

# **An overview of the role of social capital in development processes**

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**Abstract:** The sustainability of ICT for Development (ICT4D) initiatives, and indeed any development initiative, depends on many different factors that has been summarised in terms of financial, social, institutional, technological, and environmental sustainability. This complexity has led to researchers suggesting bricolage approaches that try to make do with the resources at hand, improvise and muddle through to develop local and contextual solutions. An important factor in this kind of approach is the role of relationships, particularly as evidenced in social networks of contact consisting of strong and weak ties, that has been called social capital and linking or bridging capital. The concept of social capital has been shown to influence many different processes in development. In the use of resources the capability approach refers to the influence of social capital on the conversion of commodities, technologies and resources by a person into situated use. The adoption of an innovation is also influenced by social capital, especially via the important role that is played by trust. In the design of development interventions, various types of theories of change have been articulated and the role of social capital in some of these theories is investigated. This paper aims to summarise and analyse the influence of social capital on development processes as seen from the different perspectives mentioned. In terms of development, a fundamental insight is that social capital plays a role in mediating development outcomes through embedded and autonomous social relations that can resolve social problems at macro and micro levels. Social capital also consists in crucial cross-level linkages that need to exist to enable top-down initiatives to meet bottom-up development.

**Keywords:** Social Capital, capability approach, programme theory, theory of change, ICT4D

## **Introduction**

The sustainability of ICT for Development (ICT4D) initiatives, and indeed any development initiative, depends on many different factors that has been summarised by Ali and Bailur (2007), from a review of the ICT4D literature, as: financial, social, institutional, technological, and environmental sustainability.

In order to deal with this multiplicity of factors, researchers have suggested a variety of approaches, one of them being bricolage. Ciborra (cited in Ali and Bailur, 2007) refers to bricolage as “...tinkering through the combination of resources at hand. These resources become the tools and they define in situ the heuristic to solve the problem”. One of the resources that are readily available in almost all situations is the assistance or access to other resources via the people that you know. The network of relationships that exist between you and your family and friends and the networks of people that they can call on for assistance can be quite valuable and this paper explores the usefulness of this resource, which is often called social capital. The contention is that this type of capital is easy to overlook in designing, executing and evaluating development initiatives and that more attention should be paid to it, especially since it influences many of the processes inherent to development.

The paper discusses the issue of defining social capital and then addresses in more detail why this concept is important in development, covering aspects such as the use of resources and the adoption of change. Finally, conclusions and recommendations are developed.

## What is social capital?

Social capital is a contested concept and has been used in widely different ways, and, as Farr (2004) summarises in a conceptual history of social capital, many articles on social capital start off by complaining about this fluidity of meaning. Adler and Kwon (2002, p.18), in their magisterial survey of the concepts of social capital, identified that the basic intuition driving research in this area is that "the goodwill that others have toward us is a valuable resource". This goodwill, as a resource, is embedded in and is generated via the structure and content of an actor's social relations and can be used to support action. This support includes access to information and the exercise of influence (*ibid*). The definitions of social scientists reflect their different focuses on the *substance*, *sources* or the *effects* of social capital (Robinson in Adler and Kwon, 2002), and their focus on different types of social relationships: *internal*, *external* or *both* types. Internal social relationships are between actors inside an organisation or system, while external relationships are those between these actors and any other actors, for example, external stakeholders. Woolcock (1998) refers to a focus on external relations as "bridging", while Oh and co-workers (1999) refer to "communal" relations. Internal relations can be referred to as "bonding" or "linking" (Adler and Kwon, 2002). Burt (2001) refers to internal relations as "network closure" and "structural holes" as bridging links between networks.

Nahapiet and Ghoshal (1998) argues that there are three dimensions of social capital, namely *structural* (the pattern of connections), *relational* (the sources and effects of social capital), and *cognitive* (shared representations and interpretations that constitute systems of meaning).

One has to mention the development of the concept of different kinds of capital in the research on livelihoods (e.g. Chambers and Conway, 1991 and Bebbington, 1999) and the systemization of the capitals concept in the Sustainable Livelihood Framework (SLF) as well the application thereof in the Sustainable Livelihoods approach (Clark and Carney, 2008) by the UK Department for International Development (DFID, 1999 and Solesbury, 2003). This framework differentiates between human capital, natural capital, financial capital, physical capital and social capital.

