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Individual social capital and expectations of career advancement

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Abstract

This article studies the association between the characteristics of individuals' social networks and expectations of career advancement, including pay raises and job promotions. The literature has extensively documented the role of social capital as a determinant of labour market outcomes. However, the formation of expectations constitutes another critical path by which social ties may affect work through their influence on individual motivation and behaviour. This study attempts to explain the relationship between social capital and career-related expectations and empirically assesses these associations by employing data from a survey administered to a representative sample of the Spanish population. Our findings suggest that the ability to mobilise network resources is positively linked with both measures of career advancement. However, access to the upper class is only positively associated with expecting a pay rise. Additionally, for non-employed individuals, higher mobilisation is positively associated with the expectation of an increase in income.

Keywords: career expectations; career advancement; individual social capital; social capital; social class; social networks

Introduction: individual social capital and career advancement

This article studies the relationship between individual social capital, i.e., individuals' social networks, and expectations of career advancement. The main aim is to assess how the size and composition of personal networks and the capacity to mobilise network-embedded resources affect the short-run expectations of an individual's career advancement, which we measure by expectations of pay rise and job promotion.

Within the framework of a growing body of literature that has addressed the critical role of social networks in economic and social life, several studies have analysed the extent to which a person's social network affects his or her chances of being employed and achieving other labour outcomes (i.e., wages, status attainment) through the mechanisms of information, influence and social credentials (Jackson 2020, 2021; Lin et al 1981). The role of individual social capital as a potential determinant of labour market outcomes is well documented in both the economic (Bolte et al 2020; Burchardi and Hassan 2013; Calvo-Armengol and Jackson 2004; Jackson 2021; Montgomery 1991; Stone et al 2004) and the sociological literature (Bolíbar et al 2019; Bourdieu 1986; Burt 1992; Coleman 1988; Gayen et al 2019; Lin and Dumin 1986; Lin 1999a; Montgomery 1992; Mouw 2003; Podolny and Baron 1997; Seibert et al 2001; Vacchiano et al 2018; Vacchiano 2022). According to this literature, individual social capital is essential for careers, mainly because it boosts life

chances through access and mobilisation of instrumental resources (such as educational resources or opportunities in the labour market). More specifically, previous literature has examined the differential effects of strong and weak ties and the influence of the composition of social networks (Granovetter 1974; Lin 1999b; Vacchiano et al 2018; Vacchiano 2022), and networks established in the workplace (Podolny and Baron 1997) on job satisfaction and promotion chances.

However, this literature has mostly neglected another critical path by which social ties may exert an effect on work and employment, namely, their influence on individuals' expectations about their careers. This paper seeks to fill this gap by providing new insights in three main directions. First, it provides evidence showing that individual social capital endowments, measured as access to networks and the ability to mobilise resources, are associated with expectations about career advancement. Secondly, it shows that ties with people from the highest strata of society play a critical role in shaping expectations about pay rises. Thirdly, this work broadens the scope of previous studies by addressing the role played by networks not strictly related to the workplace environment. The influence of expectations on individuals' decisions and behaviours makes the research questions and findings of this research especially relevant (see e.g., Olson et al 1996). Moreover, the new insights provided by our analysis of expectations about career advancement will likely extend our understanding of how individual social capital influences success in the professional domain.

From an empirical point of view, evidence of the association between the characteristics of a person's individual social capital and his or her career expectations, has been limited by a lack of individual network data. Indeed, this paper employs a specific dataset to overcome the problem of obtaining specific instruments required to assess the size and composition of networks. To this end, we administered a survey to a representative sample of the Spanish population. The questionnaire included a position generator and a resource generator used to measure individual social capital, specific questions about employment and job-related expectations, class, class of origin, attitudes towards the role of effort, and other personal characteristics.

Our findings are compatible with a positive effect of individual social capital with the expectation of a pay rise or an increase in income. The ability to mobilise resources is a relevant factor that influences the expectations of pay raises and job promotions. However, access to the upper class, defined here as the group of individuals with occupations characterised by a service relationship, is only positively associated with the expectation of a pay rise for employed individuals. In other words, the ability to mobilise network-embedded resources appears to be the critical driver.

