these patterns indicate that the evidence base remains conceptually fragmented and methodologically heterogeneous, limiting cumulative knowledge and theory development.

Discussion

Interpreting the findings through the PWT (Duffy et al., 2016) provides a coherent framework for understanding how DW and QoL are shaped in the primary fishing sector. PWT conceptualizes access to DW as the result of interactions between structural conditions, occupational experiences and individual well-being rather than as isolated workplace characteristics. Viewed through this lens, the findings reveal a growing but still fragmented body of literature in which research has expanded considerably since 2015, particularly between 2018 and 2024, reflecting increasing global attention to sustainability, labour rights and social justice in fisheries (Sarmiento-Carbajal et al., 2025; Tigchelaar et al., 2025). However, despite this growth, the field remains theoretically underdeveloped, with limited integration across disciplines and little consensus regarding the conceptualization and operationalization of DW and QoL.

Structural conditions shaping decent work

The review highlights the central role of structural conditions in shaping opportunities for DW. Consistent with PWT, employment conditions cannot be understood independently of broader economic, political and institutional contexts (Blustein, 2013; Duffy et al., 2016). Across the reviewed studies, poverty, income instability, weak labour protections, inadequate social security, environmental degradation and unequal access to resources consistently emerged as major determinants of both DW and QoL. Likewise, governance initiatives, modernization processes, tourism development and fisheries policies produced heterogeneous outcomes, often failing to respond to the realities of local fishing communities. These structural constraints disproportionately affected women, migrant

workers, temporary crews and other socially marginalized groups, reinforcing inequalities in employment conditions and well-being (FAO, 2020; Leite et al., 2023). Collectively, these findings support PWT's proposition that DW depends not only on individual capacities but also on the structural opportunities and constraints that enable workers to satisfy fundamental needs while exercising their rights and dignity.

Occupational conditions and access to decent work

At the occupational level, the review demonstrates that research has primarily examined immediate working conditions while paying comparatively less attention to their integration within broader conceptualizations of DW. Occupational hazards, fatigue, job insecurity, irregular income, unsafe working environments and limited access to labour rights were consistently associated with poorer worker outcomes. Nevertheless, the concept of DW itself remains inconsistently operationalized, with many studies focusing narrowly on occupational safety, health or income while overlooking equally important dimensions such as worker participation, autonomy, legal protection, fair remuneration and social dialogue (Lozano et al., 2024; Lout et al., 2022; Winchenbach, 2025). This conceptual imbalance limits understanding of how occupational experiences are embedded within broader employment systems. From a PWT perspective, occupational conditions constitute the immediate context through which structural inequalities are translated into workers' everyday experiences, emphasizing the need for multidimensional approaches that integrate employment quality, labour rights and occupational well-being.

Quality of life through the lens of PWT

The review further demonstrates that QoL has received considerably greater empirical attention than DW, with studies predominantly assessing health, psychological well-being, economic security and subjective life satisfaction. While these outcomes provide valuable insights into workers' experiences, they are frequently examined independently of the employment conditions that shape them. PWT offers a broader interpretation by proposing that DW enables individuals to satisfy fundamental needs for survival, social connection and self-determination (Duffy et al., 2016). The findings suggest that these needs are often compromised by insecure employment, financial instability, environmental uncertainty and limited institutional support, all of which undermine workers' physical, psychological and social well-being. Conversely, improvements in labour protection, social support and community resources were consistently associated with better QoL, illustrating that well-being cannot be understood solely as an individual outcome but must be interpreted within the broader structural and occupational contexts in which fishing work is performed.

Integrating decent work and quality of life

A central contribution of this review is demonstrating that DW and QoL should not be conceptualized as separate constructs but as interdependent dimensions of workers'

experiences. Although the literature has largely examined them independently, the evidence consistently indicates that poor employment conditions, including job insecurity, inadequate social protection, occupational risks and income instability, are associated with lower QoL, whereas improvements in labour conditions and institutional support contribute to better well-being (Kartikasari et al., 2021; Santos et al., 2021; Yakub et al., 2024). By integrating these findings through the framework of PWT, the review shifts the focus from individual outcomes towards the interaction between structural, occupational and personal factors that jointly shape workers' opportunities to achieve both DW and QoL. This perspective not only provides a more comprehensive understanding of employment in the primary fishing sector but also offers a theoretically grounded framework for future research, policy development and interventions aimed at promoting socially just, sustainable and equitable fisheries.

