

COMMUNICATIVE SOCIAL CAPITAL AS A DETERMINANT OF HEALTH: EVIDENCE FROM A NARRATIVE LITERATURE REVIEW

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Abstract: Communicative social capital (CSC) is the trust, information, and shared problem-solving skills that people gain from participating in community communication networks. Recently, more attention has been paid to CSC as a factor that shapes population health. This paper reviews recent research on how CSC affects health outcomes across different groups and contexts. It also explains important ideas, research methods, and gaps. The review describes how Communication Infrastructure Theory (CIT) helps us understand CSC, and explores how the ways people connect matter for health. CSC works in several ways: by sharing information that supports health literacy, building trust that helps people get care when they need it, and encouraging community members to work together when problems arise. This review shows how these factors influence access to care, health knowledge, mental health, and the ability to bounce back from tough situations. Looking at 50 studies, the review finds that people with higher CSC generally report better self-rated health, greater mental well-being, more preventive care, and stronger community resilience during public health challenges (Hall et al., 2023). However, these effects depend on context and fairness and can sometimes be negative, as when close networks exclude others or spread harmful behaviors. This paper concludes by identifying gaps in the research and considers the implications of these findings for policy and future studies.

Keywords: communicative social capital, health communication, communication infrastructure theory, social determinants of health, health disparities, community health.

1. INTRODUCTION

Public health scholarship has shifted how it conceptualizes the social determinants of health. Older epidemiological models focused on individual conduct and biomedical risks. Contemporary frameworks are more likely to view the relational and communicative fabric of community life as the primary driver of population well-being (Matsaganis & Wilkin, 2015; Goulbourne & Yanovitzky, 2021; Ehsan et al., 2019). Social capital means the relationships and resources within social networks. It is built on trust, give-and-take, and shared understanding, qualities that help people work together (Putnam, 2000; Lin & Chiu, 2011; Onyx & Bullen, 2000). More specifically, communicative social capital (CSC) is the information, problem-solving tools, and group strength that people can use in their local communication networks. These can be personal, organizational, or through community and local media (Matsaganis & Wilkin, 2015; Goulbourne & Yanovitzky, 2021).

A communicative perspective shows that exchanging information and building shared meaning help communities address health issues together. This fits with Communication Infrastructure Theory (CIT), which describes communities as storytelling networks. CIT says strong, well-connected communication networks are key for civic engagement and health equity (Witzling & Shaw, 2022; Nah et al., 2021; Lee et al., 2022). Studies back this up: communities with rich CSC usually show better health literacy, fairer access to information, and stronger public health responses (Matsaganis & Wilkin, 2015; Lee et al., 2020; Amoah et al., 2025). When communication gaps exist, health disparities grow, as people without effective communication tools are more likely to receive incorrect information (Goulbourne & Yanovitzky, 2021). According to Goulbourne and Yanovitzky (2021), lack of communication access is a fundamental inequality, akin to lacking income or education. Despite its strong theoretical basis, the literature has gaps. There is no standard way to define or measure CSC, making comparisons difficult. Some research links communication networks and health outcomes, but the empirical support is often weak. Negative or null effects of social capital—especially in cases of exclusionary bonding or behavioral contagion—are known, but underexplored (Villalonga-Olives & Kawachi, 2017; Campbell, 2020; Wakefield & Poland, 2005). A systematic review of this conflicting evidence is needed.

This paper offers an empirically and theoretically sound account of how communicative social capital (CSC) relates to health. We aim to: (a) place CSC in context and distinguish it from related constructs; (b) examine key mechanisms such as information sharing, trust-building, and collective problem-solving that link CSC and health; (c) bring together empirical findings from various settings and populations; (d) highlight adverse or neutral effects and equity concerns; and (e) suggest an agenda for policy and research. The review asks three questions: (RQ1) What influence does CSC have on mental well-being, resilience, and healthcare access across different settings? (RQ2) How do CIT's communicative mechanisms, such as media integration and storytelling, shape the CSC-health link? (RQ3) In light of social and structural conditions, when does CSC produce positive versus negative health results? THEORETICAL AND CONCEPTUAL FOUNDATIONS

2.2.1 Social Capital

Social capital theory draws on Bourdieu's (1986) study of symbolic resources in networks, Coleman's (1988) idea of it supporting human capital, and Putnam's (2000) case for civic networks as foundational to societal well-being. These views share three core elements: network structure, trust and reciprocity, and the usefulness of resources gained from group membership (Eriksson, 2011; Moore & Kawachi, 2017). Current scholarship typically breaks social capital into three analytical dimensions. Structural social capital concerns what one can observe in a social network: how central or dense it is, the regularity of interactions, and the like (Kim & Ball-Rokeach, 2006; Onyx & Bullen, 2000). Then you have the cognitive side, encompassing more subjective matters such as a sense of belonging, shared identity, and the trust one places in institutions and neighbors (Yip et al., 2006; Zhang et al., 2019). A relational dimension also comes into play, partly overlapping with the cognitive, to capture the emotional quality of interpersonal ties and the affective trust that enables knowledge sharing within an organization (Almuqrin et al., 2020; Lin & Chiu, 2011). Some have refined the communicative

approach by distinguishing among bonding capital, the tight-knit ties of similar people; bridging capital, or weak ties that cross social lines; and linking capital, the vertical connections between a community and its authorities (Kim & Ball-Rokeach, 2006; Poortinga, 2012). This is more than a matter of classification. The data show that, depending on the setting or the clinical measure, various forms of social capital can have divergent, if not opposing, effects on health outcomes (Ehsan et al., 2019; Xue et al., 2020).