The rest of the article is organised as follows. Section 'Theoretical framework: individual social capital and expectations about career advancement' discusses the relevant literature and the theoretical framework. Section 'Data, variables, and empirical approach' presents the data, variables, and empirical approach. The results are presented in Section 'Results' and discussed in Section 'Discussion'. Section 'Conclusions' concludes.

Theoretical framework: individual social capital and expectations about career advancement

The social psychology literature defines expectations generically as 'beliefs about a future state of affairs, subjective estimates of the likelihood of future events ranging from merely possible to virtually certain' (Roese and Sherman 2007). In other words, expectations are the mechanism individuals employ to predict future outcomes from experience and knowledge. They reflect a 'subjective probability', and as such, they depend on individuals' perception of the likelihood of occurrence of an event.

This subjective assessment may alter individual behaviours and influence future outcomes. Social-cognitive career theory proposes that outcome expectations, along with self-efficacy and goal setting, drive career-related behaviours (Lent and Brown, 1996). Therefore, examining how individual social capital influences career expectations will likely extend our understanding of the drivers of professional success of well-connected individuals. Indeed, Creed *et al.* (2013) explain that self-efficacy (the belief about the capacity to carry out the tasks associated with the achievement of career-related goals) and outcome expectations influence career aspirations. They find a positive association between outcome expectations and career aspirations, as well as a positive association between career aspirations and career-striving behaviours, highlighting the possible mediating role of aspirations. Also, they suggest that the development of self-efficacy and outcome expectations is influenced by various factors, including personal characteristics and contextual factors like environmental experiences, past achievements, observational learning, role models, and support from others. Accordingly, in line with the general career advancement literature (e.g., Betz and Hackett, 2006), individuals with heightened self-efficacy and outcome expectations often have positive role models and receive appropriate support. In this context, the influence of individual social capital can be appreciated. In accordance with the perspective of authors such as Bourdieu (1973), Coleman (1988), Portes (1998) or Lin (1999a, 1999b, 2001), we consider social capital as an individual resource. By individual social capital, we mean the network of relations a specific subject has, the stock of social relations. The seminal works of Lin (1999a, 1999b, 2001) distinguish two dimensions of social capital: accessibility and mobilisation of the resources embedded in individual social networks. Accessibility refers to the number of agents or social positions that an individual can access. This dimension permits consideration of the size and the composition of networks and, thus, the stratification of social ties. Mobilisation, however, refers to the practical possibility of obtaining social resources (instrumental or expressive) related to the needs of network participants. Both dimensions are interrelated, but mobilisation emphasises a specific aspect related to the functioning of social networks. Access to other individuals does not imply an exchange of resources. Accessibility is linked to the extension of a network, which is influenced by social position and trajectory, among other factors. Mobilisation, however, is affected by access to different social circles but also depends on individual investments to participate actively in the exchange of resources, which, in turn, entails a set of determinants not relevant to simple accessibility. For example, Pena-López and Sánchez-Santos (2017) show that mobilisation is strongly linked to investments in human capital and is influenced by social stratification and an urban context. In other words, the ability to mobilise resources reflects the functioning of a 'market' of social resources, a flux of exchange and reciprocity and a specific, intentional investment in social networks. Therefore, the two dimensions of individual social capital may influence expectations differently. Indeed, accessibility is linked to social stratification and is strongly contextual. Mobilisation reflects an active management of the social environment and is linked to the exchange of resources. Comparing both indicators will allow us to consider the expectation generation mechanism and whether it is contextual or related to an intentional investment process in social relations.

Individual social capital and expectations: mechanisms of influence

The strand of the literature that follows Lin's approach (2001) identifies different mechanisms through which individual social capital in any of its dimensions (accessibility or mobilisation) may influence the formation of expectations: information, referrals, and shared norms. As discussed in this section, all these mechanisms directly or indirectly depend on the social structure.

