Exploring the role and nature of trust in institutional capacity building in low- and middle-income countries: a systematic review

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Abstract

Background Global concern with strengthening institutions is evident and has been underscored in the wake of the COVID-19 pandemic. Trusted or trustworthy institutions are vital in addressing institutional capacity strengthening, but there is limited research on institutional trust and how to build it. A preliminary approach entitled, Trusted Institutions (TI), identifies six essential elements of trust including: team culture, autonomy, scale and longevity, commitment to quality and ethics, sustainability, and good fit with local context and culture. We aimed to explore capacity building initiatives and the notion of 'trust' within non-government health institutions in low- and middle-income countries (LMICs) and validate these essential elements of trust through a systematic review.

Methods We searched the published literature in PubMed and EMBASE in March 2020 and employed a three-concept search that included "health-related institutions"; "capacity building"; and "LMICs". The study team used PRISMA reporting guidelines to conduct title and full-text reviews and conduct data extraction and analysis.

Results The search yielded 342 unique articles. Seventy-seven references met initial inclusion criteria and underwent full-text extraction; 31 studies were included in the final analysis. Capacity building activities ranged from individual-level skills to institutional systems and structures. All articles addressed at least one element of trust with over half of articles describing sustainability (n = 18; 58%) and good fit with local context and culture (n = 18; 58%). Only 14 (45%) of articles explicitly mentioned the concept of trust either within an institution (intra-institutional) or between two or more institutions (interinstitutional). Four additional themes emerged as relevant to institutional trust including collaboration, communication, extent of institutional networks, and intersectionality.

Conclusions This review validates essential elements of trust in the TI approach and documents the importance of building trust both within and between institutions. The TI approach can be used by public health institutions in LMICs to enhance their abilities to achieve institutional missions and meet global targets.

Background

Global concern with strengthening institutions is evident. The WHO Global Strategy on Human Resources for Health: Workforce 2030, identified the need to "build the capacity of institutions at sub-national, national, regional and global levels for effective public policy stewardship, leadership and governance of actions on human resources for health' as a key objective to accelerate progress towards universal health coverage through the Sustainable Development Goals (SDGs) by ensuring equitable access to health workers within strengthened health systems (1). For the purposes of this paper, we will define *capacity* as the "abilities, skills, understandings, attitudes, values, relationships, behaviors, motivations, resources, and conditions that enable individuals, organizations, networks/sectors and broad social systems to carry out functions and achieve their development objectives of time" (2). The need to strengthen

capacities is also highlighted in the SDG 16, which aims to promote "peaceful and inclusive societies for sustainable development ... and build effective, accountable and inclusive institutions at all levels".

The SDG 16 notes the need to strengthen institutional capacities to promote sustainable development. Institutional capacity building takes on a multi-dimensional systems approach, and entails improving the ability or ‘capacity’ of an institution to carry out its mandate by using its resources in an effective and efficient manner (3). It goes beyond the individual capacity of its people, and extends to the political, technical, fiscal and administrative perspectives needed so that the institution can serve its staffand communities effectively (4,5) Institutional capacity comprises three dimensions – knowledge resources, relational resources, and capacity for mobilization (5). In this manner, institutional capacity building takes into account concepts like leadership, awareness, goodness of fit, and trustworthiness as a part of the capacity building process. Institutional capacity building focuses attention beyond just the individuals to include the relational webs within organizations, such as an institution’s flow of finances, key activities, job opportunities, networks, and team culture, among others. Developing institutional infrastructures and capacities can promote trust and support to help build collaborative relationships between institutions and the communities they serve (5).

Further, developing institutional capacity also underscores an important facet of the overall health systems strengthening — promoting and developing trusted institutions. Health systems are inherently relational in nature and a growing area of interest within and outside the health sector lies in understanding trust and its role in facilitating collective action (6). Trust is a relational concept which can exist between people, between people and organizations, between two or more organizations, or between organizations and other events. Trust has been identified as both a behavior and as an underlying disposition and can mitigate problems with ’social cooperation’ to ensure that interdependent actions between actors can lead to mutual reflection and benefit (7,8). To this extent, trust is important to institutional capacity building because it promotes effective and inclusive institutions that can be trusted by those they aim to serve.

While institutions can take many forms, those of primary interest in this paper are non-government health institutions in LMICs. We explore the notion of 'trust' as key to the achievement of an institution's mission - and in particular we examine the potential usefulness of a prototype approach called 'Trusted Institutions (TI)' which is largely based on experiences at the Infectious Diseases Institute, Uganda (draft, unpublished).

There is a need to understand the key elements for building trust in an institution so that they can be used effectively to strengthen institutional capacity (9). There are many tools designed to assess capacities of organizations that are usable with health institutions in LMICs and governance, administrative and financial management capacities tend to be prominent [(10–13). Important gaps appear to be: 1) the set of types of trust required for an organization to last (i.e., technical, ethical, and sustainable); 2) the essentials to build such trust and the dynamic interplay between such essentials; 3) the importance of explicitly supporting government policies and thus likely contributing to global targets; and 4) the need

not only for providing analytical tools producing relevant information for discussion of capacity strengthening, but also a comprehensive structured approach to such capacity strengthening. The TI approach seeks to address these gaps.

For governments and other local stakeholders to promote local capacity and strengthen their TIs, there needs to be a strong evidence-based framework that can guide discussion and action. Our study sought to quantitatively and qualitatively analyze current literature to support these efforts. We conducted a systematic review to explore the contexts in which institutional capacity building was studied in relation to trust within and across health institutions in LMICs, and to analyze and validate whether and how essential elements laid out by the TI approach were found in capacity strengthening interventions.

Methods

The protocol for this search followed the Preferred Reporting Items for Systematic Reviews and Meta-analysis extension for Scoping Reviews (PRISMA-ScR)(14) (see Image 1).

