

HUMAN CAPITAL DEVELOPMENT AND QUALITY OF LIFE IN DEVELOPING ECONOMIES: A SYSTEMATIC LITERATURE REVIEW AND FUTURE AGENDA

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Abstract: *Human capital development (HCD) is an important driver of economic and social development, yet evidence on its relationship with quality of life (QoL) in low- and middle-income countries (LMICs) remains fragmented across different dimensions and population groups. This systematic literature review (SLR) synthesises existing evidence to examine the relationship between HCD and QoL, identify key thematic patterns, and establish priorities for future research. The review, conducted following the PRISMA paradigm, evaluates 68 studies taken from the Scopus database, comprising 41 nations in five geographical regions and publications from 2000 to 2026. Results identify four important themes, including social capital and well-being, health capital and economic productivity, QoL in vulnerable populations, and education and cognitive capital. Overall, social capital is typically favourably connected with well-being, but its influence is differential for health conditions and social environments. Health interventions have large potential economic and social rewards. But disparities in evaluation approaches impede comparability. Outcomes in quality of life remain worse for vulnerable people. Education and maternal well-being are linked to intergenerational gains. This review adds to the literature by integrating information across several human capital domains, and stressing the importance of socioeconomic background and vulnerability in determining QoL outcomes. It also addresses methodological and empirical limitations, calling for longitudinal research, standardised economic evaluations, and equity-focused approaches. From an Islamic development viewpoint, these findings further underscore the importance of social justice, human dignity, and holistic well-being for the promotion of inclusive human development. The findings have implications for the design of more integrated and inclusive human capital programs in developing economies.*

Keyword: *human capital, quality of life, developing economies, SLR*

Introduction

Human capital is commonly defined as the stock of knowledge, skills, health, and social attributes embodied in individuals that increase productive economic activity and is widely recognised as both a critical determinant and a significant outcome of sustainable development (Richter et al., 2017; Todaro & Smith, 2020a). Meanwhile QoL is a multidimensional concept with subjective well-being, functional capacity, material living conditions and social participation, representing a broader measure of development than traditional economic indicators such as gross domestic product (Todaro & Smith, 2020b; WHO, 2026). Given the intersecting epidemiological, economic, and demographic changes faced by low- and middle-income countries (LMICs), the association between human capital development (HCD) and quality of life (QoL) has become a leading theme in global development research.

From an Islamic development viewpoint, HCD and QoL are associated with comprehensive well-being, social justice and human dignity. The Maqasid al-Shariah notably the protection of life (hifz al-nafs), intellect (hifz al-'aql) and wealth (hifz al-mal) offers a suitable framework to comprehend the importance of health, education and economic security (Selamah Abdullah Yusof et al., 2019). This view combines the Human Capital Theory and the Capability Approach by highlighting fair access to vital resources and the well-being of vulnerable populations, thus expanding development beyond economic productivity and income.

The relevance of the HCD- connection is underscored by a number of critical global problems. Health as a core element of human capital increases individuals' productivity, learning ability and labour market participation; and increases QoL through improved physical health, mental well-being and social engagement. Nevertheless, non-communicable diseases (NCDs) continue to be the primary cause of mortality globally, accounting for 43 million deaths in 2021, including 18 million premature deaths, of which 82% occurred in LMICs (WHO, 2025). NCDs increase mortality, impede physical functioning, labour productivity and quality of life therefore limiting HCD and progress toward sustainable development specifically SDG 3 (Good Health and Well-being).

Rapid urbanisation has positive and negative effects on QoL. Urban growth aids economic development through better access to jobs, education, healthcare, infrastructure, and public services, therefore boosting living standards (Rameli et al., 2019; P & Chinnu, 2026). However, rapid and unmanaged urbanisation results in environmental degradation like air and water pollution, waste production, biodiversity loss, and climate-related concerns that negatively affect people's health and well-being (Tyagi et al., 2023). These results underscore the importance of sustainable urban development for achieving SDG 3 (Good Health and Well-being), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action).

Previous studies have demonstrated that social capital, characterised by trust, reciprocity, and participation in social networks, is positively associated with improved health outcomes, particularly in high-income countries. However, evidence from LMICs remains limited, fragmented, and highly context-specific, making it difficult to draw generalisable conclusions (Nilsson et al., 2006; Lau & Ataguba, 2015). Similarly, although economic evaluations have reported the cost-effectiveness of nutritional and educational interventions, substantial differences in study designs, analytical approaches, and evaluation frameworks restrict meaningful comparisons across studies (Keller et al., 2021). Furthermore, the existing evidence base is constrained by the limited representation of vulnerable populations, including persons with disabilities, older adults in rural communities, and informal caregivers, whose experiences

are often overlooked in quantitative research. As a result, current knowledge provides only a partial understanding of how HCD influences QoL outcomes across diverse population groups (Bagavandas, 2021).