As to a definition of social capital in this paper we adopt the approach used by Farr (2004, p.9), who following Putnam (2000), combines the concepts of *networks*, *norms* and *trust* to define social capital as:

"the network of associations, activities, or relations that bind people together as a community via certain norms and psychological capacities, notably trust, which are essential for civil society and productive of future collective action or goods, in the manner of other forms of capital".

## Why is Social Capital important in Development?

A high level overview of the roles of various types of social capital in country-level development as conceptualized by Michael Woolcock and fellow researchers of the World Bank is provided in this section. In the following section the focus shifts to the influence of social capital in some of the important processes that occur in development.

Woolcock (1998) argues that the unit of analysis in post modernization development theories, such as neo-classical growth theories, has become either the nation-state or the "rational" individual, therefore neglecting the valuable mediation role played by civil society in the interaction between nation-states and markets. In his view, the concept of social capital has promise since it may offer a way of highlighting this role and bridging theoretical divides. Woolcock (*ibid*) agrees with Robert Putnam that, in addition to deficiencies in financial and human capital, social capital should also be addressed in development.

Woolcock uses two levels (micro and macro) and two types of social capital (embeddedness and autonomy) to create a broad canvas upon which the role of social capital in a society's development can be sketched. The micro level is the community level and the macro level is the society and state level. Woolcock (1998, p. 162) agrees with Granovetter's

work which argues that “all economic action was inherently enmeshed in social relations of one configuration or another, and that development essentially brought about a change in the kind, not degree, of embeddedness”. Studies of economic development revealed that what we call economic or social exchanges are all of one type, namely both social and economic and are all embedded in social relations (*ibid*). Furthermore, embeddedness has different forms such as “social practices, social ties, cultural practices” (*ibid*, p. 163) and there are benefits and costs. There would be, for example, a cost associated with moving from local market exchanges in a village to becoming part of the exchanges of a bigger and more formal market system. A cost benefit analysis therefore has to include an analysis of the complementary set of interactions with those *outside* the close-knit group, what is called autonomous social ties. At the macro level these ties refer to, for example, the professional ethos which commits policy makers to pursue collective goals. Autonomy, just as embeddedness, is different at micro and macro level. To sum up, Woolcock (*ibid*, p.164) states that:

embeddedness at the micro level refers to intra-community ties, whereas at the macro level it refers to state-society relations; autonomy at the micro level refers to extra-community networks, while at the macro level it refers to institutional capacity and credibility.

Embeddedness at the micro level is called *integration* (intra-community) and at the macro level it is called *synergy* (state-society relationships), while autonomy (extra-community networks) at the micro level is referred to as *linkage* and at the macro level (i.e. institutional capacity), as *organizational integrity* (*ibid*).

Using different combinations of these four dimensions of social capital Woolcock (*ibid*) can explain a wide spectrum of development outcomes. It is Woolcock’s view that social capital is a very necessary, but also very problematic resource for achieving developmental outcomes and that it can be used to explain so called bottom-up (grassroots) and top-down dilemmas in development.

An example of a bottom-up developmental dilemma caused by a certain combination of social capital is that very tight community social ties (high integration) may be accompanied by a lack of trust of outsiders, hence very little relationships and exchanges with outsiders (low linkage), thus leading to limited value exchanges with the bigger world outside the community (*ibid*). Woolcock’s summary of relevant research is that, in successful bottom-up development programs, “linkages to broader extra-community institutions are forged incrementally; a community’s stock of social capital in the form of integration can be the basis for launching development initiatives, but it must be complemented over time by the construction of new forms of social capital, i.e., linkages to non-community members” (*ibid*, p. 175).

In the case of top-down development dilemmas, the mutual influence in state-society relationships to achieve a developmental state is very important. A case in point is India, where a fairly well organized civil service (a moderate level of organizational integrity) has weak ties to the private sector (low level of synergy), leading to a ‘weak state’ with high ideals that cannot, in practice, deliver services to the citizens and cannot support business development (*ibid*). The ideal for top-down development is that “any institution with a developmental agenda must be at once engaged with the communities it seeks to serve and capable of maintaining its own credibility and effectiveness” (*ibid*, p. 178).