To identify published literature on institutional capacity building in LMICs we searched two databases in March 2020, PubMed and Embase, with no date restrictions. We developed a set of core concepts to be explored in the search including 1) health-related non-profit organizations 2) institutional capacity building and 3) LMICs. Search strategies were drafted by the study team in collaboration with an informationist at the Johns Hopkins Bloomberg School of Public Health and iterations of the search strategy were refined through broader discussion within the team. The initial search was performed on March 4th, 2020 and there were no restrictions on the language of publication or range of publication dates. The final search strategy is provided in the appendix.

342 eligible references were imported into Covidence (c), an electronic database, for title and abstract screening (Fig. 1). 35 duplicate articles were removed, and each remaining imported reference (n = 307) underwent a title and abstract screening. Two reviewers screened each reference based on the following exclusion criteria: not a LMIC (n = 14), not about capacity building or strengthening (n = 12), only pertained to individual capacity building (n = 97), ongoing study (n = 5), not about health or healthcare (n = 7), and commentary or perspective piece only (n = 109). Some articles met more than one exclusion criterion. Conflicts were resolved by a third, final reviewer, yielding 228 excluded references.

After title and abstract review, 79 articles were isolated to undergo full-text extraction. 2 of these articles did not have full-text version that could be found, so the final number of articles to undergo full-text extraction was 77. The data from each article was then extracted by two independent reviewers, using a standardized form, created through Google Forms software. A third reviewer compared data entries and made final determinations. The form was created by utilizing concepts in Potter and Brough's capacity pyramid (see Image 2a), the draft TI Handbook, and team discussions on institutional capacity. The capacity pyramid was chosen because of the systemic approach it adopts to understanding capacity building across different levels (individual, organizational, enabling environment), and the interrelations between the different capacity building blocks (15). The capacity pyramid has six explicit uses:

diagnosing the problem; designing the strategy; sequencing of implementation; monitoring progress; sustaining capacity; and evaluation (16). The TI Handbook supports this work and extends on it, providing guidance on how to achieve the six critical inter-linked ‘essentials’ needed for a trusted institution (see Image 2b),

During this stage of review, 46 articles were excluded for not meeting the inclusion criteria, such as for: 1) not focusing on organizational capacity (N = 8), 2) 2) not focusing on individual capacity (N = 24) building, and 3) not addressing trust or components of trust (N = 14).
The final data set of 31 articles underwent a quantitative extraction and subsequent qualitative thematic review. Data extracted during the full-text review included key concepts and components of Potter and Brough’s (2004) capacity pyramid (15). Variables included type of institution(s) focused on, type of institution(s) represented in the data, health service or condition addressed, and level of capacity building addressed. Other key variables included aspect of capacity building addressed, component elements of systematic capacity building, tools used to assess capacity building, essential concepts of trusted institutions, inter-linkages between essential concepts and measurement or mention of trust. Data on study characteristics included region of study, study purpose, health service and condition(s) addressed, and study method(s) used.

The data extracted from the studies were reviewed for discrepancies across response categories and recoded as appropriate. For example, some data cells that were left empty by reviewers were re-categorized into “none of the above”. A univariate and bivariate analysis of data was then performed using the statistical software (STATA) as well as MS Excel software.

We then conducted a thematic coding of the final 31 articles to draw a deeper understanding of the results from the quantitative analysis. Four main questions informed the thematic analysis: 1) understanding the contexts in which the six essentials in a trusted institution were mentioned across the articles, 2) identifying emergent or missing themes that were used to describe a trusted institution, 3) identifying the linkages between key ingredients of a trusted institution, and finally 4) the context in which trust was mentioned across the articles. The 31 articles were divided between three independent reviewers and were read for emergent themes and key quotes using a standardized matrix created on Google Excel. Consensus themes were generated by one of the reviewers who compared and consolidated the themes for each of the four questions. Themes were grouped based on how each reviewer categorized them and coded according to how often they were mentioned across articles. The consensus process was followed by a group discussion to make final determinations when needed and talk through the findings.

Results

Description of Studies

The review identified 31 unique studies that met the inclusion criteria. Geographically, Africa was the most studied region (57%, N = 19) (17–35), followed by South-East Asia (24%, N = 8) (15,21,34,36–40),

Eastern Mediterranean (6%, N = 2) (41,42), European Region (6%, N = 2) (40,43), Region of the Americas (3%, N = 1) (39) and Western Pacific Region (3%, N = 1) (40); four articles studied multiple regions (21,34,39,40), and three did not specify a region (44–46).

We reviewed articles to determine what types of institutions were the focus of capacity building initiatives and from which institutions data was collected. A plurality of the studies collected data from Universities or Colleges (31%, N = 16) (15,17,19,20,22,25,26,29,31–33,40,43–46), followed by Non-Profit Hospitals (21%, N = 11) (15,19,20,22,23,30,32,37,38,41,42), then Non-Profit Health Research Centers (10%, N = 5) (24,26,29,38,39), and Laboratories (6%, N = 3) (20,34,36). Sixteen articles mentioned other types of institutions such as Ministries of Health, funders, etc. (31%, N = 16) (17,21,22,24,26–29,31,32,35,37,39,41,44,46)Similarly, the focus of the studies was also most heavily Universities or Colleges (42%, N = 13) (15,19,20,22,25,29,31–33,40,43,45,46), followed by Non-Profit Hospitals (29%, N = 9) (15,19,20,22,23,30,37,41,42), Non-Profit Health Research Centers (23%, N = 7) (24,26,29,35,38,45,46), and then Laboratories (13%, N = 3) (20,36,41).

Capacity Building

Of the levels of systematic capacity building described by Potter and Brough (2004), a majority of the capacity building activities described in the articles addressed Skills (26%%, N = 26) (15,18–21,23–30,32–35,38–46), and more than half addressed Systems (21%, N = 21) (15,17–21,23–25,27–29,31,32,37,38,41,42,44,45), followed by Structures (15%, N = 15) (15,19,20,24,28,29,31,33,34,38–41,44,45), Infrastructure (12%, N = 12), Staff (10%, N = 10) (15,17,20,23,27,29,31,32,37,42), Roles (9%, N = 9) (15,17,24,25,27,29,37,40,41), and then Tools (7%, N = 7) (15,18,23,29,30,41,46); 28 articles addressed multiple levels of capacity building (15,17–21,23–34,37–46).