Limitations

Several limitations should be considered when interpreting the findings of this review. First, the search strategy was restricted to electronic databases and did not include manual searches or grey literature. Although this approach ensured a systematic and reproducible search process, relevant reports, policy documents and unpublished studies may have been overlooked, particularly in a field where governmental agencies, international organizations and non-governmental organizations frequently generate evidence on fisheries labour conditions. Second, although the review followed the methodological framework proposed by Arksey and O'Malley (2005) and its refinement by Levac et al. (2010), it did not fully adhere to all PRISMA-ScR recommendations (Tricco et al., 2018). Consequently, some relevant studies may not have been identified, and the synthesis should be interpreted as a structured mapping of the available evidence rather than an exhaustive assessment of the literature. Third, the review deliberately focused on studies explicitly addressing the concepts of DW and QoL. While this decision strengthened conceptual consistency and ensured alignment with the review objectives, it may have excluded studies examining closely related constructs, such as occupational health and safety, psychosocial well-being, job satisfaction or working conditions, that contribute to understanding workers' experiences but are framed using different theoretical perspectives. As a result, the review should be understood as capturing the development of these concepts rather than the entirety of research on fishing workers' well-being. Finally, the eligibility criteria may have limited the breadth and representativeness of the evidence. Restricting the review to studies published in English and within the social sciences may have excluded important contributions from public health, occupational medicine, environmental sciences, economics and regional literature published in other languages. This limitation is particularly relevant in fisheries, where research is often conducted in local contexts and disseminated through national journals or institutional reports.

From the perspective of PWT, these limitations also highlight important directions for future evidence synthesis. Because PWT conceptualizes DW as the product of interacting structural, sociocultural, occupational and individual factors, future reviews would benefit from adopting broader interdisciplinary search strategies capable of capturing these

multiple dimensions simultaneously. Such an approach would provide a more comprehensive understanding of how employment conditions shape workers' QoL across diverse fishing contexts.

Integrated contributions: Theoretical and policy

Interpreting the evidence through the lens of the PWT highlights three main theoretical contributions. First, the review demonstrates that conceptualizations of DW in the fishing sector remain underdeveloped, with research primarily emphasizing health, economic and subjective well-being while giving comparatively less attention to structural dimensions such as labour rights, agency, participation and dignity. This finding reinforces the central premise of PWT that access to DW must be understood through the interaction of individual experiences, social contexts and structural constraints (Blustein, 2013; Duffy et al., 2016).

Second, the review illustrates how environmental, economic and sociocultural pressures shape access to DW and, consequently, influence QoL. By documenting how precarity, labour insecurity, social inequalities and limited institutional support disproportionately affect women, migrant workers and temporary crews, the review extends the application of PWT to the fishing sector by demonstrating how structural constraints and social justice are fundamental to understanding work experiences (Blustein, 2013; Duffy et al., 2016).

Finally, the review positions QoL as an outcome emerging from the interaction between employment conditions and broader social and environmental contexts rather than as an exclusively individual experience. In doing so, it illustrates how PWT can serve as a useful framework for integrating occupational, social and ecological dimensions of fishing work, while identifying theoretical gaps that warrant further theoretical and empirical development.

From a policy perspective, the findings highlight the need for context-sensitive and multidimensional interventions that simultaneously address employment conditions, worker well-being and structural inequalities. Integrated strategies combining labour protection, social security, occupational safety, capacity-building and community participation are likely to promote both DW and QoL. Because fishing communities operate within diverse socioeconomic, environmental and cultural contexts, interventions should be locally responsive while advancing social justice, equitable livelihoods and the long-term sustainability of the sector (ILO, 1999; Duffy et al., 2016; United Nations, 2015).

Recommendations for future research

Guided by the PWT, future research should adopt integrative frameworks that examine how structural, occupational and individual factors jointly shape DW and QoL in the primary fishing sector (Kartikasari et al., 2021; Santos et al., 2021). At the structural level, greater attention should be given to climate change, governance, labour regulations, market volatility, social protection and technological transitions, as well as to expanding research beyond small-scale fisheries in South America and Asia to include industrial and distant-water fisheries (FAO, 2020; Leite et al., 2023; Nugroho et al., 2012;

Tigchelaar et al., 2025). At the occupational level, future studies should systematically assess labour conditions, safety, autonomy, participation and labour rights using standardized indicators of DW, enabling meaningful cross-context comparisons and meta-analyses (Lozano et al., 2024; Sarmiento-Carbajal et al., 2025). At the individual level, greater emphasis should be placed on multidimensional measures of QoL that integrate health, economic, social and environmental well-being while examining the experiences of underrepresented groups, including women, migrant workers, temporary crews and vulnerable fishing communities.

