

# Inequality and individuals' social networks: the other face of social capital

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Social capital is a controversial concept, which is used in economics as a generic form of pro-sociality and a simple means to introduce the social context into mainstream approaches. However, the accepted view underestimates social conflict and does not properly characterise social capital as an asset. When considering these issues, a different face of social capital emerges, one that can be associated with closure and privilege maintenance. This paper studies how access to and the extraction of social network resources depend on the social structure. By analysing data from a survey that included a position and a resource generator, we find that for the case of Spanish society, people endowed with high levels of economic and human capital enjoy improved accessibility and networks with a high prevalence of instrumental relations. There is essential inequality in the endowment of social capital, which augments economic inequality. When inequality is socially embedded, traditional redistributive policies may have limited effectiveness.

*Key words:* Social capital, Inequality, Social stratification, Lin's model, Bourdieu  
*JEL classifications:* A14, D39, Z13

## 1. Introduction: social capital—between vagueness and artificial success

This paper analyses the distribution of social capital in society and how it is intertwined with other forms of capital and the social structure. The study of the relationships across these variables is essential for a better understanding of social stratification because both economic wealth and social attributes are distinctive individual characteristics (Bourdieu, 1986; Darity et al., 2014). Indeed, addressing this issue is key to appraising the extent to which economic inequality is socially embedded in Spanish society. Dealing with inequality in the endowment of social networks requires the consideration of the institutional context and of individual attributes, such as inherited inequality, inequality derived from personal investment processes, and the interrelations between economic and human capital that can make these inequalities self-replicating (Loury, 2002; Ostrom and Ahn, 2003; Rungo and Pena-López, 2019).

Due to methodological problems and the ambiguities within the accepted definitions in the field of economics, social capital has been the least studied of the different

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forms of capital, despite being a key aspect for understanding social functioning (Das, 2006; Andriani and Christoforou, 2016; Membiela-Pollán and Pena-López, 2017). Within the framework of mainstream theory, the concept of social capital has been heavily influenced by the work of Putman and the ‘macro’ or ‘culturalist’ approach. According to this author, social capital refers to ‘features of social organisation such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit’ (Putnam, 1993, p. 67). This conventional definition has been adopted with slight differences by other authors. For instance, Inglehart identifies social capital with ‘a culture of trust and tolerance, in which extensive networks of voluntary associations emerge’ (Inglehart, 1997, p. 188). Brehm and Rahn (1997), for their part, define this form of capital as the capacity of a community to solve collective problems cooperatively. In a similar vein, Fukuyama (1995) describes social capital as ‘the ability of people to work together for common purposes in groups and organisations’.

From this standpoint, social capital appears inclusive and expresses a generic form of pro-sociality. Usually, its effects have been reduced to transaction cost reductions (Paldam, 2000), and it has been considered positive in terms of good social functioning. Participation in voluntary associations has been shown to enhance social trust, generate civic awareness, foster cooperation and, finally, contribute to the development of an integrated community (Dasgupta and Serageldin, 2001; Sobel, 2002). Following this line, social capital is proxied in many empirical works by general trust and the prevalence of associative networks (Putnam, 1993, 2000; Dasgupta and Serageldin, 2001; Woolcock, 2001; Sabatini, 2008).

This concept of social capital enabled the introduction of social processes into economic analysis from a functional perspective without calling into question the foundations of neoclassical economics. However, this approach has been questioned by a few critical voices (Solow, 1999; Arrow, 2000; Manski, 2000; Fine, 2001, 2010; Das, 2004, 2006; Nakhaie et al., 2007; Christoforou and Davis, 2014) because, among other reasons, it misses at least two critical issues.

First, this approach systematically underestimates or even neglects social conflict (Duncan, 2002; Das, 2006; Fine, 2010). Society is structured into groups, and intragroup ties do not necessarily imply relations among different groups. The structure and the segmentation of the alleged pro-sociality are both relevant. Indeed, networks can act as a social closure mechanism and limit access for the outsider. Race, ethnicity, religion, language or the simple confluence of economic interests are often the basis for many real-world market and non-market exclusions (Quibria, 2003). Additionally, the outcomes generated by personal networks and associationism are not homogeneous; they depend on the internal structure of power relations (Martin, 2009). In this regard, Das (2006) proposed the concept of ‘class social capital’. Trust, reciprocity, networks and social organisations may present specific features and effects for each social class (Pena-López and Sánchez-Santos, 2017A). For example, for the working class, mutual aid systems and neighbourhood and proximity relationships constitute a form of capital that is mainly related to expressions of bonding and strong ties (Migheli, 2017).

Second, the macro and, at least in part, the class social capital perspectives do not help to characterise social capital as a proper form of capital, that is, a durable asset, the result of an investment and accumulation process, subject to depreciation and capable of generating returns. This is a critical shortcoming, mainly because characterising

social capital as a form of capital becomes a suitable analytical tool for explaining the exercise of economic power within a class system.

When considering these two abovementioned issues, a different face of social capital emerges, which can be addressed by adopting the model of Lin (Lin, 1999A, 1999B, 2008) as a starting point. According to this model, social capital can be considered a form of personal investment constrained by the social structure and other contextual factors such as working time or the cultural environment. The accumulation of social capital is linked to individual outcomes, life chances and opportunities. Hence, people may voluntarily take advantage of membership in social networks to hoard existing opportunities and exclude non-members. From this view, social capital can be associated with closure, exclusion and the maintenance of privilege.