Essential Concepts of Trusted Institutions

Each of the essential concepts of trust from the draft TI Handbook were mentioned, with over half of all articles describing Good Fit with Local Context and Culture (58%, N = 18) (15,17–19,22,24,25,28–30,32,33,37,39,41,42,44,45), Sustainability (58%, N = 18) (17,20–31,33,39,43–45), and Commitment to Quality and Ethics (52%, N = 16) (20,22–24,26,27,29–31,33,34,41,43,45,46). Scale and Longevity (42%, N = 13) (17,20,22,24–28,30,32,38,39,43), Autonomy (35%, N = 11) (19,22,24,25,27,28,30,33,37,38,44), and Team Culture (32%, N = 10)(18–20,22,25,31,32,34,38,40) were also mentioned, with only two articles not describing any of the six essential elements of TIs (6%, N = 2) (35,36).

Relationships and Synergies

To better assess the role of each of the six essential elements of TIs proposed in the TI Handbook, articles were disaggregated by elements within the capacity pyramid and essential concept of trusted institutions.

We used the thematic analysis to identify key concepts that fit under each of the six essential elements, as well as any missing concepts that were not captured by the framework. Good fit with local culture and context, as well as sustainability was mentioned the most across the different articles, whereas scale and

longevity, and team culture were mentioned the least. Table 1 provides an overview of the different components that were mentioned within each essential element of a TI.

Table 1
Results of the key components of each essential of a TI identified from the thematic analysis

Essentials of a Trusted Institution	*Key concepts that emerged through thematic analysis*
Sustainability	• Mentorship as a component of sustainability and institutional support for novice researchers and workers (n = 6) • Sustainable models of planning that include time scales in expectations and activities, sources of financing and long-term initiatives for sustainability (n = 6) • Certainty, sufficiency and long-term funding systems (n = 5) • Administrative support and institutional infrastructure linked to sustainability (n = 3) • Peer support mechanisms to review, collaborate and promote learning (n = 2) • Resilient, adaptable teams (n = 2) • Cascade training as a measure of sustainability (n = 1) • Individual capacity met and investment in individual skills accompanied by wider workforce development with institutional development (n = 1)
Good fit with local culture and context	• Initiatives driven by local needs to promote ownership (n = 20) • Recognition of local technological, infrastructural, and administrative capacities (n = 2) • Influence between research and institutional aims on decisions of local authoritative bodies (n = 2) • Mechanisms of integration of visiting faculty and partners into local contexts and culture (n = 1)
Autonomy	• Effective leadership and oversight that enhances collaboration, and management structures that can support institutional culture and collaboration (n = 10) • Autonomy driven by institutional needs and not by external funders and agencies, as well as diversified funding and funding flexibility (n = 7) • Training people at all levels (providers, managers, leaders) (n = 1) • Competitiveness in obtaining funding and grant writing abilities (n = 1) • Creating autonomous capacity and centers (n = 1)

Essentials of a Trusted Institution	*Key concepts that emerged through thematic analysis*
Commitment to quality and ethics	• Systems for monitoring and evaluation to assess quality of outputs (n = 6) • Accountability (n = 4) · Systems to motivate individuals to learn and produce quality research (n = 3) • Quality and capacity of financial systems – e.g. accreditation, close monitoring of outputs (n = 2) • Establishing and retaining research teams, and career awards (n = 1) • Emphasis on research and ethics for quality improvement (n = 1)
Scale and longevity	• Range of activities (n = 4) • Internal career progression (n = 3) • Continuous professional development (n = 2) • Long-term strategic plan (n = 1) • Upkeep of technology (n = 1) • Gradual replacement of foreign faculty with local faculty (n = 1) • Sufficient wages (n = 1) • Network development (n = 1) • Incentives for long-term trainees (n = 1)
Team culture	• Personal agency and empowerment (n = 4) • Equity within the team – e.g. no salary differentials (n = 3) • Institutional team culture and equal treatment (n = 3) • Clear structures, roles, and systems (n = 1) • Integration within the team (n = 1)

Of the 31 articles we reviewed, 16 articles were identified through the quantitative analysis as addressing one or more synergistic links between essentials from the TI framework. Among the final 16 articles, all articles mentioned at least one synergistic link, with one article addressing 5 different synergist links. 37 total linkages were identified, such as the linkage between Good fit with local culture and context and Autonomy (n = 4), Good fit with local culture and context and Commitment to quality and ethics (n = 2), Good fit with local culture and context and Scale and Longevity (n = 1), Good fit with local culture and context and Sustainability (n = 3), Good fit with local culture and context and Team Culture (n = 2), Autonomy and Scale and longevity (n = 5), Autonomy and Sustainability (n = 5), Autonomy and Team culture (n = 2), Commitment to quality and ethics and Scale and longevity (n = 2), Commitment to quality

and ethics and Sustainability (n = 4), Commitment to quality and ethics and Team Culture (n = 1), Scale and longevity and Team culture (n = 1), Scale and longevity and Sustainability (n = 4).