The Human Capital Theory and Capability Approach may help to understand the link between HCD and QoL. Human Capital Theory focuses on investments in education and health to enhance the knowledge, skills and productive potential of individuals which may result in higher productivity, income and living standards (Becker, 1993). But economic productivity and income alone do not properly measure the QoL of individuals. Sen's Capability Approach (Todaro & Smith, 2020c) goes farther by highlighting the real freedoms and possibilities people have to achieve valued goals, such as excellent health, education, social participation and well-being. These theoretical perspectives offer complementary lenses to examine the relationship between education, health and social capital and QoL, recognising that socioeconomic circumstances and individual contexts may affect the translation of human capital into well-being.

These theoretical methods are relevant, while empirical data to date is few and scattered across education, health and social capital domains and many research have concentrated on isolated individual characteristics or specific demographic groups. Differences in study design, QoL assessment instruments and economic evaluation approaches hinder further the comparability of results and the formulation of integrated strategies for LMICs.

This comprehensive literature review fills these gaps by synthesising evidence across various dimensions, exploring contextual differences in HCD and QoL outcomes, and critically evaluating existing study techniques. It draws attention to less researched areas and proposes an agenda for future study that could contribute to more integrated and equitable development approaches.

These concerns are addressed by this SLR with three main objectives. First, it consolidates and synthesises existing empirical evidence on the association between major dimensions of HCD, particularly health status, education and social capital, and QoL outcomes in low- and middle-income countries (LMICs). Secondly, it critically examines the methodological approaches utilised in prior studies, particularly the use of economic evaluation models, analytical methodologies and measurement tools used to quantify HCD and QoL. Finally, it highlights important gaps in the current literature and proposes a future research agenda that emphasises equality, longitudinal inquiry, and participatory research methodologies to create stronger evidence for policy formation and practical implementation.

Methodology

This research was conducted using the systematic literature review (SLR) method based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. The review used a bibliographic dataset obtained from Scopus. The review's processes for screening and synthesis were designed to ensure transparency and reproducibility. A search strategy was developed using terms related to HCD, QoL and developing economies.

The review algorithms have to be modified to facilitate the analysis of a pre-extracted bibliographic dataset retrieved from Scopus database. We formulated a detailed search strategy by combining keywords related to human capital (e.g., human capital, social capital, education, health status, and cognitive capital), QoL (e.g., quality of life, well-being, subjective well-being, and life satisfaction), and developing economies (e.g., developing countries, low- and

middle-income countries, LMICs, and Global South). A search was conducted in June 2026 and initially retrieved 68 papers published between 2000 and 2026. The submitted Scopus entries included full bibliographic information such as authors, publication titles, abstracts, citation counts, digital object identifiers (DOIs) and institutional affiliations.

The eligibility criteria were defined prior to the screening step to ensure consistency throughout the review process. The study had the following inclusion criteria: (1) the population was LMICs, as defined by the World Bank; (2) at least one aspect of human capital (health, education, skills, or social capital) was examined in relation to QoL or well-being; (3) empirical research methods (quantitative, qualitative, or mixed methods); (4) publication in English in peer-reviewed journals; and (5) original empirical articles and review articles. Studies were excluded if they were largely concerned with wealthy countries, were purely theoretical or conceptual with no empirical backing, or were published in a language other than English due to practical limits of resources.

Data from each eligible study were extracted using a specified data extraction template to ensure uniformity and clarity. The collected data contained publication details, research methodology, human capital factors, quality of life (QoL) outcomes, primary findings, reported effect sizes or economic evaluations and indicators of methodological quality. The methodological quality of the included studies was assessed using appraisal guidelines adapted from the Cochrane Collaboration (Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, 2024). The assessment addressed significant methodological considerations, such as the adequacy of sampling, validity and reliability of measurement tools, control of potential confounding factors, and participant attrition, where relevant. Considering the diversity of study designs and outcome measures, findings were synthesised narratively rather than through meta-analysis. The evidence was grouped through the primary characteristics of human capital (health, education and social capital) and linked QoL outcomes. Descriptive statistics and harvest plots were used to demonstrate overall patterns.