2.2 Communicative Social Capital (CSC)

The communicative approach to social capital reframes the construct itself: rather than treating social capital as a fixed stock of network ties, Rojas, Shah, and Friedland (2011) argue that social capital is produced and sustained through ongoing communicative action — participation in discussion, media use, and civic talk that generates trust and collective efficacy as an outcome, not just a precondition, of communication. This reframing is foundational to how CSC has since been operationalized in health communication research, where it captures the social capital most relevant to community health action, collective sense-making, and information exchange (Matsaganis & Wilkin, 2015). It spotlights the communicative side of things: storytelling, deliberation, and information sharing in networks that can build or erode a residential community's social capital. In this view, social capital is not just some structural fact to be measured at baseline but is actively made and constructed through communication. You can see an empirical case for it in the work of Matsaganis and Wilkin (2015) in Los Angeles. They showed that CSC, defined as participation in local storytelling networks, predicted collective efficacy and, by extension, access to preventive care, public recreation, and better food options. Their findings position communicative social capital as a key determinant of these resources and a moderating force against the disadvantages of a neighborhood's structure. This also implies that communication can partly sever the link between structural factors and health outcomes, opening the door for intervention. More recently, Goulbourne and Yanovitzky (2021) have applied this framework to a policy analysis. Building on the CIT tradition and the theory of knowledge brokering, they argue that the very infrastructure of communication is a social determinant of health. For them, where you find systemic communication inequalities, you will find health disparities driven by unequal access to credible and inclusive networks. Put simply, CSC is a mediating resource arising from structural conditions. As Goulbourne and Yanovitzky would have it, communities with the means to support a full range of inclusive communication are better positioned to mobilize stakeholders and develop solutions to problems. That offers a neat theoretical bridge from the world of communication scholarship to population health policy.

2.3 We use Communication Infrastructure Theory (CIT) as our organizing framework.

Originating in the work of Sandra Ball-Rokeach and colleagues at USC, CIT is perhaps the most thorough ecological approach to understanding how a community's communication environment shapes civic and health outcomes (Nah et al., 2021; Lee et al., 2022). At its core, the theory holds that communities are made up of storytelling networks functioning on three planes: the micro-level of interpersonal exchange between residents; the meso-level where local and ethnic media and organizations act as storytellers; and the macro-level context of the neighborhood itself, which sets the parameters for what can be communicated.

According to CIT, it is through this storytelling network that community members gain the information and motivation to act collectively. Scholars have been quite explicit in calling this form of integration “communicative social capital” (Witzling & Shaw, 2022; Nah et al., 2016). Empirical CSC research has put this to the test, finding links between such network integration and everything from social hope and neighborhood activism to collective efficacy and health action (Nah et al., 2021; Kim & Smith, 2025; Liu et al., 2018). The theory also makes clear that the meso-level actors – your community orgs and ethnic media – can build up or tear down communicative social capital depending on their credibility and how well they are woven into other channels (Lim et al., 2022; An & Mendiola-Smith, 2018). Take the COVID-19 pandemic as an example. In the face of public health emergencies, these storytelling connections have enabled people to access trustworthy health data and rally support for those in need, such as migrant domestic workers, even when physical distancing was in place (Oktavianus & Lin, 2021; Huang et al., 2023). In short, CIT gives us a way to see the ecology of community communication, while CSC accounts for the resources residents put together through their place in it. A robust infrastructure will foster CSC and the kind of collective health action the theory predicts (Lee et al., 2022; Villanueva, 2022). With that in mind, this review aims to fill some gaps. We structure our inquiry around three questions:

(RQ1) How does CSC influence health outcomes such as mental health, literacy, and care access in varied settings?

(RQ2) Which of CIT’s mechanisms, be it media integration or storytelling networks, explains the tie between CSC and health?

(RQ3) And under what equity or structural conditions does CSC yield positive, negative, or neutral effects for a community?

3. RESEARCH DESIGN: NARRATIVE REVIEW

3.1 Methodological Approach

The evidence base for communicative social capital and health is conceptually broad, methodologically diverse, and still consolidating around a shared terminological framework. These characteristics call for an approach that prioritizes breadth and systematic organization over depth and effect estimation. The present review, therefore, draws on the complementary logics of narrative review methodologies.

A narrative review is well-suited to this literature because its purpose is to map the extent, range, and nature of evidence on a topic rather than to pool effect estimates or conduct formal quality appraisal (Arksey & O'Malley, 2005; Levac et al., 2010). Its analytical value lies in identifying key concepts, characterizing available evidence types, surfacing methodological patterns, and delineating research gaps—exactly the tasks demanded by a domain as expansive and theoretically contested as communicative social capital and health. Complementing this, a narrative review classifies the distribution of research according to topical, methodological, population, and geographic dimensions, making visible where evidence is dense, where it is sparse, and where it is absent altogether (Gough et al., 2012). Together, the two approaches support a rigorous and transparent synthesis without the restrictive inclusion criteria or formal

appraisal protocols of a systematic review. This methodological choice is appropriate given the heterogeneity of study designs, outcome measures, and theoretical framings in this literature.