From a micro perspective such as that which underlies Lin's model, individual networks might be seen as a means of production and, therefore, as a form of durable and culturally embedded capital. For example, as discussed by Van der Gaag and Snijders (2004) or Lin (1999A, 2008), social connections may facilitate the achievement of both instrumental (e.g., income, status) and expressive (e.g., recognition, mutual aid) personal goals and access to the most valuable resources depends on one's position in the social structure. Social, economic and cultural capital constitute a persistent source of differentiation (Bourdieu, 1986; Devine, 1998; Savage et al., 2005; Breen and Yaish, 2006; Doob, 2013). Therefore, the study of socioeconomic stratification requires an examination of how these forms of capital interrelate to reinforce a reproduction schema.

This paper aims to contribute to the social capital debate, particularly concerning its relationship with other forms of capital, its embeddedness in the social structure and the role of individual decisions in its development. Within this debate, we attempt to assess how social capital is distributed within Spanish society, considering its many dimensions, from accessibility to different social positions, the mobilisation of resources embedded in social networks and types of associationism. Anticipating the results, Spanish society appears divided into two groups, which differ in all dimensions of social capital but, primarily, in their degree of access to a range of social positions. We show how belonging to one of these groups is associated with other forms of capital, namely, economic and human capital, and to the positions of individuals within society. Previous literature has dealt with the relationship between social capital, cultural capital and class using the neo-Weberian class model (Goldthorpe and Marshall, 1992; Savage et al., 2005; Bennett et al., 2008; Crompton, 2008; Pichler and Wallace, 2009; Savage, 2010, 2013). We add to this literature by considering, for Spanish society, dimensions that, unlike the commonly used measures of social trust and civic participation, are more focused on social connections and the networks to which people have access.

This paper presents empirical findings for Spanish society. The consequences of the Great Recession in Spain make this society a compelling case study. The social and economic impact of this crisis has been especially strong in Spain compared to other European countries. For example, the Spanish unemployment rate increased from 8.2% in 2007 to approximately 25% in 2014. From 2009 to 2014 alone, the economy lost 3.2 million jobs (from a total of 17.2). According to the AROPE indicator (Llano Ortiz, 2015), in 2014, 29.2% of people in Spain were at risk of poverty or social exclusion (Jaraíz and Vidal, 2014). At the same time, however, Spain experienced a

paradoxical increase in trust in other people (Bolancé et al., 2018). Social capital and personal connections are, in fact, significant in this society.

The rest of the paper is structured as follows. The second section focuses on the delimitation of the concept of individual social capital, giving a central role to Lin's model as the theoretical framework from which we derive our main hypothesis on the link between social capital and stratification. The empirical analysis is presented in the third section. Finally, Section 4 concludes and discusses the main results and implications.

## 2. Individual social capital: the model of Nan Lin

According to Nan Lin, social capital is the set of social ties that make it easier for individuals to achieve market and non-market objectives as a product of interactions with other individuals (Lin, 2000, 2001, 2008). Social capital thus refers to the ability of individuals to obtain scarce resources through membership in a particular social network, namely, to extract value from connections that can be mobilised (Lin, 1999A).

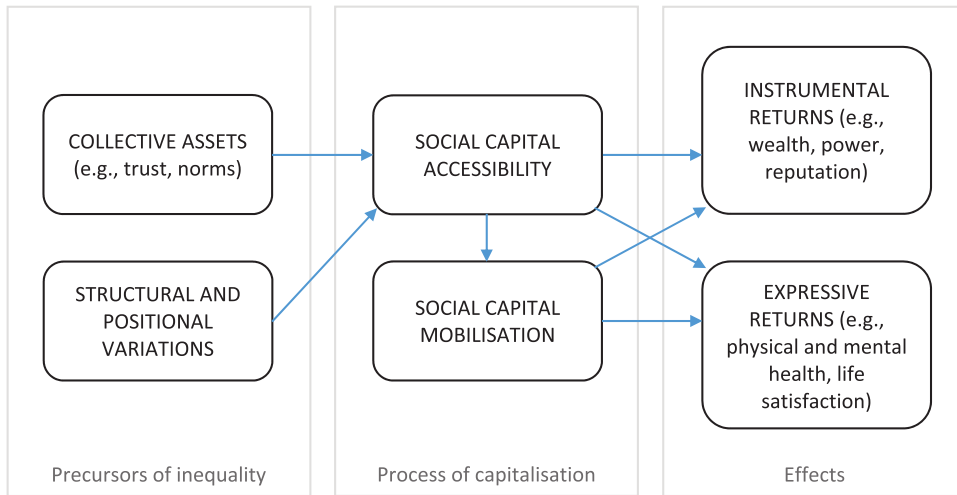
This definition emphasises the idea that social capital inheres in a social network and, simultaneously, is embodied in personal agendas (Narayan and Pritchett, 1997; Burt, 2001). Indeed, social capital belongs to individuals to the extent that they may extract resources from a network; however, it is also a property of the group into which the individual is integrated, provided that all members and, indirectly, society may perceive positive or negative externalities<sup>1</sup>.

Delving into the analogy with other forms of capital, social capital so defined is durable, transferable and accumulable (Woolcock, 2001; Robinson et al., 2002; Waldstron and Svedsen, 2008). Additionally, it generates a yield: a flow of material or immaterial outcomes associated with life chances and opportunities. Finally, it is also alienable: it is transferred, inherited and is often an object of exchange (Robinson and Ritchie, 2010). As such, it is closely associated with social stratification.