First, social networks provide access to valuable information. Many theoretical studies have shown how connections to more educated or affluent individuals can be helpful channels for transferring information, shaping aspirations, and providing mentorship or job referrals (e.g., Chetty et al 2022). Career advancement requires proper training and development, but information on how to put this to its best use (the 'rules of the game') and opportunities to employ it, are crucial to success. Cross-cutting relationships and, particularly, relationships with individuals at the upper strata of society, may be a critical source of knowledge.

Secondly, more social contacts may imply more referrals, generating more options and bargaining power, which might improve the correlation of occupations and wages among friends (Calvo-Armengol and Jackson 2007). However, direct referrals are not always necessary to activate this mechanism. Being part of an upper-class network is a credential *per se*, and signals individual status, culture, and values (Brown et al 2016). In this way, even when individuals do not make explicit use of the network's resources (i.e. referrals), the class composition of their network may alter the probability of a career advancement or, at least, the subjective perception of a higher likelihood that is reflected in expectations.

Thirdly, social contact influences individual norms and behaviours. A membership group may affect personal values, including the belief that career advancement is feasible and desirable, as Jackson (2022) remarks. According to this author, social networks configure 'homophilic groups', which generate pressure that pushes people to have similar norms of behaviour, attitudes, and values. For example, there is a link between social networks and beliefs about the causes of income differences and the role of individual effort. Similarly, ideas about the causes of economic success may exert some influence on expectations and career prospects. Therefore, when close social contacts work in high-paying occupations, individuals may value status, high income, and occupational prestige more and feel pressure or the desire to set goals to 'keep up with the Joneses'.

At the same time, people internalise the norms derived from the social setting and tend to adhere to them. Social networks are a source of shared norms that can be a powerful motivation. Individuals want to fit in with their close social contacts and conform to group norms. For instance, according to Bénabou and Tirole (2016), just-world beliefs provide both motivations to act, and a sense that life is somewhat predictable. Accordingly, subjective beliefs have an essential instrumental value by enhancing 'self-efficacy', individuals' estimates of their capability to self-motivate, mobilise the necessary resources, and take the courses of action needed to exercise control over events in their lives (Wood and Bandura 1989).

In general, superior expectations can be deduced from the upper-class habitus and the occupations social contacts have. Individual networks may induce different attitudes related to the professional career depending on the position of its members on the occupational ladder. For instance, individuals in more favourable positions tend to overweight the role of personal effort and the ability for success. When this belief is shared within a social network, it may affect career expectations and aspirations. As (Bourdieu 1973, 83) suggested, superior expectations may be seen as a reflection of the unequal opportunity structure of society that 'determine(s) aspirations by determining the extent to which they can be satisfied'. Therefore, well-connected individuals, who relate with the upper classes, expect improved career-related opportunities by habitus.

These mechanisms stress the role of stratified social networks in shaping expectations of career advancement. Indeed, expectations are influenced by social networks and, mainly, by their composition: connections with the highest strata are critical.

The arguments outlined above concerning accessibility and mobilisation, and the mechanisms of influence of individual social capital, lead us to formulate the following hypotheses.

Hp. 1. The probability of expecting a pay rise or a job promotion is positively associated with higher access to the upper class.

Hp. 2. The probability of expecting a pay rise or a job promotion is positively associated with a higher capacity to mobilise resources embedded in social networks.

Data, variables, and empirical approach

The empirical part of this study used data collected through a survey. The questionnaire was based on previous research and aimed to capture structural components of personal networks, including access to individuals belonging to different social classes and the capacity of individuals to mobilise various resources embedded in social networks. The questionnaire was administered from April to June 2019 by employing randomised telephone contacts (computer-assisted telephone interviewing) by a research company with expertise in telephone interviews under our supervision. Multistage sampling was based on the seven Spanish territorial units and the characteristics of nature of where individuals live (urban vs. non-urban area), sex, and age. The sample ($n = 3000$) represents the Spanish population aged 18 years and older.