Sustainability was identified across 18 articles, and within these, was highlighted 26 times during the thematic analysis (17,20–31,33,39,43–45). Administrative support and infrastructure were consistently linked to sustainability, and included hiring staff, building and renovating spaces, procuring resources as well as other institutional support structures needed to develop individual and overall capacity (20,22,27). For example,

"[Programs need to be] designed to increase infrastructure capacity that includes structure, roles, relationships, resources, policies, procedures, expertise and information networking. When lacking, these factors have been found to inhibit knowledge transfer. At the individual level, the strategy is intended to increase individual readiness [as measured by perceived need, commitment and self-efficacy (self-ability)], and skills." (28)

Additional concepts captured by this theme included the need to have sustainable models for planning, long-term funding, peer and mentorship structures and institutional support for novice researchers and workers. This includes investment in individual skills development which is enhanced by wider workforce and institutional development (44)

"Empowering people, whether communities, health support workers, doctors, or managers, means greatly increasing the system's capacity by creating processes that continue through time and are more or less immune to changes of individual staff and outside interference, and setting up structures that 'institutionalize' those processes and involve a much wider range of stakeholders in 'management'. Issues such as transparency, giving responsibility for formulating options and proposals to others and setting up bodies that can act across sectors are all part of the considerations." (15)

"While for some it was the lack of availability of funds per se that presented difficulty, others noted it was the mismatch between the availability of short-term funding for specific research initiatives and the requirements for longer-term investment in capacity that was the principle source of difficulties." (17)

Sustainability was also mentioned in the context of program activities being integrated within and across different organizations to increase independence.

"Sustainability may mean, for example, that the programme activities are incorporated into the structures of the original organization, that they are integrated into another institution, or that the programme itself becomes an autonomous agency such as an independent charitable organization. Typically, sustainability meant that a programme had achieved financial independence and local autonomy in decision-making." (20)

A common theme that emerged across articles was the importance of initiatives driven by local needs to promote ownership, i.e., good fit with local culture and context (15,17–19,22,24,25,28–30,32,33,37,39,41,42,44,45). This included taking the local staff's experiences into account during the

conception and design of projects, as well as aligning research or program evaluation and implementation with national research capacity and needs in line with local contexts (22,26,27,29).

"As one participant observed a key question is "How to support Southern-led priorities when much of the funding focus is Northern/funder driven?" (17)

Additionally, authors highlighted accommodating local health system priorities and constraints, and using participatory processes and collaborative relationships to ensure consensus building and shared goals. Partnerships for sustained capacity building was also underscored in this context, especially in relation to shared responsibilities with local partners taking ownership and leadership (19,32)

"Engaging stakeholders (e.g. service users, community members, health practitioners and policy makers) in the evaluation was considered to be helpful for setting realistic goals, ensuring alignment with local priorities and for addressing resource issues." (21)

Effective leadership and oversight that enhances collaboration, as well as management structures that support institutional culture were identified as key components of effective and empowered leadership for institutions. Empowered leadership was identified as an agent for positive organizational or institutional change, coupled with supportive supervision and a strong managerial vision.

"There is a need for a shift in ethos towards strong local involvement in leadership, policy-making and priority setting. Such an ethos requires reflexivity in programmatic design, coupled with a shift from focus on end outcomes measured only as publication outputs and number of training workshops, to a greater emphasis on quality, sustainability and utility of research." (44)

Authors also highlighted the need for autonomy to be driven by institutional needs and not by external funders and agencies and highlighted the need for diversified funding and funding flexibility to strengthen autonomous capacity (22,26,27).

"Increasingly, agencies funding either research or program implementation with an evaluation component acknowledge the value of building national research capacity. However, funding from these agencies is often restricted, both in amount and timelines and misaligned with national priorities, limiting an institution's ability to develop RCB activities that address current needs." (26)

Systems for monitoring and evaluation to assess quality of outputs were mentioned several times across articles, highlighting the need for adaptive learning based on a commitment to quality. The need for quality performance indicators to make key judgments and achieve objectives was highlighted as well (41). Commitment to quality and ethics was also identified as part of the institutional culture and motivation of individuals to learn and produce quality research. Accountability was identified as an important part of setting up an institutional commitment to quality outputs (15,21,45)

"Poor supervision, lack of accountability, fragmentation of too many vertical programmes imposed from above, slow disbursement of budgets, lack of authority, corruption and lack of attention to support

systems, such as maintenance, laboratory and information systems, destroyed confidence and initiative." (15)

The key concepts identified under this essential included continuous professional development and a range of activities across different domains which are needed for a high performing institution. This included network development and mentorship as a way to multiply the impact and scope of outputs (44)Further, having a long-term strategic plan and incentives for long-term trainees were highlighted across the different articles.

"Mentorship can take place between students of health research and their teachers; a lack of effective doctoral supervision has been cited as a barrier to the development of broader national health research systems. Equally the importance of international linkages with researchers in other institutions with more established research cultures, has been found to be a beneficial form of mentoring for East African clinical research trainees, and is thought to enhance the quality of research output." (44)

Investing in team culture involved strengthening the research culture to develop equitable partnerships, as well as improve communication and integration within teams.

"Government representatives also highlighted the importance of linking government and research agendas. They noted the importance of engagement from the research side "early and often" to ensure regular policy review against the national agenda and harmonization of research efforts to focus on national priorities." (29)

Four additional themes that were not captured by the TI framework were observed and coded. These included effective collaboration and partnerships; effective communication; cosmopolitanism or linkages with other institutions; and intersectionality.

Effective collaboration and partnerships were highlighted across several articles, including in searches for funding, in ensuring participatory processes between different stakeholders, and for effective and sustained capacity building that promoted shared responsibilities with local partners (17,20,25,34,37,40,42,44,45).

Cosmopolitanism is highlighted when looking at linkages between similar institutions in a country, or across the world, and was discussed in light of the importance of linkages that facilitate cooperation among different agencies or organizations as a process for innovative and sustainable international partnerships and programming (20,21,28).

"Institutional strategies for capacity development that fail to acknowledge the 'social capital' of trust and collegiality between independent researchers linked through global or local, 'infra-institutional' interaction that enables and sustains partnership, makes them vulnerable to individual mobility (understood as the South-North capacity strengthening)."(17)

Closely linked to partnerships, effective communication emerged as another strong theme (17,21,39,40). As Ager and Bates highlighted in their articles about the need to balance different interests and priorities, effective and authentic communication is crucial for to retain trust within and across institutions.