Lin (1999A, 1999B, 2001, 2008) provides the structure of a causal model that links the precursors of social capital to its outcomes (Figure 1). One's position in the social structure, as well as other contextual determinants such as social trust, influences the capitalisation process. These precursors are expressions of previous inequality and existing social stratification and act as constraints in the formation of social ties. Even though Lin does not explicitly consider the class structure of society, he shares an emphasis on the structural constraints on social behaviour with the neo-Weberian analysis of class stratification: the structural location people are born into shapes their choices and life chances.

Concerning the process of capitalisation, Lin distinguishes between access to and the mobilisation of resources (Figure 1). Accessibility constitutes individual social capital as long as it reflects the social positions that a particular subject can access. Mobilisation refers to the effective use of these accessible social ties or the effective extraction of resources through social networks (Lin, 1999A, 1999B). Mobilisation thus

<sup>1</sup> To some extent, it is also a form of public good or, depending on the degree of closure, a good for either a club or an interest group. It follows that not all expressions of social capital have to be socially beneficial (the Mafia, networks of corruption, trading in influence, etc.).



**Fig. 1.** Lin's model of individual social capital. Source: Own elaboration based on Lin (1999A).

depends on accessibility but also on the composition of the networks and the social structure (Flap and Volker, 2001; Verhaeghe et al., 2015).

Following Lin, it is possible to differentiate between expressive and instrumental mobilisation. Expressive mobilisation is usually provided by strong social ties and contributes to maintaining existing resources (e.g., domestic care). Mainly, it tends to exert its effects on subjective well-being and health (Pena-López and Sánchez-Santos, 2017B). Instrumental mobilisation, however, is more sensitive to status and contextual variables; it is usually linked to weak social ties and results in economic (e.g., income), social (e.g., reputation) or political (e.g., hierarchical position) returns. In this case, the ability to mobilise resources is mostly associated with improved human capital and instrumental outcomes (Martin, 2009; Pena-López and Sánchez-Santos, 2017A).

Lin's model stresses the formation of social networks within a system of constrained individual choices in which one's initial position in the social structure, economic condition and level of human capital act as critical constraints. This model resembles, in part, a rational decision-making approach à la Coleman (1988), who defines social capital as a resource, a public good that exists in relation to its effects on individual behaviours<sup>2</sup>. According to this approach, individuals rationally choose to invest in and take advantage of social ties to maximise their expected returns (Coleman, 1988). In this way, individuals create networks by seeking their interests, and social capital thus resides in these structures of instrumental relations among people.

However, in emphasising what are called the precursors of social capital, Lin does not exclude a perspective more attentive to the social structure and the contextual determinants. Bourdieu's (1986) definition of social capital as the sum of the actual or potential resources that are linked to the possession of a durable network of more or less institutionalised relationships is particularly close to Lin's. However, for Bourdieu, economic, social and cultural capital result from strategic investments and constitute dimensions of competition across individuals and groups, which are inherited

<sup>2</sup> In this definition, Coleman is integrating Loury's (1987) and Granovetter's (1986) proposals.

through a process of socialisation. Members of society are not perceived as making continuous cost-benefit calculations because individual practices can arise from non-maximising behaviour linked to class divisions and power relations (Fine, 2001; Adam and Roncevic, 2003).

Nevertheless, in a comprehensive reading of ‘notes provisoires’, social capital is interpreted as a form of capital that does not necessarily contradict rational choice (Bourdieu, 1980; Bourdieu and Wacquant, 1992; Eloire, 2017; Odabas and Adaman, 2018). An agent’s position in society, for Bourdieu, depends on the distribution of economic, cultural and social capital and by the particular environment in which interactions take place (Odabas and Adaman, 2018), what Bourdieu (1991) denominated the ‘legitimate principles of the field’. The rational choice approach overlooks how preferences are shaped through cognitive construction (field and habitus). However, a more holistic perspective does not crowd out rational choice as one possible modality of action. Rational choice will rule if the logic of the field makes such kinds of action legitimate and can then be a form of habitus (Odabas and Adaman, 2018).

As already discussed, Lin’s approach emphasises individual agency and instrumental action, but at the same time, it also allows the introduction of the social structure as a determinant of personal choices about social capital. The unilateral rational choice perspective can thus be abandoned in favour of a consideration of the effects that field and habitus can exert on social stratification in a capitalist society.

Concerning stratification, Lin does not adopt a closed class structure. In Bourdieu, social capital is an instrument of the dominant class, who engage in mutual recognition to preserve their position. Therefore, closure is almost an assumption. To Lin, however, network closure is not a distinctive feature of social capital. Closed and antagonistic classes are replaced by layered or stratified strategies determined by structure and incentives (Lin, 1999A), where social and economic factors play a role.

Accepting Lin’s assumptions, the social structure affects social capital endowments through three channels. The initial position in the social structure plays a binding role in individual decisions through three channels. First, the expected returns to investments in social networks and, consequently, the endowment of this form of capital can be affected by choices driven by homophily (Völker and Flap, 1999; Lin, 2001; McPherson et al., 2001; Blossfeld, 2009). Second, if income depends on one’s stock of social and human capital and their interactions, returns on investments in schooling and social networks are higher for individuals whose parents are endowed with higher levels of education and social capital (Rungo and Pena-López, 2019). Finally, the structural location may impose, by habitus and shared beliefs, preferences regarding social ties and associationism.