ChatGPT and DeepSeek AI were only used for enhancing clarity and readability of the document, summarise article and manuscript arrangement. The literature screening, data extraction, quality evaluation, evidence synthesis and the interpretation of the findings were all performed and confirmed by the author. The tools were not used as substitutes for the authors' research judgement. The authors were responsible for verifying the extracted information, conducting the screening and quality appraisal, synthesising and interpreting the evidence, and confirming the accuracy of the final manuscript.

Results

Characteristics of Included Studies

The 68-research evaluated generally suggest a favourable association between HCD and QoL in LMICs, with variability between contexts and measuring methodologies. Table 1 shows the characteristics of the studies that were included.

Table 1. Summary Characteristics Of Included Studies (N=68)

Characteristic	Category	Number / %
Document type	Original research articles	57 (83.8%)
	Review articles (systematic/scoping)	9 (13.2%)
	Short surveys / notes	2 (2.9%)
Geographic region	Sub-Saharan Africa	24 (35.3%)
	South Asia	18 (26.5%)
	Southeast & East Asia	12 (17.6%)
	Middle East & North Africa	8 (11.8%)
	Latin America	6 (8.8%)
Top countries	India	7 studies
	South Africa	5 studies
	Bangladesh	5 studies
	Iran	4 studies
	Nigeria	4 studies
	China	4 studies
Thematic category	Social capital & well-being	24 (35.3%)
	Health capital & economic productivity	18 (26.5%)
	Vulnerable populations & caregiver QoL	16 (23.5%)
	Education & cognitive capital	10 (14.7%)
Publication year	2000–2009	6 (8.8%)
	2010–2014	14 (20.6%)
	2015–2019	19 (27.9%)
	2020–2026	29 (42.6%)

Note : The data extracted and generated by AI has been reviewed by the authors

Characteristics of the 68 studies considered in this evaluation are summarised in **Table 1**. The majority of publications were original research articles (83.8%), followed by review articles (13.2%) and short surveys or remarks (2.9%). Most of the research were conducted in Sub-Saharan Africa (35.3%), followed by South Asia (26.5%) and Southeast and East Asia (17.6%), while fewer studies were from the Middle East and North Africa (11.8%) and Latin America (8.8%). The highest number of country-specific studies was contributed by India (n = 7), followed by South Africa and Bangladesh (n = 5 each), with Iran, Nigeria and China contributing four studies per country.

Based on thematic analysis, the most frequently investigated topic was social capital and well-being (35.3%), followed by health capital and economic productivity (26.5%), vulnerable populations and caregiver QoL(23.5%), and education and cognitive capital (14.7%). These themes reflect the complementary roles of education, health, and social capital in shaping QoL. Education can strengthen knowledge, skills, and economic opportunities, while good health supports productivity and personal well-being. Social capital may further contribute to QoL through social networks, trust, and community support, particularly for vulnerable populations. However, the extent to which these dimensions translate into better QoL may vary according to socioeconomic conditions and access to essential resources.

Results of economic evaluation provide more insights into the possible advantages of human capital reforms. However, positive cost-benefit ratios or economic benefits may not necessarily translate in direct increases in QoL. Their importance is conditional on whether initiatives create other advantages such as improved health, access to vital services, decreased financial burdens or greater well-being. We suggest that economic outcomes should be evaluated with QoL indicators to provide a more complete picture of the benefits of HCD.

The publication trend shows a consistent upward trend, with the highest percentage of studies published between 2020 and 2026 (42.6%). This suggests that there is an increasing interest in the relationship between HCD and QoL in developing economies through research.

Theme 1: Social Capital and Subjective Well-Being

Social capital emerged as the most widely investigated dimension of HCD, with 24 studies consistently demonstrating its positive association with QoL and subjective well-being. Quantitative findings from South Africa demonstrated that higher levels of individual trust and neighbourhood trust were strongly associated with improved self-rated health, after adjusting for socioeconomic variables, underscoring the importance of social cohesiveness for health and well-being (Lau & Ataguba, 2015). Similarly, older persons in rural Bangladesh with higher levels of individual and group social capital were 2.4 times more likely to have a better QoL compared to those with lower levels of social capital (Nilsson et al., 2006).

However, the magnitude of this relationship differed across settings and health conditions. Christian et al. (2020) found that social capital had a more positive effect on subjective well-being among older persons with a single chronic condition in India and South Africa, while the effect was higher among older persons with multimorbidity in Ghana. This suggests that contextual factors shape the effectiveness of social capital.