We identified literature through comprehensive searches across multiple academic databases, including Google Scholar, Semantic Scholar, PubMed, CINAHL, Web of Science, and Scopus, supplemented by targeted searches on the Consensus platform for research synthesis. Search strings combined the focal construct with a range of health and communication terms: "communicative social capital," "social capital and health communication," "communication infrastructure theory" and health, "storytelling networks and health," "social capital" and "health outcomes," "bonding social capital and health," "bridging social capital and health," and "cognitive social capital and health." We included both quantitative and qualitative studies, as well as primary studies, systematic reviews, meta-analyzes, and theoretically oriented papers. The only formal inclusion criterion was that a study must address communicative, cognitive, structural, bonding, or bridging dimensions of social capital in relation to health outcomes, healthcare access, health literacy, or health communication processes.

No date restrictions were imposed, though the search prioritized studies published from 2000 onward, reflecting the period of most intensive scholarly development of the communicative social capital construct. Following iterative database searches, forward and backward citation chaining, and deduplication, the top 50 papers matching the search terms "communicative social capital" and "social capital AND health" formed the core evidence base, supplemented by foundational theoretical contributions extending to classical social capital scholarship. The online text network analysis tool InfraNodus, developed by Paranyushkin (2019), was used to analyze the selected papers, create a knowledge graph, and explore critical themes and issues, the top topics identified by InfraNodus are presented in Figure 1.

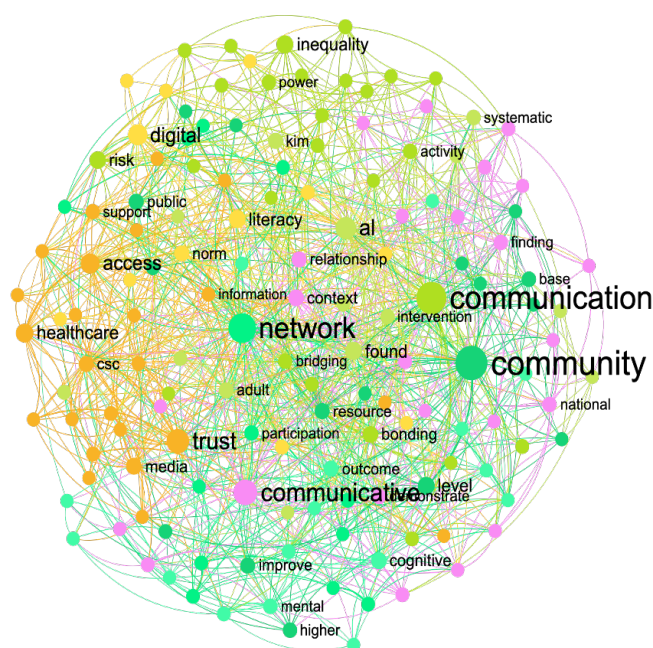


FIGURE 1: INFRANODUS KNOWLEDGE GRAPH

Figure 1 displays the text network generated by InfraNodus from the 50 selected articles, with node size and centrality indicating the most prominent and frequently co-occurring topics in the reviewed literature.

To identify research gaps, InfraNodus was requested to remove all the major topic keywords to reveal the underlying concepts.

The keywords underlying the major concepts served as a guide to identify topics that need focus in the 50 selected articles. The results are shown in Figure 2.

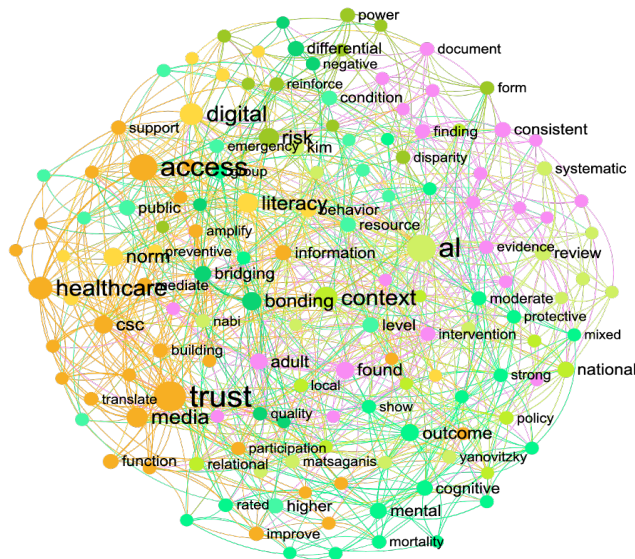


FIGURE 2: GRAPH RECREATED BY REMOVING MAIN TOPIC KEYWORDS TO REVEAL UNDERLYING CONCEPTS.

Figure 2 shows the same network with the dominant topic keywords stripped out, exposing secondary and underlying concepts that point to gaps requiring further attention in the reviewed literature.