To study the role that individual social capital plays in shaping expectations, we excluded both students ($n = 245$) and retired individuals ($n = 860$), thus reducing the sample to employed individuals, unemployed individuals, and unpaid domestic workers. The percentage of employed individuals in the sample with respect to the number of individuals aged 18 years and older is 46.3%, while the percentage of unemployed individuals with respect to the same group is 9.4%. At the time of the interview, according to data from the Spanish National Institute of Statistics, employed individuals were estimated to be 48.17% of the total adult population, and the unemployed were approximately 7.6%.

From our sample, we also dropped 33 observations of respondents who did not answer questions about their expectations and other observations related to control variables (mainly self-reported educational level, $n = 81$, and belief in meritocracy, $n = 89$). The final sample included in the analysis comprised 1,224 employed individuals and 429 non-employed individuals.

On average, employed people included in the sample were 45.460 years old (s.d. 10.724), while non-employed individuals were 49.205 years old (s.d. 16.329). Regarding the level of education, 5.13% of the sample of employed individuals completed primary education or no formal education at all, 42.87% completed secondary education, and 52.00% had a university education, from 3-year technical schools or 'diplomas' to PhDs and postgraduate academic degrees. The same figures for non-employed individuals were 19.81%, 51.52%, and 28.67%, respectively. Table 1 presents the variables used in the analysis and descriptive statistics. The remainder of this section details the variables used in the analysis and the empirical approach.

Expectations

Expectations were measured by two questions about future pay raises and job promotions. Respondents were asked whether, during the following three years, they expected a pay rise (or an increase in income, depending on their labour relation and occupational status) and, separately, a job promotion (or an improvement in their category). A total of 39.45% of the employed sample expected a pay rise or higher income, while 21.76% expected a job promotion. Of the people who expected any advancement, 48.71% expected both a pay rise and a job promotion. The correlation between the two measures was positive, high, and

Table I. Variables and descriptive statistics

Variable	Description	Employed	Non-employed
		Mean (s.d.) or percentage	Mean (s.d.) or percentage
<i>Expectations</i>			
EXPECT PAY RISE	1 = the respondent expects a pay rise or an increase in income within the next 3 years; 0 = otherwise.	39.45%	20.05%
EXPECT CAREER ADV	1 = the respondent expects a career advancement within the next 3 years; 0 = otherwise.	21.76%	
<i>Individual social capital</i>			
SC ACCESS – UPPER CLASS	Upper-class social capital extension. Number of upper-class friends in the position generator.	0.920 (1.113)	0.639 (0.961)
SC ACCESS – INTERMEDIATE CLASS	Intermediate-class social capital extension. Number of intermediate-class friends in the position generator.	1.136 (1.099)	0.713 (0.988)
SC ACCESS – WORKING CLASS	Working-class social capital extension. Number of working-class friends in the position generator.	0.875 (1.144)	0.690 (1.056)
SC MOBILISATION	Social capital mobilisation. Number of resources in the resource generator that can be mobilised through friends.	4.755 (3.493)	3.723 (3.556)
<i>Individual characteristics</i>			
FEMALE	1 = The respondent declares to be female; 0 = otherwise.	50.53%	74.36%
AGE	Age in years.	45.460 (10.724)	49.205 (16.329)
URBAN	1 = the respondent lives in an urban area (at least 50,000 residents); 0 = otherwise.	55.01%	50.12%
UNIVERSITY EDU	1 = The respondent declares to have completed, at least, a university degree; 0 = otherwise.	52.00%	28.67%
SECONDARY EDU	1 = The respondent declares to have completed secondary education.	42.87%	51.52%
PRIMARY EDU	1 = The respondent declares to have completed primary education or declares no formal education; 0 = otherwise.	5.13%	19.81%
UNIVERSITY EDU – PARENTS	1 = The respondent declares that the adult of reference when young completed, at least, a university degree; 0 = otherwise.	16.05%	10.72%
SECONDARY EDU – PARENTS	1 = The respondent declares that the adult of reference when young completed secondary education.	33.99%	24.01%

(Continued)

Table I. (Continued)