In other words, the social structure constitutes a critical constraint in which personal choices are rooted. Social capital investment strategies are not exclusively motivated by rational choice: choices are also dependent on the class-conditioned embodied dispositions of background and socialisation and the possibilities within a given field of activity (Law and Mooney, 2006).

These three mechanisms allow members of upper-class groups to receive a greater endowment of accessible networks, which permits them to mobilise high-valued instrumental resources. This greater accessibility also implies a greater return to investments in social networks, which in turn results in greater involvement in social

networks (Hodgkinson and Weitzman, 1996; Wilson and Musick, 1998; Van Oorschot and Arts, 2005) and in addition, or as a consequence, greater social trust (Delhey and Newton, 2003; Letki, 2003; Van Oorschot and Arts, 2005). In contrast, the lower strata of society have less extensive, less profitable and more informal networks (Lin, 2000, 1999B).

The arguments outlined above lead us to hypothesise that the social structure significantly influences the formation of individual social capital, that is, one's personal endowment of social networks. People belonging to the upper strata of society and endowed with high levels of economic and human capital enjoy improved access, and their social networks are characterised by the high prevalence of resources associated with instrumental relations. Indeed, the social structure is reflected in the concentration of social capital in the upper strata of society.

### 3. Inequalities in networks of relationships: an empirical analysis applied to Spanish society

#### 3.1. Data and variables

Data were collected through the administration of a questionnaire to a representative sample of the Spanish population. This social capital survey was carried out in November 2011 on a universe of people aged 18 and older living in Spain and a sample size of 3400 personal interviews (sample error:  $\pm 1.7\%$ , at 95.5% confidence level ( $z = 2$ )). The survey was administered by computer-assisted telephone interviews (CATI). In each geographical area (Spanish Autonomous Community), there was a proportional distribution of the interviews according to the size of the municipality. The sample has also been weighted by gender and age.

We used a two-step analysis to develop a set of individual social capital scores for each respondent from the survey (descriptive statistics are presented in Table 1). First, we collected data on individual social capital (accessibility and mobilisation) and associationism. In particular, accessibility was measured by employing a position generator of 14 questions, where people were asked about their contacts (family, friend or acquaintance) within a set of occupations with different levels of prestige in Spanish society.

In the case of mobilisation, we made use of a resource generator, also of 14 questions, that reflects the effective mobilisation of social resources, both expressive and instrumental, as proposed by Van der Gaag and Snijders (2005 and 2008). The types of resources cover fields such as family, work and leisure and range from strictly material resources (e.g., the loan of money or a particular good) to intangible resources (e.g., information, influence or love). In this way, questions about accessibility and mobilisation are considered separately with two instruments (Pena-López and Sánchez-Santos, 2017A) (see the Supplementary Appendix for further details).

Regarding general social capital variables, we consider a battery of questions about participation in civic and religious associations (unions, sports associations, NGOs, etc.) that allow us to measure levels of associationism.

Second, with our set of data, we develop individual social capital indicators. Using scores derived from principal component analysis, we built five indicators of social

**Table 1.** Variables and descriptive statistics

Variable	Mean	Std. Dev.
Social capital measures		
Accessibility	0.341	0.269
Expressive mobilization	0.629	0.201
Instrumental mobilization	0.447	0.275
Secular associativism	0.228	0.109
Religious associativism	0.292	0.125
Trust	0.425	0.494
Education		
Primary or none	0.256	0.436
Secondary	0.454	0.498
University	0.298	0.458
Income group		
1 (0€-999€)	0.284	0.451
2 (1000€-1499€)	0.195	0.396
3 (1500€-1999€)	0.180	0.384
4 (2000€-2999€)	0.196	0.397
5 (3000€ +)	0.145	0.353
Social class		
Working class	0.399	0.490
Intermediate	0.271	0.444
Salariat	0.330	0.470
Social class-reference parent		
Working class	0.427	0.495
Intermediate	0.398	0.490
Salariat	0.175	0.380
Age group		
1 (18–24)	0.066	0.248
2 (25–34)	0.106	0.308
3 (35–44)	0.196	0.397
4 (45–54)	0.196	0.397
5 (55–64)	0.164	0.370
6 (65+)	0.271	0.445
City	0.385	0.487
Female	0.583	0.493

Source: Own elaboration from the survey.

capital<sup>3</sup>: accessibility, expressive mobilisation, instrumental mobilisation, religious associationism and secular associationism.

The variable *Accessibility* measures access to a set of diverse social positions. In particular, the results of the factor analysis point to the existence of a single dimension (see the Appendix). In other words, all the variables in the position generator load onto the same factor, thus implying a lack of trade-offs in access to different social positions.