The mapping was done along four axes: (a) the dimension of social capital examined (structural, cognitive, relational, bonding, bridging, linking, or communicative); (b) the health outcome domain addressed (self-rated health and mental well-being, healthcare access and utilization, health literacy and preventive behavior, community resilience, or negative and null effects); (c) the population and geographic context studied (older adults, younger adults, marginalized communities, rural versus urban settings, high-income versus low- and middle-income countries); and (d) the study design employed (experimental, quasi-experimental, cross-sectional, longitudinal, qualitative, or review-level). (Ehsan et al., 2019) This categorical structure facilitated systematic mapping of the evidence landscape, highlighting both regions of relative research density (e.g., cognitive social capital and self-rated health among older adults in East Asia) and considerable gaps (e.g., limited experimental evidence on communicative interventions and sparse research on negative effects across intervention contexts). (Ehsan et al., 2019). The following sections are organized by the outcome domain axis of the mapping framework, moving from the most to the least extensively studied domains,

with cross-cutting observations on population and geographic variation integrated throughout. The summary of major findings is presented in Table 1.

4. RESULTS

TABLE 1. SUMMARY OF MAJOR FINDINGS

Topic No:	Domain	Key Finding	Evidence Summary	Population / Context	Conditions / Qualifications	Representative References
1	Conceptual Foundations	CSC is a multi-dimensional construct comprising structural, relational, and cognitive components embedded in community communication networks.	Structural capital: network membership and density; Cognitive capital: trust, reciprocity, norms; Relational capital: affective tie quality. Bonding, bridging, and linking subtypes show divergent health associations.	Cross-national theoretical synthesis	No single dimension is universally protective; different subtypes can exhibit contradictory associations across settings.	Onyx & Bullen, 2000; Lin & Chiu, 2011; Ehsan et al., 2019; Xue et al., 2020
2	CIT as Organizing Framework	Integration into community storytelling networks is the proximate mechanism through which CSC is generated and health-relevant resources accrue.	CIT's three-level storytelling network (micro, meso, macro) generates trust, collective efficacy, and civic mobilisation. CSC is the	US, China, Singapore; multi-national	Effects moderated by robustness and inclusivity of local communication infrastructure and the presence of ethnic and local media.	Matsaganis & Wilkin, 2015; Goulbourne & Yanovitzky, 2021; Nah et al., 2021; Lee et al., 2022

			relational-informational stock accumulating through this integration.			
3	Self-Rated Health & Mental Well-Being	Higher cognitive/communicative social capital is consistently and positively associated with better self-rated health and mental well-being across diverse national contexts.	Longitudinal designs show CSC predicts reduced depressive symptoms, improved subjective well-being, and lower mortality risk. Cognitive capital shows stronger mental health effects; structural capital comparatively more protective for mortality and cardiovascular outcomes.	Older adults; East Asia (Japan, China); US communities	Effect sizes small to moderate; considerable heterogeneity. Dense local networks can constrain autonomy and produce adverse effects in some rural contexts.	Takeda et al., 2024; Zhu et al., 2022; Zhang et al., 2019; Yip et al., 2006; Ehsan et al., 2019
4	Healthcare Access & Service Utilisation	CSC facilitates access to healthcare by building institutional trust and enabling social support that mediates health-seeking decisions.	Online CSC (bonding and bridging) associated with annual practitioner visits. Social media-	Young adults (digital); Bangladesh; Sub-Saharan Africa;	Health system distrust can limit this pathway; effects depend on credibility of	Matsaganis & Wilkin, 2015; Nabi et al., 2023; Mengesha et al., 2021;

			derived trust translates into healthcare facility trust. Emotional and informational support from networks facilitates maternal and child healthcare uptake in LMICs.	Southeast Asia	communication networks and quality of ties with health information sources.	
5	Health Literacy, Preventive Behavior & Norm Diffusion	CSC is a generative resource for health literacy acquisition and the diffusion of preventive health norms through trusted relational networks.	Network participation and trust independently predict eHealth literacy. Bonding capital reinforces in-group health norms; bridging capital broadens access to diverse health information. CSC operates through knowledge, self-efficacy, social norms, and	Older adults; Hong Kong, Japan; community-based populations	Information delivery alone does not produce durable behavior change; relational embedding in trusted networks is required.	Samuel et al., 2014; Amoah et al., 2025; Cao et al., 2023; Kim & Ball-Rokeach, 2006; Matsuura & Hatono, 2025

			perceived social support.			
6	Community Resilience & Public Health Emergencies	CSC enhances psychological resilience and collective response during public health crises; storytelling network connections sustain health information access and social support under crisis conditions.	CIT-guided research shows storytelling networks facilitate credible health information access and support mobilisation among vulnerable groups during COVID-19. Social capital generally associated with better mental health outcomes during disasters; group activities can restore depleted capital.	General population (COVID-19); migrant workers; Shanghai; US communities	Social capital may initially decline under crisis conditions. Digital platforms critical but unequal in reach; low digital literacy limits access.	Hall et al., 2023; Oktavianus & Lin, 2021; Huang et al., 2023
7	Digital & Social Media Extensions of CSC	Online CSC replicates and can amplify the trust-building functions of offline social capital, though digital platforms also introduce	Social media-mediated CSC predicts institutional healthcare trust and health	Bangladesh, China; young adults; digital and social media users	Benefits unevenly distributed; digital literacy gaps reproduce social inequalities.	Nabi et al., 2023; Sun & Seo, 2022; Kite et al., 2023; Tierney et al., 2020