The solution to these dilemmas lies in recognizing the need for social relations that connect “top down resources and bottom-up capacity building” (p.179). In order to achieve this, both top-down and bottom-up development needs to participate in a dynamic interplay where, “in the case of bottom-up development, intensive extra-community ties (integration) must begin to coexist with more extensive albeit “weaker” extra-community networks (linkage), while at the same time top-down combinations of state-society relations (synergy) must coexist with cohesive corporate ties (integrity)” (*ibid*, p. 180).

To summarize, Woolcock (*ibid*) sees social capital as a critical constituent of development since it can enhance or destroy other capitals such as physical or human capital and mediates

development outcomes through embedded and autonomous social relations that can resolve macro and micro level social dilemmas.

While Woolcock (*ibid*) does recognize that power can also play a role in influencing development outcomes, he stresses that the principal mediation takes place through social relations. Critique of Woolcock's position has emerged, for example, Kleine (2007) argues that the concept of linking social capital (mostly linkage to those with more resources) accepts inequality and may even celebrate the entrenched structural dependencies. Urquhart, Liyanage and Kah (2008) refer to the possibility of negative social capital formation via gangs and corrupt relations. Schuurman is concerned that use of the concept of social capital may underplay inequalities in power and cites John Harriss' warning against usage of social capital since it is "consistent with the neo-liberal agenda of reducing the role of the state, partly in order to make possible large cuts in public expenditure" (Harriss, 2002, cited in Schuurman, 2003, p. 992).

## **The influence of social capital on processes in development**

If one assumes, as discussed in the previous section, that economic and social exchanges are all *both* social and economic, and are all *embedded* in social relations, then development processes, as examples of social and economic exchanges should also be influenced by social capital. In this paper we have selected some of the central processes that lead to development outcomes: the use (or conversion) of resources by people into situated uses (Sen, 1999), and use program theory as an overarching view on structured thinking as to how change comes about. Each of these processes or aspects is now discussed in turn.

### **Use of resources**

From a human development perspective, Amartya Sen (1984, 1999) argues that development is about freedom of choice and the development of people's 'capabilities'. Sen (1999) has a specific way of defining capabilities via his use of the concept of 'functionings' which are all the beings and doings that a person may value, for example, working or being healthy. Capability is used by Sen (*ibid*) to refer to the alternative ways in which these desirable functionings are feasible for a particular person. In simpler words: What, effectively can I do and be? Note that this does not refer to how much I do have, or how much can I consume.

Freedoms are the drivers of "the enhancement of human capabilities and achievements", and elimination of "unfreedoms" is the focus of development (Payne & Phillips, 2010, p. 122). Sen (1999, p.3) defines development as "a process of expanding the real freedoms that people can enjoy" to "lead the lives they have reason to value" (p.293). Note that freedoms are valuable opportunities (capabilities), *potential* options for choice, while achievements are *actual* achieved functionings (beings and doings) (Robeyns, 2005).

Freedoms are in this context considered as the primary means and the principal ends of development (Prendergast, 2004) and people are viewed as the primary agents of their own development.

In order to exercise these capabilities people need assets or capitals, or, as Sen (1999) prefers to call it in the capability approach, 'resources' (e.g. clean water, basic health knowledge, money). People need inputs in the form of means or resources to support capabilities (the alternative ways in which desirable functionings are feasible). However, even if people have the same level of resources, the freedoms that people have can vary due to variations in the conversion of resources into freedoms. Sen (1999) mentions that people are diverse, for example, two people with differing special talents or levels of health, may have different qualities of life even if they have access to similar resources (e.g. income). Five different sources of variation in converting income to freedom were identified by Sen (*ibid*, p. 70-71): personal heterogeneities, environmental diversities, variations in social climate (which includes aspects such as pollution, prevalence of crime and "the nature of community

relations”, i.e. social capital), differences in relational perspectives, and distribution within the family. Conversion differences may reflect how social issues are interwoven, and many beings and doings are” influenced by *intricate intragroup relations and interactions*” (Sen, 1992, Kindle Locations 432-434, italics added for emphasis).