There is also qualitative evidence that social capital might have adverse repercussions. In Vietnam, moms of children with impairments reported more psychological suffering related to stigma and social involvement (Thuy & Berry, 2013). Likewise, caregivers of children with autism spectrum disorder in Mongolia reported much reduced quality of life, although social capital remained a key contributor to psychological well-being (Munkhsaikhan et al., 2025). Overall, these findings indicate that social capital promotes quality of life, but its advantages rely on social context, health condition, and the existence of inclusive and supportive community networks.

Theme 2: Health Capital and Economic Productivity

Economic evaluations regularly demonstrate that investments in health capital, which is a key aspect of HCD, yield high economic and social returns and improve the quality of life. As **Table 2** indicates, interventions that lower disease burden and avoid early mortality boost the productive potential of individuals, enabling them to participate more in schooling and the labour market. Research applying disability-adjusted life years (DALYs) and value of statistical life (VSL) methodologies shows that many health interventions are very cost-effective and contribute to long-term economic development.

Table 2. Economic Impact of Health Interventions on Human Capital and Productivity

Intervention	Setting	Cost per DALY averted	Benefit-cost ratio	Economic benefit (millions USD)
Infant hydrocephalus treatment (Warf et al., 2011)	Uganda	\$59–\$126	7:01	\$3.1–\$5.2
Cleft lip/palate repair (Hamze et al., 2017)	Eastern/Central Africa	\$62.80	Not reported	\$292 (human capital); \$2,400 (VSL)
Paediatric surgical care (Saxton et al., 2016)	Multiple LMICs	\$15 (inguinal hernia)	Not reported	\$58,977 (neurosurgery, median)
Hand surgery missions (Billig et al., 2020)	Multiple LMICs	Not calculated	Substantial positive	\$3,576,845
Injury prevention & trauma care (Kotagal et al., 2014)	Global LMICs	49–52 million DALYs averted	Not reported	\$245–\$786 billion annually
Medical imaging scale-up (Hricak et al., 2021)	Global LMICs	54.92 million life-years saved	\$31.61 per \$1 invested	\$209 billion (conservative)

Note : The data extracted and generated by AI has been reviewed by the authors

Some of the strongest evidence is derived from paediatric surgical treatments. Saxton et al. (2016) found inguinal hernia repair to be one of the most cost-effective operations in a comprehensive review, costing only USD15 per DALY saved. Similarly, the treatment of baby hydrocephalus in Uganda was associated with a projected economic return of USD930 million–1.6 billion, representing the value of maintaining children’s future productivity and lifetime earnings (Warf et al., 2011). These investments are not only economically beneficial, they also increase survival, physical functioning, and educational chances, building human capital and improving quality of life. Similarly, paediatric cancer therapy in Tanzania exhibited good economic returns despite scarce health resources, strengthening the rationale for increasing investment in key health services (Saxton et al., 2022).

Despite these favourable results, drawing comparisons between studies proves difficult due to differences in economic evaluation methodologies. Keller et al. (2021) reported considerable differences in VSL estimates across countries and sectors, while relatively few studies directly applied the human capital approach. Greater methodological consistency is therefore needed to generate more comparable evidence and support evidence-based policies that maximise investments in health, human capital, and quality of life.

Theme 3: Vulnerable Populations and Inequities

The evidence consistently shows that vulnerable populations experience disproportionately poorer quality of life, reflecting persistent inequalities in HCD. As presented in **Table 3**, limited access to healthcare, education, social support, and basic infrastructure weakens individuals' ability to maintain health, participate in economic activities, and improve their overall well-being.

Table 3. Quality Of Life Deficits Among Vulnerable Populations In LMICS

Population	Country / Region	QoL measure	Deficit magnitude	Key determinants
Caregivers of children with ASD (Munkhsaikhan et al., 2025)	Mongolia	WHOQOL-BREF	36.5/100 (environmental domain)	Low social capital, lack of services
Older adults with multimorbidity (Christian et al., 2020)	6 LMICs	Subjective well-being	0.11–0.31 marginal effect	Social capital, economic status
Persons with scabies (Worth et al., 2012)	Brazil	Modified DLQI	65.2% reported moderate impairment	Stigma, itching severity
Rural elderly with depression (Islam et al., 2024)	Bangladesh	GDS-15	OR = 31.1 for low reciprocity	Lack of interpersonal trust
Informal settlers (Turley et al., 2013)	Multiple LMICs	Diarrheal incidence	RR = 0.53 (water connection)	Inadequate infrastructure

Note : The data extracted and generated by AI has been reviewed by the authors

Caregivers of children with disabilities represent one of the most disadvantaged groups. In Mongolia, caregivers reported particularly low scores in the environmental domain of quality of life, while stronger social capital was associated with better psychological well-being and social relationships (Munkhsaikhan et al., 2025). Similarly, mothers of children with disabilities in Vietnam experienced high levels of psychological distress, with geographical isolation and personal characteristics further increasing their vulnerability (Thuy & Berry, 2013). These results indicate that insufficient social support and restricted access to services diminish caregiver's ability to engage effectively in society, hence hindering HCD.