		misinformation risk and asymmetric access.	behavior adoption. Communication diversity (multiple channels) more protective than reliance on any single mode. Social media influencers possess substantial CSC but risk commercial co-optation adverse to public health goals.		Misinformation and behavioral contagion are documented risks requiring active platform governance.	
8	Bonding vs. Bridging Capital: Differential & Negative Effects	Neither bonding nor bridging social capital is universally superior; effects are context-, gender-, and SES-dependent. Excessive inward-focused bonding can generate exclusion, conformity pressure, and behavioral contagion.	Bridging more protective for women and deprived urban residents in some contexts; bonding stronger for older adults' self-rated health and mood. Interactive rather than additive effects documented. Negative pathways	Japan, Korea, Philippines, US, Netherlands, China; gender and SES-stratified analyzes	Prioritising one form over the other is suboptimal. Power inequalities within networks can negate benefits or actively reinforce health disparities.	Kim & Ball-Rokeach, 2006; Iwase et al., 2010; Murayama et al., 2013; Hung & Lau, 2019; Villalonga-Olives & Kawachi, 2017; Campbell, 2020

			include behavioral contagion (e.g., smoking norms), social exclusion, and unequal resource distribution.			
9	Interventions Targeting CSC	Social capital-building interventions show modest positive effects on health outcomes when communicative relationship quality—not merely social contact—is the target.	12-week community-based programs improved social capital, quality of life, self-care, and health literacy (Taherian & Motamedi, 2022). Systematic reviews report mixed outcomes; positive process outcomes but variable direct health effects. Local tailoring and trust-building enhance effectiveness.	Older adults; community-based settings; LMICs	Sustainability and equity remain challenges. Programs ignoring power dynamics risk reinforcing disparities. Generic approaches less effective than locally adapted designs.	Coll-Planas et al., 2016; Taherian & Motamedi, 2022; Haldane et al., 2019; Shiell et al., 2020

10	CSC as a Social Determinant of Health & Equity	Differential access to robust communication infrastructure constitutes a structural social determinant of health; communication inequalities deepen racial and ethnic health disparities.	Goulbourne & Yanovitzky (2021) designate communication infrastructure a policy-level SDH comparable to income or education. Minority communities face systematic communication inequalities amplifying misinformation vulnerability and reducing healthcare access. Public investment in minority-serving media is required.	Racial/ethnic minority communities; US; multi-national policy contexts	Structural investment logic required—community capacity-building alone insufficient. Research and policy must disaggregate effects by race, class, rurality, and other equity axes.	Goulbourne & Yanovitzky, 2021; Wakefield & Poland, 2005; Campbell, 2020; Villanueva, 2022
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Note. CSC = Communicative Social Capital; CIT = Communication Infrastructure Theory; LMIC = Low- and Middle-Income Country; SDH = Social Determinant of Health; SES = Socioeconomic Status. References are representative rather than exhaustive; full citations appear in the reference list.

4.1 Self-Rated Health, Mental Well-Being, and Physical Health

When it comes to the link between self-reported health and social capital of a cognitive or communicative nature, the evidence is both robust and unyielding. You will find this borne out in large cross-sectional and cohort studies from a variety of national settings: after accounting for socioeconomic confounders, there is an association with better physical and mental health ratings where trust, reciprocity, and community are strong (Takeda et al., 2024; Zhu et al., 2022;

Zhang et al., 2019; Yip et al., 2006). A case in point is Takeda et al. (2024) on older adults in Japan. Using an outcome-wide longitudinal approach, they showed that, at the community level, social capital prospectively predicted gains in areas as diverse as subjective well-being and functional decline, as well as mortality risk and depressive symptoms. The comparative literature also clearly prefers cognitive over structural social capital in the context of mental health. The most thorough meta-analytic synthesis available, an umbrella review by Ehsan et al. (2019), put it in perspective: the protective value of things like trust and reciprocity outweighs that of structural elements such as network size or organizational membership. That said, structural capital has its merits for cardiovascular disease and mortality endpoints. Yip et al. (2006) saw much the same in rural China, where cognitive capital had a steady positive effect. Structural capital was another matter altogether; its impact on well-being was mixed and could even be adverse if a dense local network came at the cost of personal autonomy. Moreover, while Xue et al. (2020) have confirmed the positive association between social capital and health across a wide range of observational studies, they caution against overstating effect sizes, which tend to be small to moderate and quite heterogeneous.

