

CONCEPTUALIZATION OF SOCIAL CAPITAL IN CROSS-SECTIONAL DESIGN STUDIES: RAPID REVIEW OF LITERATURE

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Abstract. *Social capital is a concept that is widely studied in different fields of science, in different dimensions of this concept, and consists of a number of elements, including trust, sense of belonging and affiliation. Given the multidimensional nature of social capital, researchers point to the challenges of its conceptualization and operationalization of its elements.*

Objective: To identify cross-sectional design studies, with nationally representative samples from European countries, where each study assessed following social capital elements: either trust and sense of belonging, or trust and affiliation, to identify other included social capital elements, to clarify how these elements are operationalized, to identify what social capital determinants are taken into account and what social capital manifestations have been evaluated.

Method: Cross-sectional design studies, with nationally representative samples for European countries, conducted between 2014 and 2019, were sought in Science Direct, ProQuest, SAGE, EBSCO, Google Scholar, using the key words “social capital”, “trust”, “sense of belonging” and their synonyms. The methodological quality was assessed by Appraisal tool for Cross-Sectional Studies (Axis). Results: From initially identified 173 studies, the literature review included 3 studies. The included studies identify determinants of social capital (socio-demographic factors (2 studies) and political affiliation (1 study)) and manifestations of social capital (self-rated health (1 study), loneliness (1 study), willingness to pay for environmental quality (1 study)). The included studies define the bonding, bridging and linking types of social capital, as well as the structural and cognitive dimensions of social capital. The studies assessed and operationalized the following social capital elements: trust (3 studies), sense of belonging (1 study), support (1 study), frequency of contacts (2 studies), participation in associations (1 study), religious affiliation (1 study), civic activity (2 studies).

Keywords: *affiliation, sense of belonging, social capital, trust.*

Introduction

The 21st century worldwide is marked by changes in social and economic processes, the escalation of climate change issues and the rapid development of information technologies and biotechnologies. The boundaries between the

physical, digital and biological world converge, the relationships and values are changing (Schwab, 2016), the forms of social functioning of different generations are becoming more pronounced (Parker, Graf, & Igielnik, 2019).

The social capital is a concept, under which the social structure, its constituent and representative elements, the factors affecting the elements, and the results of this interaction, both at individual and society level, are examined. The concept of social capital comes from sociology, but this is often studied in a number of scientific disciplines, as well as interdisciplinary ones (Claridge, 2018). One of the pioneers of the concept of social capital in social sciences, Robert Putnam, defines it in a following way: social capital is a resource formed in relationships. In the concept of social capital, Putnam defines three elements: trust, engagement and norms, highlighting trust as a key element (Putnam, 1999). Francis Fukuyama explains it in a similar way, pointing out that trust builds in collective cooperation and in norms (Fukuyama, 1995). The trust is divided in particular, general and institutional trust. Cooperation, engagement and affiliation to social associations promotes democratic conflict resolution strategies (Bjornskov, Schnellenbach, Gehring, & Dreher, 2015) and compromise-building skills (Kopelman, Hardin, Myers, & Tost, 2016). The sense of belonging, within the concept of social capital, is defined as a phenomenon based on shared values and trust (Ahn & Davis, 2019). The sense of belonging is an essential factor for the functioning of the individual (Pinillos-Franco & Kawachi, 2018), for integration into society (Simonsen, 2017), in the process of forming a civic consciousness, as well as a prerequisite for successful cooperation in tackling social and economic dilemmas (Arora, Peterson, & Krantz, 2009). Trust, sense of belonging and affiliation are essential elements, characterizing the social structure, and are a pretext for the positive development of the state and society.

Research into the concept of social capital, from the point of view of different sciences, highlights its complexity, leading to a different understanding among researchers of the concept of social capital. In order to conceptualize social capital, and to create a common understanding about it, a number of researchers have identified determinants of social capital and structure of social capital, including elements, types, dimensions and manifestations of social capital (Claridge, 2018).

Researchers often use secondary data from international surveys to analyze social capital, the factors, structure and manifestations that affect it, both in Europe and elsewhere in the world, but social capital conceptualization depends on the data of each particular survey. Latvian researchers, J. Šķilteris, S. Vasiļjeva and others have also studied social capital characteristics in Latvian society, through cross-section design studies with representative samples.