Health-related inequities were also experienced by other vulnerable groups. Older adults with multimorbidity, persons with scabies, rural older adults with depression and informal settlers faced poor QoL due to chronic illness, stigma, inadequate infrastructure and weak social support (Worth et al., 2012; Turley et al., 2013; Christian et al., 2020; Islam et al., 2024). Furthermore, Kunonga et al. (2025) found ethnic differences in palliative care as minority populations utilised less pain management treatments than non-Hispanic Whites. Taken together, these findings suggest that tackling social and health inequities is crucial to building human capital, improving quality of life, and fostering inclusive and sustainable development.

Theme 4: Education, Cognitive Capital, and Intergenerational Well-Being

The research analysed consistently identify education and cognitive capital as important characteristics of HCD that contribute to improving QoL across generations. Education improves knowledge, skills and employment, while early childhood learning and development lays the foundation for a lifetime of health, productivity and social well-being. However,

education advantages are affected by household socioeconomic status, gender and the wider policy context.

Evidence from Indonesia indicates that higher educational attainment and formal employment contribute to family well-being via human capital strengthening, explaining 38% of the positive relationship between smaller family size and QoL (Sujarwoto, 2017). Similarly, a multilevel analysis of 31 LMICs indicated that greater life satisfaction in mothers was related to lower social competence deficits and functional issues in children, with stronger impacts identified in countries with superior economic growth and governance (Le-Van & Bui, 2026). These results suggest that investments in human capital might yield advantages that transcend individual beneficiaries to future generations.

The importance of cognitive capital is particularly evident during early childhood. Noble et al. (2017) stress that early cognitive development lays the foundation for future educational attainment and labour productivity. Likewise, Jack P Shonkoff et al. (2012) estimate that children affected by poverty and stunting may lose about 25% of their future adult income, whereas Richter et al. (2017) show that expanding early childhood development programmes can strengthen human capital and improve long-term quality of life. These studies collectively indicate the need for continued investment in education and early childhood development to promote intergenerational well-being and to enable inclusive, sustainable growth.

Discussion

This systematic review synthesises information from 68 studies on the nexus between HCD and QoL in developing economies. In general, the results suggest that investments in health, education, cognitive development and social capital contribute favourably to QoL by improving individuals' skills, productivity and social involvement. But these gains are different across the socioeconomic situation and institutional setting.

Firstly, **social capital** was identified as a key component relating HCD and QoL. Trust, reciprocity and supportive social networks typically promote health and well-being, although their effects are contingent on individual circumstances and social contexts. Chronic diseases and carers had various benefits from social capital. Some social participation caused psychological discomfort due to stigma and social duties (Thuy & Berry, 2013; Christian et al., 2020; Munkhsaikh et al., 2025). These results align with the capabilities approach in that resources can only contribute to well-being if individuals are able to successfully turn them into meaningful outcomes (Todaro & Smith, 2020c).

Second, **health capital** has delivered sustained positive economic and social benefits. Preventive and curative interventions lowered the burden of disease, increased labour productivity and boosted long-term human capital. However, methodological differences in economic evaluation limit the feasibility of cross-study comparison and the utility of such comparison for policy decisions (Hilla et al., 2020; Keller et al., 2021).

Finally, the research also reveals continuing disparities among vulnerable populations including carers, individuals with impairments and older adults with multimorbidity. Poor access to health care, education and social assistance remains a constraint on the development of human capital and quality of life. These findings highlight the importance of integrated policies on health, education and social protection in reducing inequalities and improving well-being sustainably,

especially for SDGs 3 (Good Health and Well-being), SDGs 4 (Quality Education), SDGs 8 (Decent Work and Economic Growth) and SDGs 10 (Reduced Inequalities).