4.2 Access to Healthcare and Utilization of Health Services

The literature increasingly shows how communicative social capital shapes a person's access to health services. In the realm of online social media, for instance, the social capital derived from digital networks is positively correlated with how people access care. Nabi et al. (2023) tested this in Bangladesh and found that the type of social capital gained through social media can mediate trust in healthcare facilities. It is a digital extension of communicative capital that, in turn, drives utilization. This has practical implications: Fogel & Ewen (2023) note that individuals with greater bonding and bridging capital online are more inclined to see a practitioner at least once a year. For younger adults who rely on these networks for information, digital platforms that build such capital can enable access. In low- and middle-income nations, the pattern holds. Mengesha et al. (2021) show that the emotional support and trust one receives from network members consistently drive the uptake of maternal and child health care. On a wider scale, having a richer social network means you are better positioned to acquire health information and eHealth literacy; among older people, at least, your participation in and trust within the network are independently linked to how you rate your own eHealth literacy (Ahn et al., 2022; Cao et al., 2023).

4.3 Health Literacy, Preventive Behavior, and Norm Diffusion

CSC impacts health primarily by disseminating health information and setting the tone for behavioral norms. Kim and Ball-Rokeach (2006) tested this, showing that while community bonding and bridging social capital both link to preventive behavior, they do so in distinct ways. Bonding capital appears to underpin a group's adherence to its own health standards, whereas bridging capital opens up avenues to a wider range of health data. More recent work supports this. A cross-sectional study indicates that the social ties you have through communication serve as the practical and normative backbone for maintaining healthy habits. Matsuura and Hatono (2025) found this in their research on older Japanese adults, in which community-level social capital was a clear predictor of receiving preventive checkups. Samuel and colleagues (2014) have made the case in Health Review for a more systematic approach, one that weaves community social capital into behavioral health theory. In their view, CSC works by bolstering

self-efficacy and perceived support, sharpening knowledge, and reinforcing norms, all of which prompt people to adopt and sustain healthy behaviors. From a practical standpoint, health communication efforts designed to build social capital yield better long-term results than simply handing over information, because they embed the message in a context of trust. Amoah et al. (2025) make a good case for this in their Hong Kong study of older adults. They show how things like neighborly trust or involvement in local organizations can help people acquire and maintain health literacy. It is not just a conduit for information, as the health literacy framework might suggest, but a generative resource that gives people the motivation and wherewithal to act on what they learn.

4.4 Community Resilience, Public Health Emergencies, and Digital Contexts

A mature reading of the evidence must recognize that social capital is not uniformly beneficial and that its effects are systematically moderated by form, context, population, and distribution. The comparison between bonding and bridging social capital illuminates this complexity. Kim and Ball-Rokeach's (2006) multilevel analysis of 40 U.S. communities found modest protective effects for both forms. However, subsequent research has documented important contextual variation: bridging social capital was more strongly protective for women in Japan (Iwase et al., 2010) and for residents of deprived urban neighborhoods in Korea (Kim & Cho, 2016). Bonding capital was more strongly associated with self-rated health and depressive mood among older Japanese adults (Murayama et al., 2013).

In the Philippines, Hung and Lau (2019) found that bonding capital improved self-rated health only when bridging capital was also present, and the effects of these two forms of capital were interactive rather than additive, making it ineffective to prioritize one over the other. The systematic review of Villalonga-Olives and Kawachi (2017) documents the most extensive catalog of the adverse effects of social capital on health. We identify several negative pathways. High social capital can facilitate the contagion of behaviors (e.g., smoking and drinking norms through tight-knit networks); it can support social environments that exclude and cause stress for those outside the group; it can impose pressures for conformity and curtail individual autonomy over health; and it can distribute resources unevenly within communities.

Campbell (2020) extended this critique, arguing that social capital interventions that focus on community-level resources while ignoring underlying power inequalities may reinforce the very disparities they aim to reduce. These findings have important methodological implications: studies that aggregate social capital effects without disaggregating by form, distribution, and power dynamics may systematically underestimate both the heterogeneity and conditionality of the communicative social capital–health relationship. Wakefield and Poland (2005) also cautioned that narratives of community solidarity can mask internal tensions, power differentials, and exclusionary dynamics that characterize real communities, emphasizing the need to examine not only the presence of communication networks but also their inclusivity and governance. Goulbourne and Yanovitzky (2021) provide a policy framework addressing this challenge by conceptualizing communication inequalities, or differential access to credible health information among racial and ethnic minority communities, as a structural problem that

calls for intentional investment in minority-serving media and community communication infrastructure.

4.5 Differential Effects: Bonding, Bridging, and Negative Consequences

One has to be mature in one's appraisal of the evidence to see that social capital is not an unalloyed good; its impact is systematically shaped by the form it takes, the context and population at hand, and how it is distributed. The distinction between bonding and bridging social capital illustrates this well. Take the work of Kim and Ball-Rokeach (2006): their multilevel study of 40 U.S. communities turned up only modest protective benefits for either type. However, later studies have refined the picture by showing how much context matters. In Japan, Iwase and colleagues (2010) found that bridging social capital was a stronger safeguard for women. In contrast, in Korea, it was more so for those living in underprivileged urban areas (Kim & Cho, 2016). Conversely, Murayama et al. (2013) linked bonding capital more closely to depressive mood and self-rated health in older Japanese. The two forms can be hard to separate in practice. Hung and Lau (2019) reported from the Philippines that bonding capital would only enhance self-rated health if bridging capital were present as well; since the effects are interactive, you cannot simply add them up or put stock in one to the exclusion of the other. Moreover, the most thorough inventory of social capital's adverse effects on health comes from the systematic review by Villalonga-Olives and Kawachi (2017). We can point to several negative pathways. Tight networks can spread behaviors like smoking or drinking norms; foster environments that are stressful and exclusionary to outsiders; impose pressure to conform that limits a person's autonomy over their health; and parcel out resources unevenly. Campbell (2020) has argued that interventions that focus on community resources but disregard power imbalances will only entrench the disparities they are meant to address.