At the social climate, i.e. societal level, Sen (1999) provides examples such as capitalism in Japan where behavioural codes, cooperation, and rule-based behaviour underlie non-profit motivations that deviate from the assumed sole motivation of self-interest in business. The role of behavioural codes are vitally important in business transactions, the state cannot enforce compliance with every contractual obligation, and hence enforcement is mostly due to codes such as mutual trust and a sense of being ‘obliged to do the right thing’ (*ibid*). There may even be instances where the state is failing to meet its obligations to fight corruption and organizations such as the Mafia play a role in enforcing mutual fairness on business transactions (*ibid*). In the South African context the arrangements at taxi ranks where commuters gather to board are controlled by taxi rank managers that mediate in the competition for passengers among taxis.

Conversion may thus be influenced by relations and interactions and codes for interaction at a range of levels of interaction, from the personal level to the family and the social group, as well as the societal level such as business relationships and the role of the state. This has profound implications for development strategies: even if people’s ownership of resources has been brought to a more equitable level, the development outcome of substantive freedoms may not have been equalized – variations in conversion may persist that are due to a multitude of factors beyond resource provision, some of which are related to social capital. It is probably worth emphasizing that social capital is not to be confused with a resource itself, it cannot substitute for a resource, it is, however, the ability to obtain resources by belonging to social structures, which have members with differing levels of resources, and differing abilities to convert resources into achievements or freedoms (Portes, 2008; Portes and Landolt, 2000).

## **How does change come about?**

### **Programme Theory**

In order to design, execute, monitor and evaluate interventions or policies that bring about desirable development outcomes, organisations such as governments and major funding agencies have increasingly found it necessary to attempt to articulate how such interventions may lead to the intended outcomes (Funnel and Rogers, 2011). The articulation of the how, is often called program (or programme) theory, which can be defined as “an explicit theory or model of how an intervention, such as a project, program, a strategy, an initiative, or a policy, contributes to a chain of intermediate results, and finally to the intended or observed outcomes” (*ibid*, p. xix). A programme theory consists of a theory of change and a theory of action. A theory of change describes the key processes through which change comes about at individual and group level and these processes are of many different types, e.g. economic, social and psychological processes (*ibid*). The theory of change can be based on research, or, for example, practical experience and received wisdom. A theory of action explains how programmes are designed to initiate the theory of change. For example, a teacher development programme might decide that teaching will improve if teachers have an increased sense of self-worth (the theory of change) that will be brought about by coaching and mentoring (theory of action).

To summarise, the development of a programme theory tries to develop understanding of the causal processes that link the processes in a programme to the desired outcomes. This involves not only the elucidation of a logic model: *inputs* -> *processes* -> *outputs* -> *outcomes* (short and medium term) -> *ultimate outcomes* or *impacts* (longer term), but also an outcomes chain linked to the steps of the logic model that outlines the possible causalities involved (*ibid*).

Programme theory, in the context of monitoring and evaluation (M&E) activities has been called many things, including 'theories of change' (ToC) and 'intervention logic' (*ibid*) or 'logical model', and 'roadmap' (Jones, 2011). These terms may be used to refer to just a theory of change, or used to refer to the combination of a theory of change and of action.

Funnell and Rogers (2011) defines the key components of programme theory and arranges them in a sequential process as summarised below:

**Table 1 Components of Programme Theory as a sequential process (Funnell and Rogers, 2011, p. 150)**

<b>Theory of change</b>	1. Situation analysis: identifying the problems, causes, opportunities and consequences.	2. Focussing and scoping, setting the boundaries of the programme.	3. Outcomes chain that links the theory of change and the theory of action.
<b>Theory of action</b>	4. The desired attributes of intended outcomes as well as consideration of unintended outcomes.	5. Programme aspects and external factors that affect outcomes.	6. Programme actions to address the key factors of programme: internal and external.

We discuss only components 1 and 2 in this paper in order to show examples of the influence of social capital on Theories of Change.

A *situation analysis* goes beyond a needs or problem analysis. It describes and clarifies the problems, by identifying known causal pathways (the succession of causes) to the problem, opportunities and the reasons why the problem is worth addressing (the consequences) (*ibid*). An example of the role of social capital is the work of Davidson (as cited in Funnell and Rogers 2011, p.60) who, in her situation analysis of a community nutrition programme, identified extensive extended family networks and respect for elders and tradition, as community strengths that could be used in designing the programme (representing structural, relational and cognitive dimensions of social capital).