In order to find out, how social capital is conceptualized in cross-sectional design studies, and whether such social capital elements, as trust and sense of

belonging, or trust and affiliation, are both assessed in the same study, a literature review will be created, using a rapid review methodology. The aim of this rapid literature review: to identify cross-sectional design studies, with nationally representative samples from European countries, where each study assessed following social capital elements: either trust and sense of belonging, or trust and affiliation, to identify other included social capital elements, to clarify how these elements are operationalized, to identify what social capital determinants are taken into account and what social capital manifestations have been evaluated.

Literature review

This section will provide a brief insight into these determinants, types, dimensions, elements and manifestations of social capital, which have been taken as the basis for an analysis of studies included in the review.

Determinants of social capital can be divided into a micro (individual) and macro (society) level. Socio-demographic factors, membership of social groups, etc. are most commonly used as micro level determinants of social capital. History and culture, social structures, mobility, economics, social class, civil society, consumption, political society, and social norms at various levels are most commonly used as macro level determinants of social capital (Claridge, 2004).

Stephen Aldrige, David Halpern and Sarah Fitzpatrick describe the most frequently mentioned types of social capital: bonding, bridging and linking social capital (Aldrige, Halpern, & Fitzpatrick, 2002).

Bonding social capital describes the relationships between group or community members, having similar socio-demographic characteristics and having a close relationship. These can be family members, neighbors, closest friends with similar interests, values, attitudes and mutual trust. This type of social capital is characterized by a horizontal relationship (Aldrige, 2002).

Bridging social capital describes the relationships between individuals, groups or organizations with different socio-demographic characteristics. These relationships are based on common interests, values or attitudes, but individuals, groups or organizations involved in these relationships may have a different social identity. Bridging social capital is characterized by a tolerance to the differences and relationships can be horizontal and vertical, but not as close as in the case of bonding social capital (Aldrige, 2002).

Linking social capital is described as institutionalized, legally regulated norms and relationships between individuals, groups or institutions. They are vertical, within which cooperation is taking place between individuals or groups from different social layers with different divisions of power. Linking social capital includes civil activity and responsibility, cooperation between local

communities, organizations and government, trust in legislators and institutions, shared values and objectives (Aldrige, 2002).

Regarding social capital dimensions, one of the most well-known social capital researchers, Yuan Chou, defines the cognitive and structural dimension (Chou, 2006).

The cognitive dimension of social capital includes the quality of social relations between individuals and groups, attitudes and value-building processes, mutual trust based on shared values and norms. Their constituent elements are shared values, attitudes, and beliefs, trust and trustworthiness, norms and sanctions, obligations and expectations and sense of belonging (Chou, 2006).

The structural dimension of social capital describes the social structure, the relationships between individuals and groups. Structural social capital is characterized by the closeness and intensity of individual relations and by the density of groups and organizations and the number of members. Their constituent elements are network ties and configuration, roles, rules, precedents, and procedures (Accra, 2016; Claridge, 2004).

Regarding manifestations of social capital, at the micro level, the social capital manifestations can be mental health, subjective well-being, and others. At the macro level, the social capital manifestations can be an index of democracy, the level of crime, the country's economic growth rate and others (Claridge, 2004).

Methodology

This literature review was created using rapid review methodology.

Data sources: cross-sectional design studies, with nationally representative samples, carried out in European countries, between 2014 and October 2019, with full English text available, and where each study assessed following social capital elements: either trust and sense of belonging, or trust and affiliation.

Procedure: Studies were searched in the Science Direct, ProQuest, SAGE, EBSCO data bases and Google Scholar. Key words used: social capital, trust, sense of belonging and affiliation. The used Boolean operators: OR, AND. From the studies, included in the literature review, the following information was obtained: general information (author of the study, year, title), purpose of the study, information on the research instruments, information on the sample of the study, social capital elements trust, sense of belonging or affiliation, and other elements, articles used in their operationalization, determinants of social capital, manifestations of social capital.

Research instruments: The methodological quality of the studies, included in the literature review, was assessed by Appraisal tool for Cross-Sectional Studies (AXIS).