Variables related to mobilisation measure the effective use of network resources. Factor analysis, as applied to the results of the resource generator, reflects the existence

<sup>3</sup> Because the original variables are not continuous (0–1), all indicators have been obtained by factor analysis with tetrachoric correlations (Freibert et al., 2013), and all dimensions have been normalised to be between 0 and 1. The obtained results provide the set of scores for individual social network endowments and associationism that is presented in Table 1.



of two dimensions, in line with Lin's model, and a trade-off between them. A group of variables more closely linked with expressive resources (e.g., help with childcare or the eldercare, or domestic arrangements) load onto the first dimension: *expressive mobilisation*. The rest of the variables, which are linked with instrumental resources (e.g., assistance in dealing with public administration or help that requires specific fiscal knowledge), load onto the second dimension: *instrumental mobilisation*. Following Lin, expressive mobilisation is more closely related to the preservation of existing resources, particularly those in the domestic sphere. Negatively correlated with the first, the instrumental dimension is more closely connected to economic achievements and social status (Pena-López and Sanchez-Santos, 2017A, 2017B).<sup>4</sup> The negative correlation between expressive and instrumental mobilisation is not surprising if the opportunity cost of individual investments in social networks is considered. Investment in the development of a particular network (e.g., instrumental) has costs in terms of the development of alternative networks (expressive); i.e., there is a trade-off. Investing in weak social links has a cost in terms of strong family relations.

Using the same data reduction technique, we identified the factors reflecting the greater or lesser integration of individuals into these associative networks. In this case, factor analysis reveals the existence of two dimensions (see Figure A2 in the Appendix). On the one hand, there is a secular dimension (*secular associationism*) in which belonging to trade unions, political parties or to general associations focused on the defence of particular interests scores strongly. On the other hand, integration into religious associations (*religious associationism*), which are the most traditional form of associationism in Spain, constitutes a separate factor. Sports, cultural associations and NGOs are located in an intermediate position that charges on both factors. These are more expressive forms of associationism (Pena-López and Sánchez-Santos, 2017B).

We also incorporate general trust into the analysis, which, as discussed, is the most common and accepted expression of social capital. *Trust* is measured as a dichotomous variable that takes on the value 1 when respondents declare that 'it is possible to trust the majority of people'.

Regarding economic conditions and the social structure, we consider *income* and *social class*. *Income* refers to household income and is measured by bins in the survey; in particular, five groups with a monthly net income are considered, with the reference category being 0–999 euros. In our models, due to a lack of more appropriate indicators, this variable is also employed as a proxy for economic capital.

Finally, to capture the social structure in which the individual is embedded, we make use of a neo-Weberian occupation-based concept of social class for individuals and their fathers (*social class*). We consider both the class of the individual and the class of the parent of reference during childhood (*social class-reference parent*). In particular, by adopting the reduced Goldthorpe class scheme, people are classified according to their occupations into the working class, the intermediate class and the 'salaried'. This approach is closely related to the problem of 'opportunity hoarding' within the analysis of stratification. Indeed, it implies that the economic conditions of people are inherently relational, and it is thus appropriate for the study of conflicts over the distribution of resources (Wright, 2015).

<sup>4</sup> As per the Lin interpretation, which follows Granovetter (1986), expressive mobilisation is commonly provided by strong ties, whereas instrumental mobilisation is provided by weak ties. Thus, weak ties facilitate high-valued non-redundant resources.

Additionally, the respondent's level of education is measured by the categorical variable *education*, from which the dichotomous variables *secondary education* and *university education* are derived. In our models, this variable is considered a proxy for human capital.

The analysis also includes other demographic and socioeconomic variables, such as *sex*, *age* and *habitat*. Due to data availability, age was measured with age groups, as defined in Table 1, with the age group 18–24 as the reference category. *City* captures the respondent's habitat and takes on the value one when the respondent lives in an urban environment with more than 100,000 people.

### 3.2 Empirical strategy

The empirical strategy is designed to analyse the relations between the social structure and social capital, human capital and economic capital. First, we study how people are divided in terms of their endowments of social capital. To this end, after a preliminary observation of the correlations between the different dimensions of social capital, we apply cluster analysis. The results clearly show a division into two groups, the first with high accessibility and relatively more intensive instrumental resources and the second with low accessibility and relatively more intensive expressive resources. Second, we use a logit regression to analyse the associations between belonging to the high accessibility group and income, human capital and social class.

## 4. Results and discussion

A preliminary analysis of the Pearson correlations between the abovementioned dimensions of social capital allows us to identify some important features concerning the social structure of the personal endowment of social networks (see Table 2).

We observe a positive correlation (Pearson's  $\rho$ : 0.48) between *accessibility* and *instrumental mobilisation*, whereas the correlation between *accessibility* and *expressive mobilisation* is also positive and statistically significant but low (Pearson's  $\rho$ : 0.16). Additionally, the correlation between *instrumental* and *expressive mobilisation* is moderate and negative (Pearson's  $\rho$ : -0.28), a trade-off in line with what is known as Baumol's disease of relational goods (Becchetti et al., 2008, 2009; Pena-López and Sánchez-Santos, 2017B). Hence, higher accessibility is correlated with improved mobilisation, primarily

**Table 2.** Pearson correlations of individual social capital dimensions

	Accessibility	Mobilisation		Associationism	
		Expressive	Instrumental	Secular	Religious
Accessibility	1	.164**	.482**	.283**	.158**
Expressive mobilisation	.164**	1	-.279**	.071**	.004
Instrumental mobilisation	.482**	-.279**	1	.188**	.104**
Secular associationism	.283**	.071**	.188**	1	-.192**
Religious associationism	.158**	.004	.104**	-.192**	1

\*\*Correlation is significant at the 0.01 level (2-tailed).

Source: Own elaboration.