There are methodological lessons here. If you aggregate the data without accounting for power dynamics and distribution, you are likely to understate the conditional nature of the link between communicative social capital and health. Wakefield and Poland (2005) would agree, warning that tales of community solidarity can mask the internal friction and power differentials that define most communities, so one must examine the governance of these networks as well as their existence. On policy, Goulbourne and Yanovitzky (2021) have proposed a framework to address these issues. They treat the unequal access to credible health information in racial and ethnic minority groups as a structural problem of communication inequality, one that demands we put our money where our mouth is and invest in the media and infrastructure that serve them.

4.6 Interventions Targeting Communicative Social Capital

The evidence base from intervention research in this area is both informative and mixed. A case in point is the 2016 systematic review by Coll-Planas and colleagues on social capital interventions for older adults. They noted that although several well-conducted trials have found positive effects on mortality, mental health, and general health, the overall picture is one of methodological heterogeneity and inconsistent results. They argued that you are more likely to see an effective intervention when it is tailored to the local social context and the distribution of social capital in the community; what matters is fostering genuine communicative ties, not just more social contact. Taherian and Motamedi (2022) also conducted quasi-experimental

work. In a 12-week community trial with older adults, participants demonstrated marked improvements across self-care, health literacy, quality of life, and social capital. It would seem that with the right kind of structured communication, one that is overt about building trust and reciprocity instead of merely getting people to show up at organizational events, you can put in place the relational infrastructure for long-term health gains (Matsaganis and Wilkin, 2015, make a similar point). Haldane et al. (2019) reached generally positive conclusions in their review of community engagement and participation, but cautioned that the direct impact on health is more variable. You cannot assume that improving a community's communication will yield quantifiable health benefits in the time it takes to run a study. Shiell and his team (2020) put it another way: we need to rethink how we design social capital interventions to reflect that the path CSCs take to influence population health is complex, non-linear, and often slow to materialize.

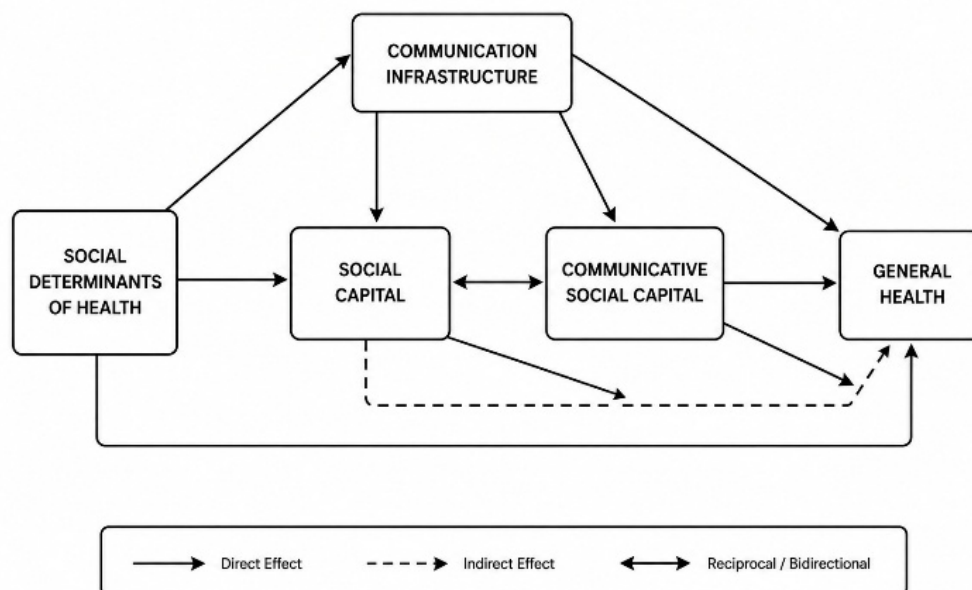


FIGURE 3: LITERATURE-DERIVED CONCEPTUAL FRAMEWORK

Figure 3 synthesizes the reviewed literature by illustrating the relationships among social determinants of health, communication infrastructure, social capital, communicative social capital, and general health. It highlights direct, indirect, and reciprocal pathways through which communication and social relationships may contribute to health outcomes.