Data analysis: The included studies were analyzed using theoretical framework, established in the concept of social capital, defining the determinants, types (bonding, bridging, linking), dimensions (cognitive, structural), elements and manifestations of social capital.

Research results and Discussion

From 173 identified articles, that were screened by abstracts, 123 articles were excluded. The full texts were read for 50 articles. 47 articles were excluded, because they did not meet the inclusion criteria (inappropriate design, not nationally representative sample, both trust and sense of belonging, or trust and affiliation are not evaluated in the study). As a result, the literature review included 3 studies of cross-sectional design, with nationally representative samples for European countries, where each study assessed following social capital elements: either trust and sense of belonging, or trust and affiliation. As we can see, the concept of social capital is widely studied, as demonstrated by the large number of studies, however, there are few studies where social capital elements such as trust, sense of belonging or affiliation, are included and evaluated. According to Venkatanarayana Motkas, it points to a differing understanding of researchers about the social capital elements, their importance and, accordingly, the inclusion and evaluation of these elements (Motkas, 2018).

The methodological quality, of the 3 included studies, was assessed using Appraisal tool for Cross-Sectional Studies, and was found to be very high, meaning that the criteria related to the study design methodology, the description of the results and the discussion, were met.

Table 1 contains information from studies, including the following data: author, year, title, purpose of study, research instruments, country, determinants of social capital and manifestations of social capital.

As shown in Table 1, 2 studies use secondary data from international surveys, 1 study use data from a national survey. 1 study use data from 17 European countries, 2 studies use data from 1 country.

Socio-demographic factors are used a determinant of social capital at micro (individual) level in 2 studies. Political affiliation is used a determinant of social capital at macro (society) level in 1 study. Socio-demographic factors are often used as determinant of social capital in studies, where manifestation of social capital is assessed at individual level, such as self-rated health (Ehsana, Klaasa, Bastianena, & Spinia, 2019), while political affiliation is a social capital determinant, which is widely used for social capital research at the society (macro) level (Anand, Boudreaux, & Banerjee, 2018).

Table 1 General information about included studies, determinants and manifestations of social capital

Author, Year	Name	Purpose of study	Research instrument	Country	Determinant of social capital	Manifestation of social capital
Pinillos-Franco, Kawachi, 2018.	The relationship between social capital and self-rated health: A gendered analysis of 17 European countries	Test whether gender differences in social capital could account for the male/female gap in self-rated health.	European Social Survey (ESS) (2016).	Austria, Belgium, Czech Republic, Estonia, Finland, France, Germany, Iceland, Ireland, Netherlands, Norway, Poland, Russian Federation, Slovenia, Sweden, Switzerland, United Kingdom.	Age, gender, marital status, education	Self-rated health
Marbuah, 2016.	Willingness to pay for environmental quality and social capital influence in Sweden	Investigate the extent to which social capital influences individual decision regarding WTP for environmental protection in Sweden.	International Social Survey Programme: Environment III - ISSP 2010	Sweden	Political affiliation	Willingness to pay for environmental quality
Nyqvist, Victor, Forsman, Catta, 2016.	The association between social capital and loneliness in different age groups: a population-based study in Western Finland	Examine the association between social capital and experienced loneliness in different age groups in a Finnish setting.	Western Finland Mental Health Survey 2011	Finland	Age, gender, marital status, education, language (Finnish, Swedish and other).	Loneliness

Based on the social capital theory and the theoretical concept of the included studies, the following manifestations of social capital have been evaluated in 2 studies: in 2 studies loneliness and self-rated health, using socio-demographic factors as determinants. These results confirm the fact, that socio-demographic factors, as social capital determinants, are substantially related to the health of the individual, as manifestation of social capital (Islam, Merlo, Kawachi, Lindström, & Gerdtham, 2006). In one study, the social capital manifestation was willingness to pay for environmental quality, which can be classified as civil activity and corresponds to the macro level. According to Anand, civil activity is one of the most important indicators of public sentiment and is often assessed in social capital studies (Anand, 2018).

The data from the studies were inserted in Table 2, showing the structure of the social capital: social capital types (bonding, bridging, linking), dimensions (cognitive, structural) and elements.