Variable	Description	Employed	Non-employed
		Mean (s.d.) or percentage	Mean (s.d.) or percentage
PRIMARY EDU – PARENTS	1 = The respondent declares that the adult of reference when young completed primary education or declares no formal education; 0 = otherwise.	49.96%	65.27%
BELIEF IN MERITOCRACY	Degree of agreement with the statement: 'Hard work and personal effort, in general, do not cause success – it is more a matter of luck and personal relations'. (1 to 10, inverted scale).	6.630 (3.009)	6.044 (3.138)
UPPER CLASS	1 = The respondent is classified as upper (service) class; 0 = otherwise.	43.03%	
INTERMEDIATE CLASS	1 = The respondent is classified as intermediate class; 0 = otherwise.	32.11%	
WORKING CLASS	1 = The respondent is classified as working class; 0 = otherwise.	24.86%	
OVERQUALIFIED	1 = the respondent's level of education is greater than the median level of education of his or her occupational group (based on 1-digit Spanish National Classification of Occupations - CNO-); 0 = otherwise.	29.10%	
SMALL FIRM	1 = the respondent declares to work in a business with less than 10 employees; 0 = otherwise.	31.54%	
FULL-TIME EMPLOYEE	1 = The respondent is classified as full-time employee; 0 = otherwise.	71.96%	
PART-TIME EMPLOYEE	1 = The respondent is classified as part-time employee; 0 = otherwise.	8.80%	
BUSINESS OWNER OR SELF-EMPLOYED	1 = The respondent is classified as business owner or self-employed; 0 = otherwise.	19.24%	
DOMESTIC WORKER	1 = Non-employed respondent is a domestic worker; 0 = otherwise.		42.19%

statistically significant (tetrachoric $\rho = 0.856$; p value < 0.001). However, these measures may capture different dimensions of career advancement. A higher category is associated with improved status and class. However, a pay rise may not necessarily involve a new position in society. For a more precise interpretation of the results, it should be noted that almost all employed individuals (92.13%) who expected a category advancement also expected an associated pay rise. However, only 50.83% of employed respondents who expected a pay rise also expected to improve their category.

Non-employed respondents were only asked whether, during the following three years, they expected an increase in their income. In total, 20.05% of non-employed individuals expected a rise in income. Non-employed were not asked about possible job promotions.

Individual social capital

We analysed two critical dimensions of network social capital: accessibility and the mobilisation of network resources. Concerning accessibility, in line with the proposal of Erikson (1996) and the work of Wright (1985), we employed a class-based position generator, which permitted us to obtain information about the social class of the respondents' friends. The position generator is a widely used and tested instrument developed by Lin and Dumin (1986) to study the ability to access structurally embedded resources (Lin and Erickson 2008). It has been employed to assess social capital outcomes, from labour market achievements to health and social class (Lin 2001; Lin and Dumin 1986; Lin and Erickson 2008; Pena-López et al 2021). In practice, respondents must indicate whether they are in contact (through friendship, in this case) with a sample of occupation-based positions. Social class was defined and measured according to the framework of the European Socioeconomic Classification (ESeC, see Rose and Harrison 2007, 2010), a social class schema based on the Erikson-Goldthorpe-Portocarero (EGP) model. In particular, we have employed the three-class, reduced model, which includes the 'salarial' (or 'upper-class'), the 'intermediate class', and the 'working class'.

The EGP approach to class analysis and, thus, the ESeC (Erikson and Goldthorpe, 1992; Goldthorpe, 2006) distinguish three basic social positions: employers, the self-employed, and employees. Employers are further distinguished by the number of employees in their establishments (large or small), and employees are characterised by the nature of their employment relations (service relationship, labour contract, or mix of the two). Following the ESeC methodology, we have used these variables to assign a social class to employed individuals (the survey included explicit questions about occupation, employment characteristics and size of the firm for this objective). However, the position generator does not provide specific information to assign a social class to each personal contact unequivocally. To avoid ambiguity, we have adopted the following strategy. First, we have selected occupations that, according to the European Socioeconomic Classification, are always included in the same social class, independently from the size of the firm or the employment relationship (for example, in the ESeC, university professors and architects are always classified as 'salarial'). Employing the reduced model, which only considers three classes, has greatly facilitated this work. Second, for some occupations in the position generator, we have added details about the size of the firm or the employment relationship (for example, we asked about the 'owner of a large firm' or an 'office clerk without a supervisory role'). This procedure permitted us to capture the general class profile of the respondent's social network. Therefore, throughout the rest of the paper, we talk about 'upper-class', 'intermediate-class', and 'working-class' ties. Appendix 1 lists the occupations included in the position generator.