A study of long-term unemployment revealed that one of the factors increasing the probability of unemployment is the reduced contact with people that do have work and may know about jobs (Funnell and Rogers, 2011) (structural and relational dimensions of social capital). The importance of weak ties in job seeking was extensively researched by Mark Granovetter (1974) (structural dimensions of social capital).

*Focussing and scoping* is important since it identifies the programme outcomes that are in-focus, out-of-focus but within scope, and out-of-scope (Funnell and Rogers, 2011). Out-of-focus, out-of-scope activities may be very important in supporting in-focus, in-scope outcomes. An example of these activities with a social capital component is a substance abuse programme that required community support and community capacity (in-focus outcomes) that had to address community distrust of government initiatives and community struggles with housing issues (*ibid*). The programme team decided to include a facilitation role to improve housing developments as part of the theory of change in order to assist in building community capacity. This is also an example of an outcome chain that shows causal or contingency relationships between the various levels of outcomes such as immediate and intermediate outcomes, thus linking the theory of change and the theory of action.

#### **Types of Theories of Change**

We now move one level up from a TOC for a particular project to examples of the different types of theories of change that span the common levels of analysis, namely, individuals, intergroup relationships, structures and systems (Shapiro, 2005). In practice a theory of change could, of course, span some or all of these levels. Funnell and Rogers (2011) discuss research-based Theories of Change that follows this kind of typology, and focus on

individual, community, organizational and policy level change. As interventions go, those in the policy domain present the biggest challenge for developing a theory of change, since it has the widest scope with many possible influences and influencers. Jones (2011), based at the Overseas Development Institute, in developing a guide to monitoring and evaluating policy influence, refers to the three common types of theories of change as: causal chain, dimensions of influence and actor-centered theories. This represents a focus on the mechanisms of change rather than the scope of the change (individual, community, etc...).

Funnell and Rogers (2011) discuss the following theories of change in which social capital plays an important role: *Diffusion Theory* (Rogers, 1995), which deals with community level as well as mass behavior change, *Socioecological Theory* (Bronfenbrenner, 1979) which deals with systems such as families, groups and communities, and *Network Theory* (Granovetter, 1973). The relevance of social capital in each of the theories is discussed below.

#### *Rogers' diffusion theory*

Everett Rogers' diffusion theory is concerned with the process of how an innovation is communicated over time in a social system and this theory has been applied in, for example, the uptake of technology (Funnell and Rogers, 2011). Social capital plays a role in three of the key concepts of diffusion theory, namely communication channels, the diffusion in a social system and the time dimension of diffusion (*ibid*).

**Communication channels** vary in effectiveness with interpersonal face to face contact being the most effective in gaining acceptance of a new idea (*ibid*). Rogers also refers to the influence of varying degrees of the homogeneity of groups, the concept of bonding ties are related to homophily (the tendency of individuals to bond with similar others), while bridging ties is related to heterophily (the bonding in diverse groups) (Clark, 2010). Communication in homophilous groups are very effective as the people share common frameworks such as language and social backgrounds and therefore common codes, so that communication is easy and effective, and therefore more likely to bring about attitude or behavioural change (*ibid*). While communication in heterophilous groups is more difficult due to a lack of common codes, these groups do increase access to new information due to the different contexts in which people live (*ibid*). Homogeneity can also become a barrier to adoption of change, as deviations from the social norm is frowned upon, while heterophilous groups have to accommodate diversity, are more tolerant, and encourage change (Funnell and Rogers, 2011).

The **diffusion of ideas** among members of a social system is influenced by norms, social structure as well as the presence of thought and opinion leaders and change agents (*ibid*). Knowledge of the social structure can be used to predict the when and who of the adoption of innovations and network theory and social networks analysis are useful tools in programme design.

The **time dimension** of diffusion refers to the steps of knowledge, persuasion, decision, implementation and confirmation (*ibid*). This is not just a rational decision-making process, but also a *social process*, for example, the decision to adopt an innovation depends on the decisions made by the other members of the social system, hence the phenomenon of an S curve in the adoption rate of an innovation (*ibid*).