"Without honest exchange, and an acknowledgement of the differential power at work in seeking to resolve tensions in perspective, the notion of 'equitable partnership' was seen as illusory." (17)

"A key message that emerged from our analysis is that close and regular dialogue among all those involved in the health RCS evaluation is essential to achieve a jointly agreed purpose, to maintain engagement and momentum and to provide valid and balanced findings." (21)

While intersectionality was not always explicitly mentioned in the articles, several authors alluded to concepts of intersectionality when discussing how, for example, promoting an environment or culture that addresses health research inequities should also involve addressing the gender imbalance and bias towards Anglophone countries' support that is evident in current discourse (33,44,46).

TI Relationships: Trust

Of the 31 articles, 14 (45%) explicitly mentioned the concept of trust or trusted-ness of the institution. Articles that included trust described both interpersonal trust (between individuals) and trust within and between organizations (17,19–21,24,25,30–32,35,39,40,44,45).

Articles that described trust through an interindividual or interpersonal lens highlighted the importance of trust within a team or organization to shape and execute shared goals and common agenda (17,31,32) highlighted the need for spaces that encouraged trust and transparency and allowed individuals to share their vulnerabilities and provided leadership as needed (31). As highlighted in the quote below, interpersonal trust was identified as pivotal, especially when formal inter-organizational relationships needed strengthening.

"The analysis indicated that interindividual trust was pivotal in negotiating periods where formal inter-organizational relationships faltered, with one respondent suggesting "Institutions won't trust each other; it is individuals that have to trust in each other" Symposium participants echoed this theme with suggestions that contestations over understanding of appropriate approaches and associated 'power battles' regularly needed to be addressed, with another summarizing the core challenge as: "getting various stakeholders involved in health research to trust each other and work together." (17)

Further, interpersonal trust was also highlighted as an important precursor to independence of different levels of capacity strengthening activities, alluding to the need for higher-level institutional trust within and between organizations. The articles underscored the importance of gaining trust by engaging stakeholders throughout the process and promoting genuine partnership for long-term commitment, common interests, and problem solving (19–21)

"In particular, we have demonstrated the importance of considering the interdependence of the different levels of capacity strengthening activities (i.e., individual, institutional, national/international), of

conducting a thorough review and collation of available evidence to inform optimal capacity, of gaining trust and engaging stakeholders throughout the process, and of reducing external support over time to match increases in local capacity and promote sustainability. Our intensive consultation and openness to options at the start of the programme cultivated trust and local ownership. These, together with our external support, permitted the type of light touch management needed to adapt plans and indicators as the programmes matured." (20).

Discussion

TIs are ever more important now, as global health security crises like COVID-19 highlight the need for TIs in every country contributing to trusted local capacity not only to respond effectively in emergency mode, protecting both local and global populations, but also to support the government with ongoing evidence-based advice and recommendations for action as the public health crisis unfolds (47–52). The TI approach has relevance as a strategic enabler in the development of cost-effective and sustainable approaches to GHS, as well as a motivating factor for promoting political, economic and social successes for institutions (6,50,51,53). TIs offer an additional option for those governments who, at time of serious outbreak, have tended to turn to major international organizations (such as MSF, CDC, IRC and others) with demonstrated global competence to step in quickly as 'prime responders'. Local TIs can play a major role in partnership with such international organizations, and in conducting competent and ethical research at time of outbreak. A World Bank report presented at the UN World Health Assembly in 2018 specifically references the TI concept following a study visit to the Infectious Diseases Institute in Uganda (54).

This review reflected previous analyses conducted on the importance of the six essentials in health literature and offered new emergent ideas that can augment the argument to support institutional capacity development and trust building for health systems strengthening. Of the six essential elements of trust outlined in the TI handbook, the analysis revealed that Sustainability, and Good fit with local context, were highlighted across the articles most frequently. Understanding how, and in what context, these essentials were mentioned can hold important insights for future institutional capacity building planning and implementation, as is supported by existing literature. For example, Phelps et al. (2000) critically analyze the role of collaborative planning in health systems where institutional capacity building is considered as a part of local systems of governance (55). They highlighted the structure of institutions and organizations that interact through the strategic behavior of a dominant local organization and argued for the recognition that needs to be given to the 'context-dependent nature of structuring of action within systems of local governance' in promoting communication, consensus, and trust. Similarly, Islam (2017) reviewed two community empowerment projects in Bangladesh where non-governmental organizations utilized global development frameworks that did not fit with the local context (56). This led to numerous challenges and gaps which did not take into consideration the local needs and context required for effective development strategy. The authors highlighted the role of confidence, social trust, and collective action in promoting participatory plans and partnerships in institutional arrangements.

Across the articles, trust was identified along two dimensions: intra-institutional trust (between members in an organization) and interinstitutional trust (between organizations).

Intra-institutional trust was highlighted when discussing trust and transparency between partners; the need to have safe spaces for collaboration and sharing to build trust and team cohesion, and to promote trusting relationships between multiple stakeholders in an institution. While most accounts of trust reflected intra-institutional trust, the qualitative themes that emerged from our analysis largely reflected issues of trust between institutions (e.g. cosmopolitanism and communication). This suggests the need for further discussion on how to promote trust between institutions. When trust was described on an institutional level it was mainly identified in the context of the need for mutual trust and shared decision making between institutions, as well as in the managing of expectations and maintaining of trust through operational frictions. Ager and colleagues best captured it through a quote they highlighted, ”Institutions won’t trust each other; it is individuals that have to trust in each other” (17).

Intra-institutional and interinstitutional trust are not mutually exclusive forces; instead, they influence and shape the capacity for institutions to strengthen health systems. For example, research done by Andriani and Sabatini in Palestinian territories show that institutional trust is the strongest predictor of prosociality, and that in collectivist societies with low levels of trust, the strengthening of institutional trust has the potential to reinforce prosocial behavior (prosocial individuals “tend to be natural co-operators that will strive to maximize joint outcomes and equality in outcomes, or sometimes even other outcomes (altruism) and they seek win-win situations to disagreement” (57)(58). Similar research done in Africa, Sweden, and Chile showed that higher institutional capacity was associated with increased levels of individual trust in institutions and governments across these countries (59–61). These support the notion that trust is important to promote innovation and efficiency, and support development.