We obtained information about social capital mobilisation by employing a resource generator. The resource generator is similar to the position generator, but individuals are asked whether their friends can provide a set of resources. The resource generator used in this study included 14 resources, from finding a job for a family member or landing an amount of money to advising on tax issues and taking care of children if needed (see Appendix 1 for the complete list of resources). Several 'resources' being considered are not specifically oriented to the achievement of career-related outcomes. In fact, the instrument is intended to capture the general capacity of individuals to mobilise resources. In other words, the number of resources that individuals can access through their friends is a signal of a general capacity to extract resources from other individuals and, thus,

obtain instrumental returns from a network of contacts. In other words, it measures the ability to intentionally manage networks of relationships oriented towards individual goals.

Control variables

The empirical analysis also employed other control variables related to our theoretical framework, and the literature indicates possible drivers of expectations. In addition to individual characteristics (sex/gender, age, education, parents' education, kind of the area where respondents live [urban vs. rural], and occupational class) and context controls that may affect the probability of career advancement (labour relation, overqualification, and firm size), we included a variable that potentially affects the set of prior knowledge and individual beliefs related to expectations: beliefs about meritocracy.

Empirical approach

Regarding the data analysis procedure, we split the sample between employed and non-employed individuals. Even when the mechanisms that explain the association between social capital and expectations are the same, the two groups present different characteristics (see Table 1), and the meaning of a rise in income may differ for employed and non-employed individuals. Also, several control variables related to the employment relation and firms' characteristics are only available for the employed. Therefore, we analysed the two groups separately.

Regarding the empirical methods, we estimated logit models where the dependent variables were the expectation of a pay rise (or an increase in income for non-employed individuals) and job promotion. Every model includes an interaction of social capital with age. Expectations of promotion or salary increases are often limited to certain stages in individuals' careers. Therefore, social capital may be more or less relevant at different ages.

The Results section presents the estimation of all models. Robustness checks, which assess the consistency of the sign and size of the coefficients of the social capital measures as well as the role that control variables play, are presented in the Appendix.

Results

Table 2 shows the results of the model estimations, including the expectation of a pay rise (or increase in income) as the dependent variable. Models i and ii consider the sample of employed individuals, while the sample of non-employed individuals is used in models iii and iv.

On considering employed individuals, the results of Model i (Table 2) do not support the association between accessibility and expectations. However, when including control variables (Model ii, Table 2), we observe a positive and significant association between access to the upper class and expecting a pay rise, while having friends from the intermediate or the working class is not related to career-related expectations.

The average adjusted prediction of the probability of expecting a pay rise for individuals who reported having no friends in the upper class was equal to 0.368, while the same figure increased by almost 30% to 0.484 for individuals with the maximum number of upper-class friends in the position generator (see Model ii, Table 2). Even though heterogeneous networks may boost the flow of information, the connection to the top may provide valuable knowledge about the 'rules of the game' and values, beliefs, and mechanisms that increase the likelihood of career advancement.