Rogers' theory is aligned with an innovations system perspective in which innovation is seen as a social process involving relationships between a range of actors, institutions and opportunities (technological and others) (Clark, 2010). Therefore development is not (solely) the result of technological change but the social context in which change takes place is the significant driver of development (Spielman, 2006, in Clark 2010).

#### *Socioecological Theory*

Socioecological theory (developed by Bronfenbrenner) uses biological concepts about interrelationships between organisms and their environment to emphasise that people's behaviours are influenced by their environment which includes physical as well as social and cultural variables (Funnell and Rogers, 2011). The environment is described as a nested set of systems (*ibid*):

- the microsystem (e.g. an individual interacts with the home environment);

- the mesosystem (the home and work systems interact);
- the exosystem (interaction between home and work, and a system which individual has no direct interactions, e.g. the justice system); and,
- the macrosystem which is the all-encompassing system (culture, belief systems) that permeate all other “lower” systems.

Finally, all of these systems move through time in the so-called chronosystem.

This theory has been applied to many development contexts, including community development and children’s development. For example, a child’s development can be described as a process of mutual interactions between the child’s characteristics and the various systems described above, e.g. the home system as microsystem and the school as mesosystem. A theory of change developed for a programme for at-risk children would have to take into account how to incorporate risks and protective factors as well as influences from these various systems (*ibid*), for example, the presence of drug dealers and gangs in neighbourhoods (negative social capital - Urquhart, Liyanage and Kah (2008)). An important aspect of socioecological theory can be described via the concept of social capital, especially considering the view (discussed in a previous section) that social capital mediates development outcomes through embedded and autonomous social relations at micro and macro levels.

#### *Network Theory*

Mark Granovetter (1973, 1995) is generally recognised as the first person to develop a theoretical focus on what the impacts of networks are, rather than just analysing networks (Funnell and Rogers, 2011). Network theory concerns itself with the positive or negative influences that the position of an actor in a set of relationships (i.e. a network), as well as the types of these relationships, has on the actions of this actor (Keast and Brown, 2005). Networks can operate as systems that change over time, as the type and strength of existing relationships change and new relationships form (Davies, 2002). In complex adaptive systems outcomes emerge that are impossible to link a particular actor’s actions to a particular component of the outcome (*ibid*).

In a network theory of change the type of change that networks can effect in order to assist in achieving long term outcomes needs to be spelled out. For example, networks could be built or altered in order to achieve an intermediate outcome of enhanced use of resources in order to improve the economic productivity (*ibid*). Networks are more often a means to an end and not an end in itself. Just as social capital is not usually invested in for its own sake, but for improved mediation of outcomes. An example is the strategy used in an IT project to build a clan by developing its social capital dimensions (structural, cognitive, and relational ties) and leveraging the clan in order to enact clan control to avoid project failure (Chua, Lim, Soh et al., 2012).

To understand the ways in which networks affect outcomes, a major research focus has been the role of the features of relationships (directionality, reciprocity) and the features of networks (e.g. density) (Funnell and Rogers, 2011). It has also been recognised that the purpose and context of a network also influences the nature of the relationships, i.e. an instrumental purpose such as helping each other to do work activities would result on different relationships than having a social purpose (*ibid*).

Network concepts have been fruitful in stimulating research in a network based theory of social capital (Burt, 2000, Lin, Cook and Burt, 2001 and Lin, 2005). Burt (2000) researched networks and social capital in organizations, and differentiated between two sources of social capital: network closure and structural holes. Network closure refers to the existence of a network of strong and weak relations where all the members are connected to each other, forming an identifiable group. The members tend to circulate information quickly and freely amongst each other, hence deriving an advantage. Social capital thus influences the flow of information and what actions can be taken on the basis thereof. Information flows more slowly between groups and Burt’s theory of structural holes reflects the fact that groups are linked by weaker ties that he calls the “holes in the social structure” (*ibid*, p.353). The

individuals whose relationships spans these holes, have a competitive advantage since they can broker the flow of information between groups and be in control of initiatives that require participation of different groups. The latter role is called being an “entrepreneur in the literal sense of the word - a person who adds value by brokering connections between others” (Burt, 1992, cited in Burt, 2000, p.356). A ‘network across structural holes’ is a form of social capital that enables a person to have early access to a wide range of information and to exercise entrepreneurial control. Burt argues that such a person has more social capital than a person having a more closed network.