The thematic analysis contributed to our understanding of the essentials of a trusted institution and identified emerging themes that were not captured by the initial TI Handbook, i.e., partnerships, cosmopolitanism, effective communication, and intersectionality. For example, the link between partnerships and institutional trust has been identified across current literature and is becoming a norm in international development. Green and colleagues identified three common drivers for ensuring successful health partnerships: trust; a diverse and inclusive network; and a clear governance structure (62). Their results align with and augment our findings by reinforcing several essentials in the TI concept: strong leadership; diversity and intersectionality; local ownership and institutional context; sustainability; and partnerships. Further, partnerships with local collaborators, rather than extractive research, is critical in ensuring that research and subsequent health plans and programs are contextually appropriate, locally driven, equitable, and in line with local and national policies and key strategies (63–68). Effective communication, another emergent theme from the analysis, can facilitate partnerships and institutional trust. Authentic, effective, and transparent communication has been identified as an underlying factor that can contribute to building and sustaining effective partnerships for health (67,69).

These results suggest that the 'essentials' of a TI, as outlined in the TI Handbook, have congruence with the published literature and current thinking and also highlight avenues for further development. Image 3 below displays how findings and new themes from this literature review can be incorporated into the TI concept. In particular, if we assume that good fit with the local context and the commitment to quality mean that the institution is likely impactful, then we can consider making longevity the goal and seek to show that unless the institution is trusted it will not last. Furthermore, the TI construct assumes that TIs align with national policies (and contribute to their further development) that support the achievement of SDGs and compliance with the WHO International Health Regulations (IHRs).

This modified and more purposeful representation in Image 3 incorporates the degree to which TI essentials relate to inter- and intra-organizational spaces. That is, whether the trust required to strengthen a particular 'essential' is an internal matter for the organization ('intra') - for example the development of 'Team Culture'; or whether the trust relates to connections with other organizations ('inter') - for example 'Partnerships as equals'; or whether a mix of both is likely necessary - for example, 'Sustainability'. With the emerging global theme of cosmopolitanism (extent of institutional networks with other institutions) and the ever-increasing importance of healthy stable egalitarian networking, these distinctions can help leaders of LMIC health organizations see more clearly where to strategically focus in order to build their organizations into long lasting and trusted institutions.

The importance of trusting relations within and across institutions and other parts of the health systems, as well as international linkages with the global community, was mentioned across the articles. Earlier versions of the TI framework treated partnerships and external relations as a cross-cutting theme, but this review suggests this factor deserves greater visible prominence in the TI approach as the additional 'essential' of 'Partnerships as equals' (see Image 3).

The TI approach is predicated on focusing management attention on a few critical areas, so the institution has the best chance of becoming trusted. Communication, cooperation, and trust between stakeholders emerged as prominent themes through our analysis, highlighting the need for stakeholders to come together and clearly set expectations for outputs, create spaces to share their experiences, ensure shared decision-making, and build trust and cohesion. Institutional arrangements that promote the vision, mission, and strategy of the institutions can benefit from strong communication and knowledge translation systems to effectively and sustainably provide the organizational support needed to improve research and output uptake (70). Effective communication enables trustworthy institutions to be seen as such and therefore be trusted by different stakeholders.

Finally, in line with the SDG agenda to leave no one behind, intersectionality is an invaluable approach to account for the multifaceted power structures that influence health outcomes within and across institutions (71). At an institutional level, intersectionality can mean promoting an environment, culture, and/or philosophy that addresses health inequities such as gender imbalance and biases toward Anglophone countries’ support (71). While this is an emerging area of study, it is important for institutions to be cognizant of the ways in which multiple social categories (e.g., race, ethnicity, socioeconomic

status, sexual orientation, and gender) interact and intersect to influence individual experiences within and across institutions and systems, and in the words of Bowleg, how that “reflects multiple systems of privilege and oppression at the macro, social-structural level” (72). Institutional capacity strengthening efforts need to be more holistic, taking into account the complex ways in which systems and individuals interact and shape each other.

This research is subject to certain limitations. The search was restricted to peer-reviewed literature which may not reflect the full range of institutional issues and assessments explored in the grey literature. We purposefully excluded trust from our search strategy (that is, it was not one of the core concepts or search terms) so we could access a wide range of literature that looked at institutional capacity building, but in so doing we may have missed key articles that described, in detail, issues related to trust. However, using this approach we were also able to identify numerous articles that described concepts of trust without defining it as such.

Conclusions

This literature review showed that there is global interest in strengthening health institutions, especially in LMICs, but also in HICs, to achieve the SDGs around which there is global consensus. The original 6 essentials of a TI were recognized in the literature as important for longer term institutional benefits. Institutional partnerships, the value of communication, and the importance of using an intersectional lens emerged as key findings and can be incorporated into the TI approach which can be used by public health institutions around the world to enhance their abilities to achieve institutional missions and meet global targets.

Declarations

Ethics approval and consent to participate: Not applicable

Consent for publication: Not applicable

Availability of data and materials: All data generated or analyzed during this study are included in this published article and any supplementation information files.

Competing interests: The authors declare that they have no competing interests.

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Authors’ contributions: Authors AK and RB conceptualized the study. AK developed the search strategy and guided the title/abstract reviews and data extraction. All authors participated in reviews and data extraction. RB drafted the introduction, MM drafted the results, AK drafted the methods, and all authors collaboratively drafted the discussion. All authors reviewed and approved the final manuscript.