Table 2 Types, dimensions and elements of social capital

Author	Bonding		Bridging		Linking	
	Cognitive	Structural	Cognitive	Structural	Cognitive	Structural
Marbuah			General trust		Institutional trust	Civil activity
Nyqvist	Sense of belonging	Contacts	General trust	Membership in associations		
Pinillos-Franco	Support	Contacts	General trust, support	Religious affiliation	Institutional trust	Civil activity

As shown in Table 2, the structure of social capital, its types, dimensions and elements, one study covers all three types of social capital (bonding, bridging and linking) and both dimensions (cognitive and structural). One study covers 2 types (bonding and bridging) and both dimensions for these types. One study covers 2 types (bridging and linking), the cognitive dimension for bridging type and cognitive and structural dimensions for linking type. The general trust, as an element of social capital, was assessed in all 3 included studies, the institutional trust was assessed in 2 studies, confirming the fact that trust is considered as one of the key elements of social capital (Hamilton, Helliwell, & Woolcock, 2016). Sense of belonging was assessed in 1 study, but affiliation was assessed both as social capital element and as social capital determinant. This fact points to the differences, between social capital researchers, regarding social capital structure and determinants (Claridge, 2018).

The cognitive dimension of bonding social capital has been evaluated in 2 studies: “I feel I belong and am part of my neighborhood?” (Nygqvist, 2016), “How many people, if any, are there with whom you can discuss intimate and personal matters?” (Pinillos-Franco, 2018).

The structural dimension of bonding social capital has been evaluated in 2 studies: “How often are you in contact with friends and neighbors, respectively?” (Nygqvist, 2016), “How often do you socially meet with friends, relatives or colleagues?” (Pinillos-Franco, 2018).

The cognitive dimension of bridging social capital has been evaluated in 3 studies: “Would you say that most people can be trusted or you can’t be too careful?” (Marbuah, 2016), “It is better not to trust anyone.” (Nygqvist, 2016), “Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?”, “Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?”, “Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?” (Pinillos-Franco, 2018).

The structural dimension of bridging social capital has been evaluated in 2 studies: “How active are you when it comes to association activities?” (Nygqvist, 2016), “Apart from special occasions such as weddings and funerals, about how often do you attend religious services nowadays?” (Pinillos-Franco, 2018).

The cognitive dimension of linking social capital has been evaluated in 2 studies: “Most of the time we can trust people in government to do what is right (Marbuah, 2016), “Have you worked in a political party or action group in the last 12 months?”, “Compared to other people of your age, how often would you say you take part in social activities?” (Pinillos-Franco, 2018).

The structural dimension of linking social capital has been evaluated in 2 studies: “Political party affiliation”, “The last five years, have you (a) given money to an environmental group”, (b) taken part in a protest or demonstration about an environmental issue?” (Marbuah, 2016), “Have you worked in a political party or action group in the last 12 months?”, “Compared to other people of your age, how often would you say you take part in social activities?” (Pinillos-Franco, 2018).

The results of this literature review reveal a trend, pointed out and criticized by a number of authors, of forming a social capital structure from different elements and using different questionnaires to assess these elements (Claridge, 2018, Haynes, 2009).

A restriction for this literature review, which may affect the results of the review, is a non-involvement of an independent researcher in the process of study identification, selection, data extraction and methodological quality evaluation.

Conclusions

Systematic search identified cross-sectional studies, with nationally representative samples from European countries, where each study assessed following social capital elements: either trust and sense of belonging, or trust and affiliation. By analyzing the studies, included in the literature review, we can conclude that there are few studies assessing, in the same study, both trust and sense of belonging, or trust and affiliation.

The social capital is conceptualized by defining determinants of social capital at the micro level (individual) and macro level (society). Manifestations are evaluated at both micro (individual) and macro (society) levels.

Operationalized elements cover types of bonding, bridging and linking social capital, and the cognitive and structural dimensions. From different questionnaires are used different questions to assess the social capital elements.

In order to promote a common understanding of social capital conceptualization, it is necessary to continue to compile and analyze existing studies by identifying social capital studies in different fields of science.

Gratitudes

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