Table 3. Post-hoc ANOVA on the cluster classification

	Cluster	Error	F	Sig.
	Mean square	Mean square		
Accessibility	87.616	0.046	1,894.594	0.000
Expressive mobilisation	1.188	0.040	29.620	0.000
Instrumental mobilisation	196.050	0.018	10,801.357	0.000
Secular associationism	1.996	0.011	175.196	0.000
Religious associationism	0.727	0.016	46.676	0.000

Source: Own elaboration from the survey.

instrumental mobilisation. However, given the negative correlation between the two dimensions of mobilisation, it appears that people with low accessibility may still enjoy some degree of expressive mobilisation.

Regarding *secular associationism*, we find a moderate, positive correlation with *accessibility* (Pearson's  $\rho$ : 0.28). However, the correlations between *religious associationism* and *accessibility* and *instrumental mobilisation* are both positive but very low. Improved associationism thus appears to be weakly correlated with the other forms of social capital, though correlations point at a possible association with higher accessibility.

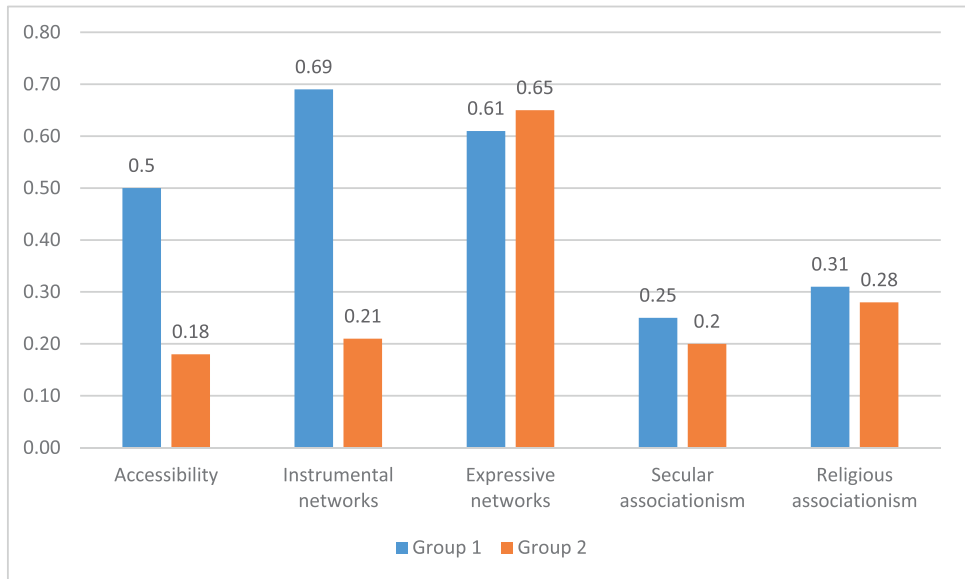
To analyse how people are grouped in terms of the different dimensions of social capital, we carried out a cluster analysis. As shown in Table 3, all social capital dimensions appear to be relevant to the composition of groups. However, *accessibility* and *expressive mobilisation* seem to account for the bulk of the differences between groups.

The cluster analysis allows for the identification of two identically sized and divided social groups, marked by their inequality in individual social capital endowments (see Figure 2). Group 1 enjoys high accessibility and high mobilisation, though it is more intensive in instrumental relations. Group 2 is relatively more intensive in the mobilisation of expressive resources, and it is characterised by low accessibility.

In particular, the level of accessibility of the group that is more intensive in instrumental mobilisation is more than double that of the second group. Moreover, the level of instrumental resources is more than three times higher than that of the second group. Regarding expressive resources, there were no significant differences between the groups.

To a lesser extent, both groups also differ in terms of membership in associations, with Group 1 presenting greater associationism. The lower capacity to discriminate between groups calls into question the validity of formal expressions of associative participation as proxies for personal endowments of social capital.

To clarify the interrelationships between social capital and other forms of capital and, more specifically, the ability to transform a particular form of capital into another form, we explore the factors that influence the probability of belonging to the high-accessibility group. Figure 3 offers a first, descriptive approximation of this issue without controlling for personal attributes that might also be associated with individual social capital endowments. People in Group 1 (high accessibility and high intensity in instrumental relations) present higher levels of income and education, and they are more likely to belong to the upper classes. This result suggests that social networks are embedded in the social structure.



**Fig. 2.** Group 1 (instrumental resource-oriented group) vs. group 2 (expressive resource-oriented group); means by group. Source: own elaboration from the survey.

We completed this analysis of the relationship between social structure and social capital endowments with the estimation of a series of five models to assess the relevance of all forms of capital as determinants of the probability of belonging to Group 1. The results are presented in [Table 4](#).

Model 1 and Model 2 include the other forms of capital, proxies for socioeconomic status and sociodemographic controls as explanatory variables. The estimates show that higher levels of education and income increase the probability of belonging to the high-accessibility group.

Compared to primary education (or no education at all), the average marginal effect on the probability of belonging to Group 1 associated with secondary education is a 7 percentage-point increase. Moreover, the effect associated with having a university education is a 17.4 percentage-point increase. When considering income, we observe a similar pattern. A significant and increasing effect is observed starting with the third income group (interval 1500–1999 euros). The expected difference in the probability of being in Group 1 associated with the highest income group is a 20.8 percentage-point increase. Social class also plays a significant role. Belonging to the salariat is associated with a 15.5 percentage-point increase in the probability of enjoying high accessibility and networks that are more intensive in instrumental resources. To check the robustness of the results for education and economic status, Model 2 removes *income* as an independent variable. As shown in [Table 4](#), the variable *income* suffers from a very high non-response rate. The main difference from model 1 is that the effects of education and class are more significant, possibly due to their association with income.