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Figures

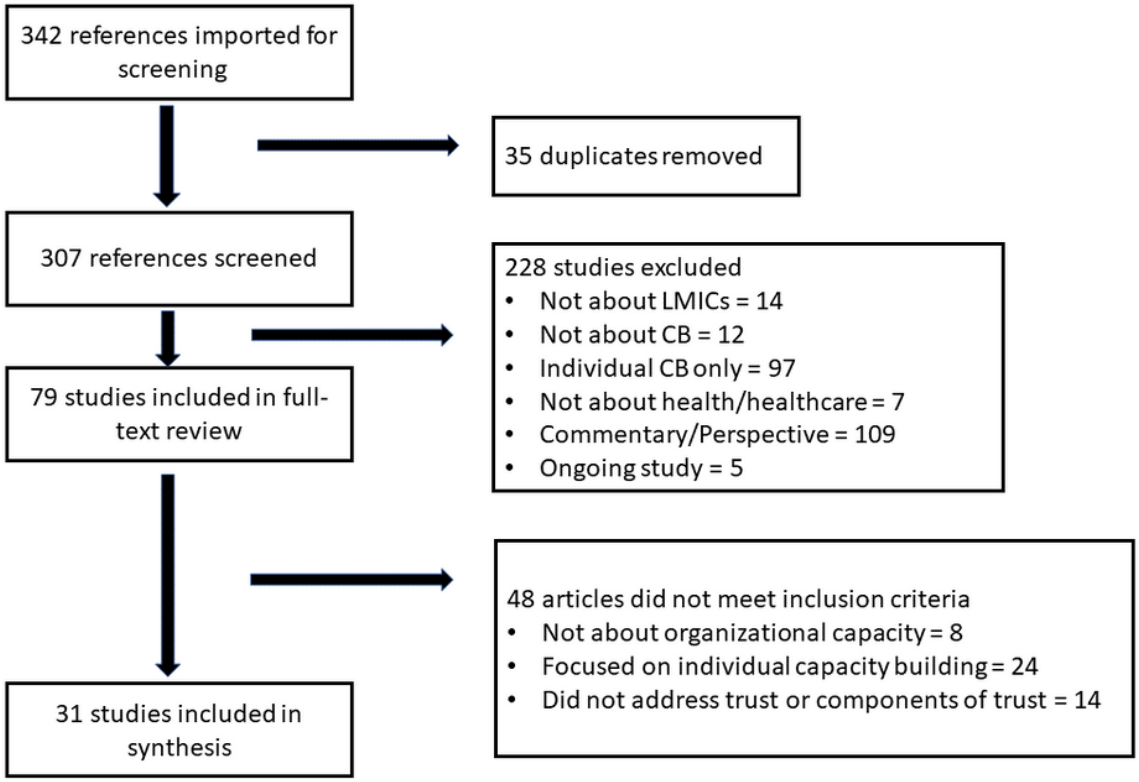
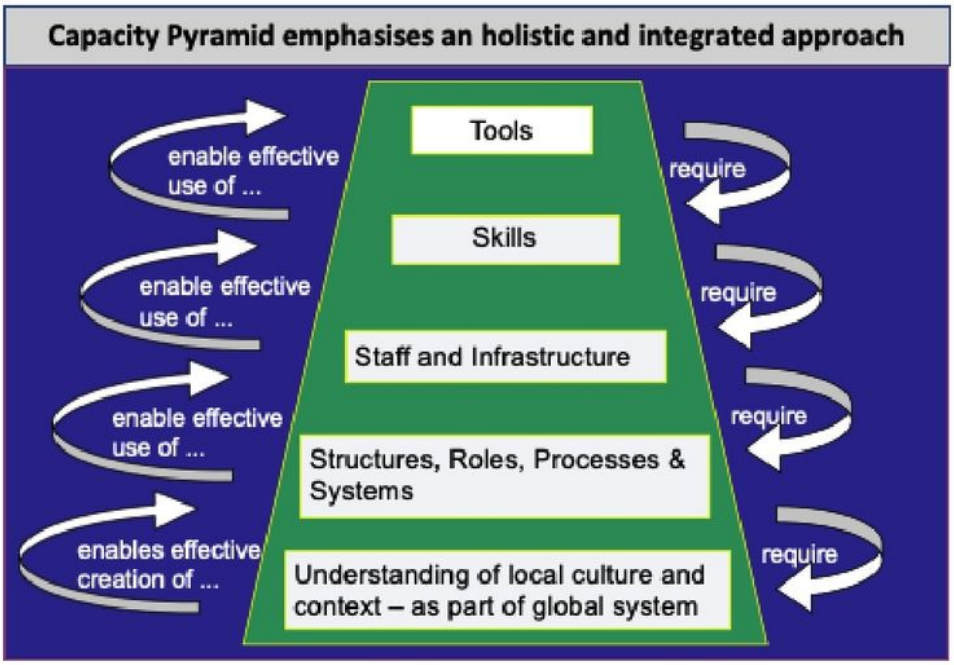