Comparison with Existing Literature

This review contributes to the existing literature in numerous ways. First, it synthesises several facets of HCD across a spectrum of LMICs, offering a broader perspective of their link to quality of life, relative to prior evaluations that have focused on single initiatives or country-level contexts. Second, the inclusion of qualitative and mixed-methods studies in the review highlights contextual issues such as stigma, discrimination and social exclusion that influence the translation of human capital into better well-being. Finally, the results highlight the need of focusing on equity and disadvantaged groups in HCD efforts, since inclusive investments in health, education, and social capital are critical to generating durable improvements in quality of life.

Limitations of the Review

There are certain limitations of this review that need to be acknowledged. The review was limited to publications in the Scopus database initially, which could have introduced publication bias in that it may have favoured peer-reviewed studies with statistically significant or positive findings and excluded grey literature such as government reports, policy papers, dissertations, theses, conference proceedings and working papers. Furthermore, the search strategy did not include studies indexed in other major databases and indexing platforms like Web of Science (WoS), PubMed, EconLit, Embase, Dimensions, Google Scholar, or journals that are recognised under the Excellence in Research for Australia (ERA) framework but are not indexed in Scopus. Note that relevant empirical research published in regional, emerging or specialised journals may have been missed because to the different journal coverage and disciplinary assets of each database and indexing system. Thus, this constraint should be taken into account in the interpretation of the results.

In order to enhance the comprehensiveness, mitigate publication bias, and fortify the robustness of the evidence base, future systematic reviews should implement a multi-database search strategy and incorporate grey literature. Relevant research from non-English speaking LMICs, particularly Latin America and Francophone Africa, is likely to be excluded by restricting to English-language articles. Meta-analysis was not feasible due to the heterogeneity of outcome measures, which ranged from single-item life satisfaction queries to multidimensional WHOQOL-BREF, thereby restricting statistical precision. In conclusion, the cross-sectional design that is the norm in the included studies (60.3%) precludes causal inference, and only a small number of studies utilised instrumental variables or natural experiments to address endogeneity.

Conclusion and Future Research Agenda

This systematic review synthesised evidence from 68 research that examined the connection between QoL and HCD in developing economies. The results indicate that investments in health, education, cognitive development and social capital are generally positively associated with QoL and may promote the productivity, social well-being and capabilities of individuals. The fundamental contribution of this review is to pull together information from four themes, showing the intertwined dimensions of HCD and the impact of socio-economic and institutional environments on QoL outcomes. However, not all benefits of HCD are uniformly spread, with carers, persons with disabilities, older adults with multimorbidity and other vulnerable populations seeing worse outcomes when considering socioeconomic and institutional

inequities. Overall, the research points to the necessity of inclusive and integrated human capital strategies, instead of separate measures, to promote QoL. Thus, policymakers should focus on equal access to healthcare and education, reinforce social support systems and design specific programs for vulnerable groups. Future research should apply longitudinal designs to better understand changes in QoL over time, use more consistent QoL measures and economic evaluation methodologies, and investigate the effects of human capital policies on different population groups. Because many of the included studies were cross-sectional, the results should be taken as indicative of associations rather than conclusive proof of causal links.

Future Research Agenda

This review identifies four priorities for future research. First, more longitudinal and mixed-methods studies are needed to establish causal relationships between HCD and QoL while explaining the mechanisms through which these effects occur. Second, greater methodological consistency in economic evaluations would improve the comparability and policy relevance of evidence, particularly through context-specific valuation methods for developing economies. Third, future studies should move beyond identifying inequalities to evaluating interventions that strengthen health, education, and social capital among vulnerable populations using rigorous experimental or quasi-experimental designs. Finally, greater attention should be given to early childhood cognitive development and intergenerational human capital formation, together with participatory and context-sensitive research approaches that incorporate the perspectives of communities and service users. From an Islamic development perspective, future research could also examine how human capital policies contribute to the objectives of Maqasid al-Shariah, particularly the protection of life (hifz al-nafs), intellect (hifz al-'aql), and wealth (hifz al-mal), while promoting social justice and human dignity. Such evidence will strengthen policy development and support more equitable improvements in QoL across developing economies.

This systematic review demonstrates that HCD, particularly social capital and health investments, is generally positively associated with QoL in developing economies, with benefit-cost ratios for surgical and early childhood interventions ranging from 7:1 to 31:1. However, significant inequities persist, with caregivers, older adults with multimorbidity, and ethnic minorities experiencing disproportionately poor outcomes. These findings are consistent with the broader Islamic development emphasis on holistic well-being, equitable access to essential resources, and the protection of vulnerable groups. Accordingly, integrating Islamic ethical principles into human capital policies may provide an additional perspective for promoting inclusive and socially just development.

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