Regarding controls, in line with the existing literature, generalised trust is positively associated with belonging to the high-accessibility, instrumental resource-intensive group ([Pichler and Wallace, 2009](#)). Additionally, we observe that the only age group with a significant effect corresponds to retirement age in Spain. Social networks in the workplace seem to account for a relevant part of instrumental resources.

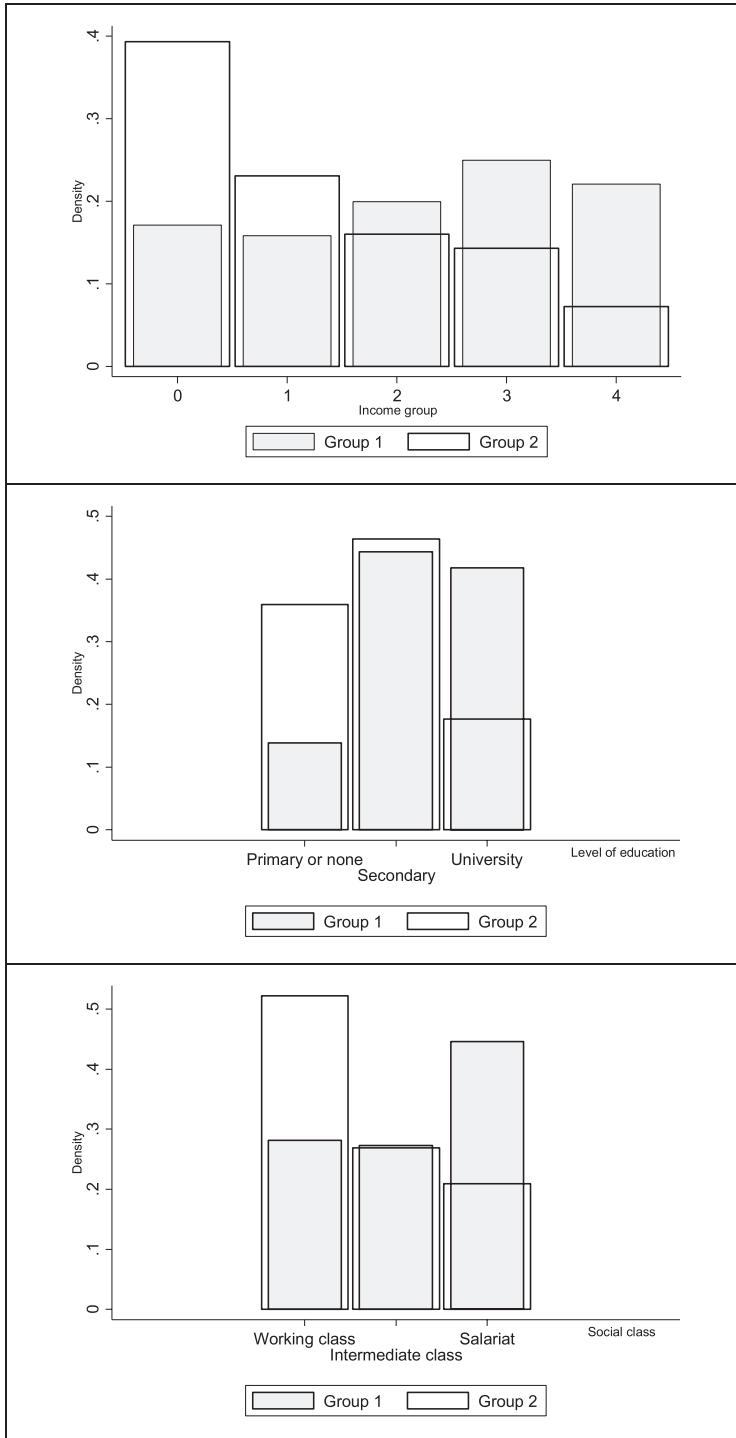


Fig. 3. Distribution of income, level of education and social class by social capital group. Source: own elaboration.

**Table 4.** Determinants of the probability of belonging to Group 1. Binary logistic models (average marginal effects)

	1.a	1.b	2	3.a	3.b
	<i>dy/dx</i>	<i>dy/dx</i>	<i>dy/dx</i>	<i>dy/dx</i>	<i>dy/dx</i>
Education					
Secondary	0.070 **	0.104 ***		0.062 **	0.092 ***
University	0.174 ***	0.229 ***		0.151 ***	0.200 ***
Income group					
2	0.031			0.039	
3	0.132 ***			0.134 ***	
4	0.154 ***			0.148 ***	
5	0.208 ***			0.202 ***	
Social class					
Intermediate	0.107 ***	0.118 ***		0.099 ***	0.112 ***
Salarial	0.155 ***	0.206 ***		0.15 ***	0.195 ***
Social class-parent					
Intermediate			0.061 ***	0.034	0.018
Salarial			0.229 ***	0.092 ***	0.090 ***
Trust	0.042 **	0.069 ***		0.043 **	0.069 ***
City	0.024	0.032	0.056 ***	0.021	0.031
Female	-0.002	-0.018	-0.042 **	-0.005	-0.021
Age group					
2	-0.097	-0.063	-0.007	-0.095	-0.058
3	-0.064	-0.048	-0.022	-0.055	-0.048
4	-0.075	-0.056	-0.031	-0.062	-0.050
5	-0.088	-0.099 **	-0.132 ***	-0.080	-0.096 **
6	-0.161 ***	-0.176 ***	-0.246 ***	-0.153 ***	-0.173 ***
N	2025	3079	3165	1954	2952
Wald chi2	272	359	205	266	346
( <i>p</i> -value)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Pseudo R2	0.113	0.100	0.053	0.114	0.101
Personal controls	Y	Y	Y	Y	Y
Trust	Y	Y	N	Y	Y
Education	Y	Y	N	Y	Y
Income	Y	N	N	Y	N
Social class	Y	Y	N	Y	Y
Social class-parent	N	N	Y	Y	Y