Figure 1

PRISMA Diagram here



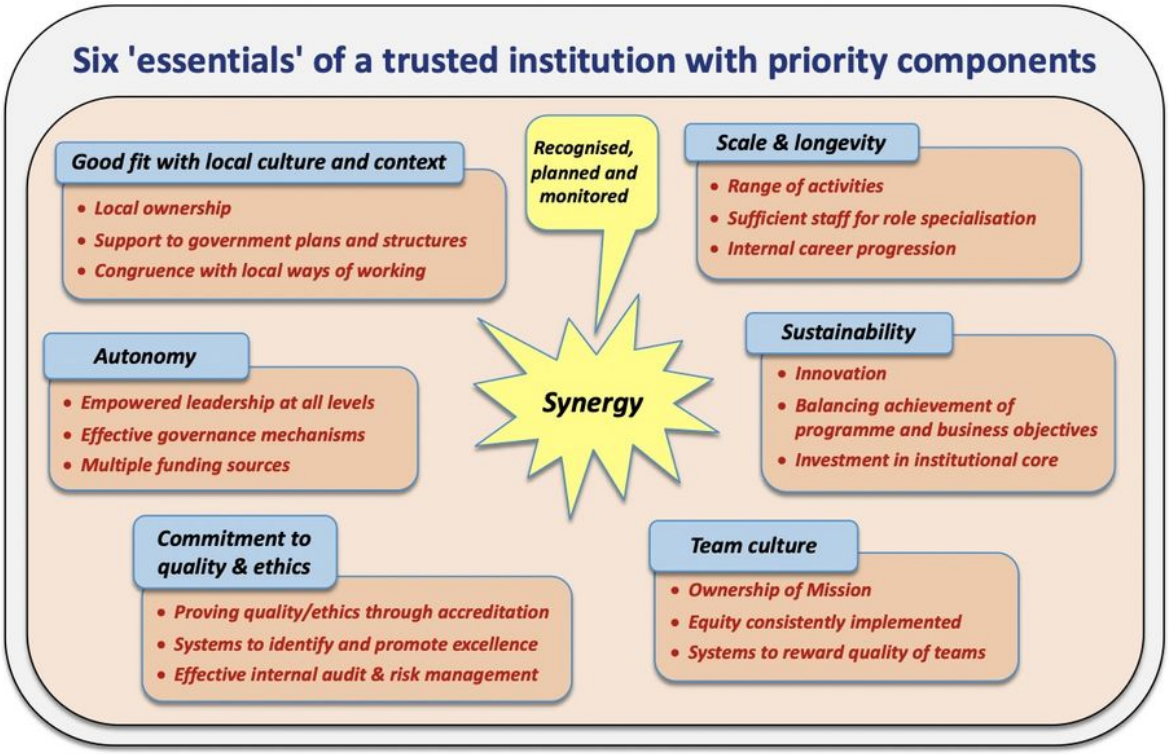


Figure 2

a: Capacity Building Pyramid. b: Trusted Institutions: Six essentials

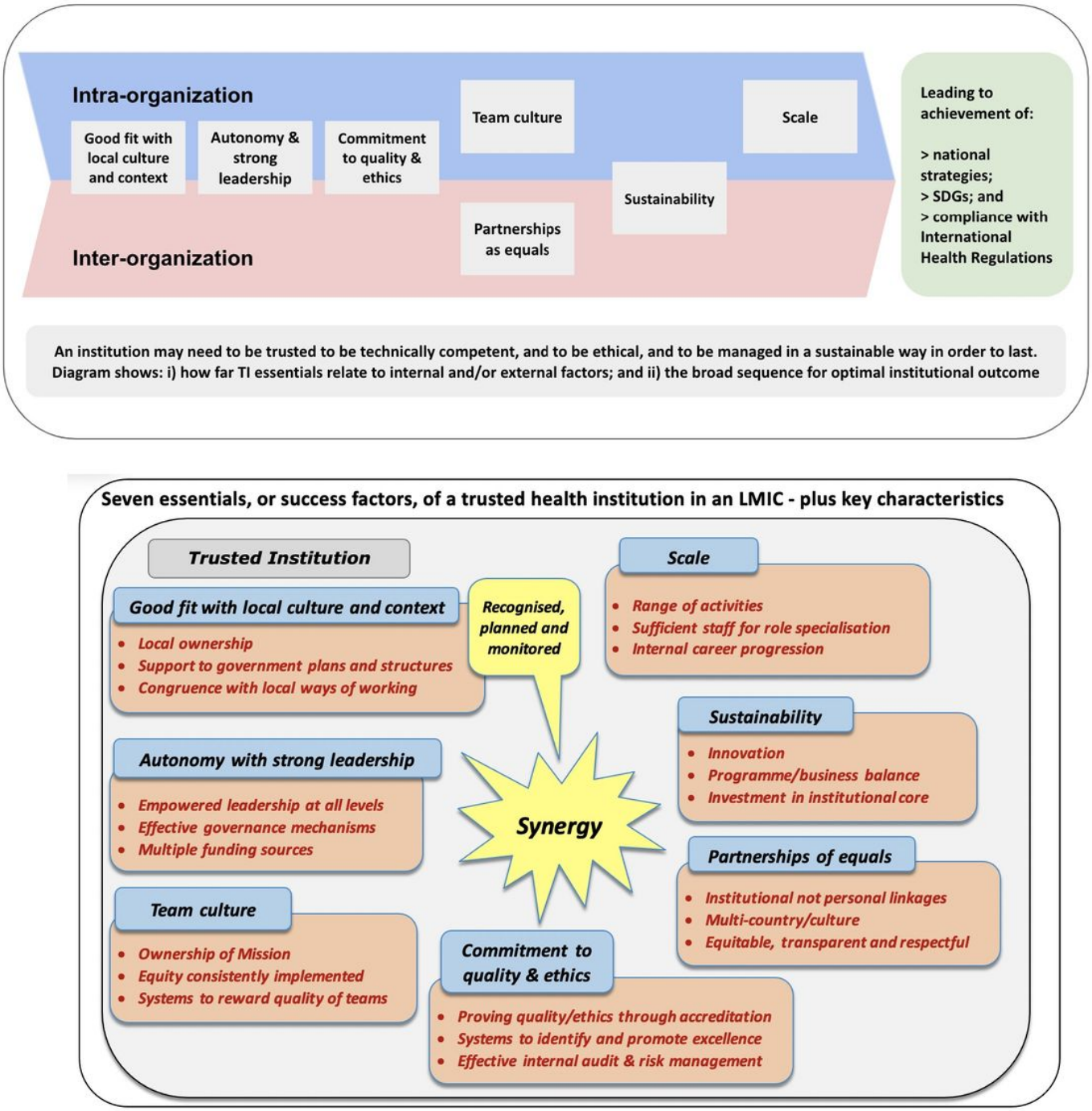


Figure 3

a: Conceptual diagram. b: Seven essentials diagram