Methodologically, longitudinal, mixed methods and participatory designs are needed to strengthen causal inference, capture changes over time and incorporate community perspectives, thereby improving the relevance and uptake of research findings (Asche et al., 2018; Kadfak, 2024). Future studies should also evaluate policy initiatives, community programmes and labour interventions to understand both their outcomes and the mechanisms through which they influence DW and QoL across diverse sociocultural contexts. Finally, rather than using PWT solely as a conceptual background, future research should explicitly test its propositions by examining how structural constraints, occupational conditions and individual resources interact to influence workers' access to DW and QoL (Blustein, 2013; Duffy et al., 2016). Such research would further strengthen both the theoretical development of PWT and its application to sustainable and equitable fisheries.

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Supplemental material

Supplemental material for this article is available online.

References

Alayyannur PA, Ramdhan DH and Tejamaya M (2023) The health and safety of being fishermen: A literature review. *Journal of the Pakistan Medical Association* 73(2, Ind Supplement: The 13th International Nursing Conference): S40.

Anna Z, Yusuf AA, Alisjahbana AS, et al. (2019) Are fishermen happier? Evidence from a large-scale subjective well-being survey in a lower-middle-income country. *Marine Policy* 106: 103559.

Arksey H and O'Malley L (2005) Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology* 8(1): 19–32.

Asche F, Garlock TM, Anderson JL, et al. (2018) Three pillars of sustainability in fisheries. *Proceedings of the National Academy of Sciences of the United States of America* 115(44): 11221–11225.

Blustein DL (2013) *The Oxford Handbook of the Psychology of Working*. Oxford University Press.

Blustein DL, Olle C, Connors-Kellgren A, et al. (2016) Decent work: A psychological perspective. *Frontiers in Psychology* 7: 407.

Davies AR, Grey CNB and Homolová L (2021) Supporting farmer and fisher communities in Wales through uncertainty: Two mixed methods studies. *The European Journal of Public Health* 31(Supplement_3): 561. doi: 10.1093/eurpub/ckab165.587.

Dewi FS, Kusnoputranto H, Purwana R, et al. (2023) Identification of work-related diseases in small-scale fishermen in Batam Island, Indonesia. *The Open Public Health Journal* 16: e187494452304140. doi: 10.2174/18749445-v16-e230505-2022-218.

Doza S, Bovbjerg VE, Vaughan A, et al. (2022) Health-related exposures and conditions among US fishermen. *Journal of Agromedicine* 27(3): 284–291.

Duffy RD, Blustein DL, Diemer MA, et al. (2016) The psychology of working theory. *Journal of Counseling Psychology* 63(2): 127–148.

FAO. Food and Agriculture Organization of the United Nations (2020) *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication*. FAO. Available at: https://www.fao.org/voluntary-guidelines-small-scale-fisheries/en

FAO. Food and Agriculture Organization of the United Nations (2024) *The State of World Fisheries and Aquaculture 2024*. FAO. Available at: https://www.fao.org/3/cd0683en/online/sofia/2024/fisheries-aquaculture-employment.html

Giron-Nava A, Lam VWY, Aburto-Oropeza O, et al. (2021) Sustainable fisheries are essential but not enough to ensure well-being for the world's fishers. *Fish and Fisheries* 22(4): 812–821.

Høvdanum ASá, Jensen OC, Petursdóttir G, et al. (2014) A review of fatigue in fishermen: A complicated and underprioritised area of research. *International Maritime Health* 65(3): 166–172.

Husain A and Rauf E (2024) Perceived stress, life satisfaction and mental well-being of fishermen in Kerala. *Psychology and Mental Health Care* 8(4): 1-5. doi: 10.31579/2637-8892/265.

ILO. International Labour Organisation. (1999) *Report of the Director-General: Decent work*. International Labour Office. Available at: https://www.ilo.org/public/english/standards/relm/

ilc/ilc87/rep-i.htm#:~:text=Decent%20work%20is%20the%20converging,role%20in%20the%20near%20future

ILO. International Labour Organization. (2007) *Convention C188: Work in Fishing Convention, 2007 (No. 188)*. ILO. Available at: https://www.ilo.org/global/standards/subjects-covered-by-international-labour-standards/fishing/lang–en/index.htm

Kadfak A (2024) The labor governance frontier in fisheries: A critical review and future outlook. *Society & Natural Resources* 37(12): 1710–1721.

Kartikasari A, Stringer C and Henderson G (2021) Co-creating changes to achieve decent work conditions in the New Zealand fishing industry. *Global Social Policy* 22(2): 281–302.

Leite MCF, Johnson DS, Ross H, et al. (2023) Social wellbeing, values, and identity among Caiçara small-scale fishers in southeastern Brazil. *Maritime Studies* 22(3): 36.