Source: Own elaboration from the survey. \*\*Significant at the 0.05 level; \*\*\*Significant at the 0.01 level.

To delve into the structural components of the determinants of social capital and to test the extent to which social origins determine the structure of social networks, Model 3 considers the social class of the reference parent as the only independent variable apart from the sociodemographic controls. The results show that coming from an upper-class family is associated with a 22.9 percentage-point increase in the probability of being classified as Group 1.

With the aim of testing the extent to which the effect of the social class of origin on social capital may pass on the intergenerational transmission of status and education, we estimate Model 4 and Model 5. When we consider education, income, social class and social class of origin together, as in Model 4, we still observe an independent effect of the class of the reference parent, suggesting that the echo of structural factors passes

through generations. The only difference between Model 4 and Model 5 is that the latter does not include *income* as an explanatory variable. The results of the estimation of Model 5 confirm that even when *income* is not considered, the associations between different forms of capital remain significant.

To summarise, Group 1 is the group with greater accessibility and a higher prevalence of instrumental social networks, and this endowment is linked directly with economic capital, human capital and location in the social structure. The social structure is crucially intertwined with social networks. In particular, people endowed with higher levels of education and income and in better social positions are more likely to enjoy improved access to social networks, particularly social networks with instrumental resources.

## 5. Conclusions

From the standpoint of mainstream social capital theory, i.e., the macro perspective, all social groups and classes enjoy access to social networks, and the effects of social capital reach all social groups. Indeed, these effects are usually considered positive in terms of good social functioning. However, access to and the extraction of resources from social networks through mobilisation are highly dependent on one's position in the social structure. A better understanding of how social networks are embedded within the social structure requires the study of the distribution and composition of social capital from a micro perspective. Along this line, this paper adopts the model of Nan Lin, who defines individual social capital as the set of networks that make it easier for individuals to achieve market and non-market objectives as a product of interactions with other individuals. Lin remarks on individual agency and, at the same time, permits the consideration of social structure as a determinant and constraint of personal choices.

Lin's model leads us to hypothesise that two mechanisms link social structure and the formation of individual social capital. First, there is an essential inequality in the endowment of network accessibility and mobilisation, primarily instrumental mobilisation. Second, this distribution is associated with the distribution of other forms of capital and the social structure.

For the case of Spanish society, we find that one's position in the class structure is significantly associated with the formation of individual social capital, that is, one's personal endowment of social networks. Additionally, the distribution of social capital reveals the existence of substantial inequality that is closely linked to economic and human capital endowments. People belonging to the upper strata of society and endowed with higher levels of economic and human capital enjoy improved accessibility, and their social networks are characterised by a high prevalence of resources associated with instrumental relations. Education, income and social background are crucially associated with both accessibility and the capacity to mobilise the instrumental resources embedded in social networks. Indeed, our findings are compatible with the idea that inequality in individual social capital augments economic inequality and may play a role in its temporal dynamics. When inequality is socially embedded, social capital contributes to its replication and progressive aggravation.

This evidence questions the so-called levelling effect of social capital at the macro level posed by Putnam. Further research should focus on the reproduction of social

inequalities as a form of the Matthew effect. This opens a perspective congruent with Bourdieusean class reproduction and with the evidence from Chetty et al. (2014) on the relationship between social capital and social mobility.

The results remark on the limited scope of traditional redistributive policies and the problems linked with socially embedded inequality. Regarding the future evolution of inequality, although improvements in human capital can be expected to promote equality, the potential impact will be strongly conditioned by initial disparities in terms of income and inherited social capital.

Our findings should be considered in light of several limitations. From a methodological point of view, the study is cross-sectional in design. Although it suggests that social structure may influence social capital distribution, it is also possible that social capital may affect economic and human capital. For this reason, we have focused on the associational character of the relationship and have not attempted to draw any causal conclusions. Additionally, our findings are culturally conditioned. Spain constitutes a kind of warm society (in the Tönnies sense) where strong ties and family are particularly relevant. This societal characteristic can influence the results and strengthen the relevance of social ties. Nevertheless, in all societies, inequality in social capital endowments is linked to the interrelations between the social structure and the accumulation of the different forms of capital. Finally, our analysis does not seek to obliterate or misinterpret the Bourdieusian discussion of the field and struggles for symbolic power. There are more dimensions to social capital dynamics, such as social change through collectives (organised labour and social movements), which may also rely on the resources of trust, cooperation and reciprocity that are central in definitions of social capital.

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### Supplementary data

Supplementary data are available at *Cambridge Journal of Economics* online.  
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