Burt (*ibid*) researched four network dimensions of social capital (network constraint, size, density and hierarchy) among managers in medium to large organizations and tried to ascertain the association between these measures and professional performance. This association was used to test which of the two network mechanisms of network closure or structural holes is the major source of social capital. As an example of these measures, the definition of network constraint is discussed. Network constraint reflects the degree to which a person’s network is composed of people that are sources of redundant information (we all hear the same things). A high degree of direct connections to each other leads to a high degree of constraint, while a set of contacts that include many indirect contacts to other groups would have a low degree of constraint. The result of his research supports structural holes as the source of social capital, and a strongly supported result is that network density (the average strength of connections between contacts) has a negative association with performance.

The four network dimensions considered by Burt reflect the strength of relationships, while contingency factors such as network content deals with the substance of relationships, and reflects the role played by the kind of relationships considered (e.g. friendship, business, or authority). By considering contingency factors Burt comes to the conclusion that his research on the differing study populations show evidence of both types of social capital, with brokerage across structural holes (across groups) adding additional value while closure is required to unlock the value of the holes (the closed groups).

#### **Summary of programme theory**

Jones (2011) summarises the development of a programme theory succinctly in two steps: start with a picture of what drives change in the ‘target’ and then link into this picture the ways in which the initiative aims to influence the target. We have shown how social capital plays a significant role in the selected theories of how to drive change.

### **Conclusions and recommendations**

Social capital is an all pervasive concept that at the same time can be interpreted in so many different ways as to become too broad a concept to be useful. The concept does capture the idea that all our actions are embedded in networks of social relations at the micro and macro level. There are questions as to what kind of resource it is or if it is a resource at all. Some see it as a capital that is as productive of “actions” as other forms of capital and call it the “capital of the poor” (Woolcock and Narayan, 2000). The definition chosen in this paper opts for seeing social capital as networks of associations between people that enable collective action in a similar manner to other forms of capital. Social capital combines concepts such as networks, norms and trust and has structural, relational and cognitive dimensions. There are positive and negative aspects to social capital too as it can enhance or destroy other capitals.

The focus of this paper is mostly on the structural dimension where different contributions to social capital have been identified that has to do with the differences between internal and external linkages. External linkages can extend across groups at the same level of a social structure or cross levels of social structures from the family to the societal level.

In terms of development, a fundamental insight is that social capital plays a role in mediating development outcomes through embedded and autonomous social relations that can

resolve social problems at macro and micro level. As conceptualized by Sen, the conversion of resources into freedoms is influenced by a variety of factors, one of them being social climate of which social capital is an integral part. The crucial cross-level linkages that need to exist to enable top-down initiatives to meet bottom-up development is an important role for social capital, especially as development initiatives are often driven by external, top down systems that do not aim to foster long term linkages to grow social capital, but tend to focus on “getting things done” in the short term. Kleine (2007) refers to the potentially important role of social capital in forming a conceptual bridge between local economic development and empowerment approaches.

How does the concept become useful? Can you use an understanding of social capital in planning and doing development? Programme theory, which consists of a theory of change and a theory of action, has a situational awareness component in which social capital can be very useful in identifying crucial linkages. In understanding the relevant systems in the environment the analysis of social networks can be used to discover the extent of the external influences on the system with which the development programme is directly interacting with and can be used to set the programme boundaries.

In terms of achieving outcomes, Rogers’ research refers to how knowledge of the social structure can be used to predict when and who to influence. The critical leverage points, i.e. the key influencers can be identified as well as the nature and extent of their influence. The nested sets of systems that influence each other via social relations can be used to identify how cross system linkages can be built. Knowledge of the positive and negative aspects of closed and “cross-linked” systems can be used to devise effective and efficient strategies to achieve outcomes.

At the strategic level strategies for sustainability can be designed that work with social relations, building on existing strengths and weaknesses in the system rather than ignoring it. Awareness of social relations and the negative aspects such as entrenched power structures can be used to develop strategies that will not be shot down, but will also not further entrench these inequalities.

As a cautionary note: you cannot develop social capital for people, they do it themselves. Social capital not a replacement for resources, it *mediates* development outcomes, it is mostly a means to an end, not an end in itself. Supporting social capital development may be very important in order to achieve the major outcomes of a development intervention.

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