5. DISCUSSION

The literature synthesized in this review indicates that the relationship between communication and health is embedded within a broader social and structural system. As illustrated in Figure 3, communication infrastructure, social capital, and communicative social capital are interconnected rather than independent constructs. The preceding review supports several substantive conclusions. First, CSC is a genuinely multidimensional construct with distinctive structural, relational, and cognitive components whose health implications operate through partially distinct mechanisms. Second, the overall association between CSC and health outcomes is positive. However, effect sizes are typically small to moderate, and outcome type,

social context, population characteristics, and the form and distribution of social capital condition the strength and direction of effects. Third, the communicative dimension of social capital, i.e., inclusion in networks that facilitate the exchange of health-relevant information, trust, and collective action, appears to account for a significant part of the protective effect associated with cognitive social capital, especially for health literacy, healthcare access, and community resilience outcomes. Fourth, interventions to build communicative social capital (CSC) are promising, but they need attention to context, equity, and the quality of the communicative relationships they create. These findings carry several important theoretical and methodological implications. The evidence substantiates the notion of communicative social capital as an active mechanism, one that is communicatively constituted rather than merely structurally given (Rojas et al., 2011), that functions not merely as a contextual moderator but also as a partial mediator of the relationship between neighborhood social structure and health outcomes. The CIT-informed perspective, identifying the communication action context, the storytelling network, and residents' integration into that network as the operative elements, provides a more comprehensive explanatory framework than purely structural accounts. Methodologically, the field would benefit from greater consistency in operationalizing and measuring communicative social capital, clearer articulation of the theoretical pathways under investigation, and more robust longitudinal and experimental designs that can establish causal direction. This literature has important implications for equity.

Goulbourne and Yanovitzky (2021) reframe the policy problem by framing communication infrastructure as a social determinant of health. Rather than framing deficits in social capital as community character flaws to be fixed through grassroots efforts, this framing points to structural conditions—media deserts, digital divides, underfunded minority-serving media, and barriers to civic participation—that systematically deprive some communities of the communicative resources needed for health equity. This calls for a public investment logic that complements community capacity-building and fits with broader structural approaches to health equity that move beyond behavioral and community-level interventions (Campbell, 2020; Wakefield & Poland, 2005). What this review shows supports several substantive conclusions. To start, CSC is truly multidimensional; its structural, relational, and cognitive parts are, in their own way, distinct and have health implications that operate through mechanisms that are not entirely the same. Then there is the link between CSC and health outcomes: overall, it is positive. However, effect sizes generally range from small to moderate, and the strength and direction of the effect depend on the population, the social context, the type of outcome, and how social capital is used. We also see that the communicative side of social capital—being part of networks where you can put your trust and take collective action and swap information that matters for your health—goes a long way in explaining the protective effect of cognitive social capital, particularly when it comes to community resilience, access to care, and health literacy.

As for building this kind of capital, clean interventions show promise, but they must prioritize relationship quality, equity, and context. The evidence gives some weight to the idea of communicative social capital as an active mechanism that mediates the tie between a

neighborhood's social structure and its residents' health, rather than simply moderating the context. A CIT-informed view is more complete in this regard than a purely structural one, since it puts the communication action, the storytelling network, and how residents are woven into it front and center. Methodologically, though, the field could do with more rigor. We need better longitudinal and experimental work to pin down causality, and more consistency in how communicative social capital is measured and defined. The field are ablations for equity implications. Goulbourne and Yanovitzky (2021) put it well when they recast the policy issue by making communication infrastructure a social determinant of health. It is no longer a case of seeing a lack of social capital as a character flaw in the community to be put right at the grassroots level; instead, we are looking at structural conditions such as digital divides, media deserts, and underfunded minority media that rob certain communities of the resources for health equity. This demands a logic of public investment to accompany any capacity-building, in line with the broader structural approaches advocated by Campbell (2020) and Wakefield and Poland (2005). While the literature has a solid descriptive core on the connections between networks, health, and social capital, its critical edges remain thin when it comes to harm, digital governance, and structural power. The field has a well-developed descriptive core linking social capital, health, and networks, but its critical edges, such as structural power, mediating mechanisms, digital governance, and harm, remain thin.

6. CONCLUSIONS

This narrative review makes the case for communicative social capital as a concept with firm theoretical underpinnings, if only moderate empirical backing. Drawing on Communication Infrastructure Theory and informed by a good deal of empirical work on health and social capital over the years, it offers a way to understand the resources communities put into being through their communication practices and infrastructures. We are talking about information, trust, collective efficacy, and mobilization capacity, all of which are so relevant to health. The data show these resources have an impact. They can be the difference between people having access to care or health information; they underpin preventive measures and mental well-being, and they are what give a community the resilience to see out a crisis. However, one would be wrong to think of social capital as a panacea; its influence depends on power, context, and distribution. Any intervention to build this kind of capital must be mindful of these complexities, or it will perpetuate the very inequalities it is meant to fix (Campbell, 2020; Wakefield & Poland, 2005). There is the matter of mechanism. While Samuel et al. (2014) have laid out the theory behind self-efficacy, social norms, and the like, you will find little in the way of longitudinal or experimental studies to back up those causal links. In fact, the gap between what we know about the effects and the structural equity conditions at play is the field's most glaring blind spot. Future work calls for a more rigorous approach: longitudinal designs to sort out causality, better ways to measure the communicative side of social capital, and equity analyzes that break down results along lines of race, class, and rurality.

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Data availability

Data will be shared on reasonable request with the corresponding author. Most relevant data is included in the supplementary materials.

Ethics/IRB statement

Since the paper is based on a meta-narrative review, there are no human subjects; no ethics approval is not required.

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