Levac D, Colquhoun H and O'Brien KK (2010) Scoping studies: Advancing the methodology. *Implementation Science* 5(1): 1–9.

Lout G, Fitzpatrick J, García Lozano AJ, et al. (2022) Decent work in a seascape of livelihoods: Regional evaluation of the shrimp and groundfish fishery of the Guianas-Brazil shelf. *Marine Policy* 144: 105231. doi: 10.1016/j.marpol.2022.105231.

Lozano AG, Shibata JP, Jeri JC, et al. (2024) Elevating labor concerns in small-scale fisheries: Challenges to decent work in Peru's jumbo flying squid fishery. *Maritime Studies* 23: 28.

Mehta A. (2025, 17 September) 'Sea change needed to help the world's seafarers', *Reuters*. Available at: https://www.reuters.com/sustainability/society-equity/sea-change-needed-help-worlds-seafarers–ecmii-2025-09-17/ (Accessed: [insert date]).

Moher D, Shamseer L and Clarke M (2015) Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews* 4(1): 1–9.

Myers ML, Durborow RM and Kane AS (2018) Gulf of Mexico Seafood harvesters: Part 1. Occupational injury and fatigue risk factors. *Safety* 4(3): 31.

Nugroho AS, Fujimura M and Inaoka T (2012) Changes in socioeconomic status; community health and environmental conditions of fishermen by transmigration (transmigrasi) in Lampung Timur, Indonesia. *Life Science Journal - Acta Zhengzhou University Overseas Edition* 9(4): 789–798.

Pollnac RB and Poggie JJ Jr (2006) Job satisfaction in the fishery in two southeast Alaskan towns. *Human Organization* 65(3): 329–339.

Pollock D, Peters MDJ, Khalil H, et al. (2023) Recommendations for the extraction, analysis, and presentation of results in scoping reviews. *JBI Evidence Synthesis* 21(3): 520–532.

Santos P, Trimble M and Johnson D (2021) Balancing hope and disappointment: Representation, social wellbeing, and the future of small-scale fisheries in Uruguay. *Development in Practice* 31(5): 580–591.

Sarmiento-Carbajal J, Cabrera-Castro R, Domínguez-Bustos ÁR, et al. (2025) Assessing the future of work in fisheries: A multi-criteria participatory approach from Spain. *Ocean & Coastal Management* 237: 107749.

Siame S, Bygvraa DA and Jensen OC (2022) Facilitators and barriers to implementing occupational safety interventions in the fishing industry: A scoping review. *Safety Science* 151: 105512.

Smith CL and Clay PM (2010) Measuring subjective and objective well-being: Analyses from five marine commercial fisheries. *Human Organization* 69(2): 158–168.

Su X and Chan KL (2023) The associations of decent work with wellbeing and career capabilities: A meta-analysis. *Frontiers in Psychology* 14: 1068599.

Tabe-Ojong MP, Vincent MG Jr, Kedinga ME, et al. (2025) Social protection and aquatic food systems. *Environmental Science & Policy* 168: 104043.

Thorvaldsen T, Kongsvik T, Holmen IM, et al. (2020) Occupational health, safety and work environments in Norwegian fish farming: Employee perspective. *Aquaculture* 524: 735238.

Tigchelaar M, Jackson B, Selig ER, et al. (2025) Decent work in fishing in a changing climate. *Marine Policy* 181: 106846.

Tricco AC, Lillie E, Zarin W, et al. (2018) PRISMA Extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine* 169(7): 467–473.

Trimble M and Johnson D (2013) Artisanal fishing as an undesirable way of life? The implications for governance of fishers' wellbeing aspirations in coastal Uruguay and southeastern Brazil. *Marine Policy* 37: 37–44.

Turner RA, Sainsbury NC and Wheeler BW (2019) The health of commercial fishers in England and Wales: Analysis of the 2011 census. *Marine Policy* 106: 103548.

United Nations (2015) *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations. Available at: https://sdgs.un.org/2030agenda

WHO. World Health Organization (1995) The World Health Organization Quality of Life Assessment (WHOQOL): Position paper from the World Health Organization. *Social Science & Medicine* 41: 403–409.

Winchenbach A (2025) Fishing for dignity: Cornish fishers' perspectives on dignity at work—conceptual grounding and implications for policy and practice. *Marine Policy* 182: 106864.

Yakub A, Armunanto A and Haryanto NA (2024) The impact of the assistance of the hope family program on the quality of life in coastal communities: A case study of fishermen of South Sulawesi province. *International Journal of Public Law and Policy* 10(1): 32–52.