The relationship between accessibility and expectations emerges only when age is properly considered in the model. Regarding accessibility to the upper class, we find that

Table 2. Individual social capital and expectations of a pay rise or an increase in income. Logit regressions

Dependent variable:	Model i		Model ii		Model iii		Model iv		
	EXPECT PAY RISE OR INCREASE IN INCOME, employed individuals				EXPECT PAY RISE OR INCREASE IN INCOME, non-employed individuals				
	Avg. marginal effect	Std. error	Avg. marginal effect	Std. error	Avg. marginal effect	Std. error	Avg. marginal effect	Std. error	
Individual social capital									
SC ACCESS – UPPER CLASS	0.020	0.014	0.028 **	0.014	0.002	0.021	0.001	0.020	
SC ACCESS – INTERMEDIATE CLASS	-0.019	0.015	-0.019	0.015	0.004	0.023	-0.018	0.021	
SC ACCESS – WORKING CLASS	-0.009	0.013	-0.013	0.013	-0.003	0.021	0.019	0.019	
SC MOBILISATION	0.019 ***	0.004	0.016 ***	0.004	0.023 ***	0.005	0.012 **	0.005	
Control variables									
FEMALE			-0.052	0.028			-0.059	0.040	
AGE			-0.010 ***	0.001			-0.007 ***	0.002	
URBAN			0.033	0.027			-0.001	0.034	
SECONDARY EDU			0.094	0.070			0.165 ***	0.038	
UNIVERSITY EDU			-0.038	0.078			0.181 ***	0.044	
SECONDARY EDU – PARENTS			-0.003	0.031			-0.001	0.042	
UNIVERSITY EDU – PARENTS			-0.021	0.041			-0.043	0.052	
BELIEF IN MERITOCRACY			0.012 ***	0.004			0.004	0.006	
INTERMEDIATE CLASS			-0.040	0.036					
WORKING CLASS			-0.074	0.041					
OVERQUALIFIED			0.088 **	0.039					

(Continued)

Table 2. (Continued)

Dependent variable:	Model i		Model ii		Model iii		Model iv	
	EXPECT PAY RISE OR INCREASE IN INCOME, employed individuals				EXPECT PAY RISE OR INCREASE IN INCOME, non-employed individuals			
	Avg. marginal effect	Std. error	Avg. marginal effect	Std. error	Avg. marginal effect	Std. error	Avg. marginal effect	Std. error
SMALL FIRM			0.063	0.036				
PART-TIME EMPLOYEE			0.037	0.050				
BUSINESS OWNER OR SELF-EMPLOYED			-0.084	0.045				
DOMESTIC WORKER							-0.161 ***	0.041
N	1227		1227		429		429	
Wald χ^2 ($P > \chi^2$)	26.93 (<0.001)		139.84 (<0.001)		21.63 (0.050)		112.25 (<0.001)	

Note. Significance levels: * = 0.1; ** = 0.05; *** = 0.01.

the association with expecting a pay rise is statistically significant only when individual age varies between 43 and 49 years (p value < 0.001). However, even though our findings point to a possible relation between age and the social capital effect, they are not compatible with an interaction effect: the effect of accessibility does not vary significantly with age (the difference between the effect estimated at any level of age and the effect estimated at any other level of age is not statistically different from zero; p value < 0.001 , in all cases). Therefore, individual age shapes the region of significance, but we have not identified a proper interaction effect between age and social capital. We will observe a similar pattern when considering mobilisation.

When examining the capacity to mobilise resources in the same models, we also observe a significant and positive association with expecting a pay rise. The predicted probability of a pay rise expectation increases from 0.316 when an individual has no access to network-embedded resources to a maximum of 0.548 when mobilising all resources considered in the resource generator is possible (Model ii, Table 2).

As in the case of access to the upper class, the association between mobilisation and expectations is positive and significant only for a specific age interval. In particular, the effect is statistically different from zero when age varies between 18 (the minimum age in our sample) and 58 (p value < 0.001). Therefore, contrary to accessibility, the capacity to mobilise resources appears to play a role throughout almost all professional life. However, as in the case of accessibility, an interaction effect is not empirically supported.

When considering employed individuals and the expectation of a pay rise, our findings are compatible with Hypotheses 1 and 2. In both dimensions captured by the position and the resource generators, individual social capital is positively associated with the expectation of a pay rise.

For non-employed individuals, we obtained comparable results (see Models iii and iv, Table 2). Regarding the capacity to mobilise resources, the predicted probability of expecting an increase in income varies from 0.153 for an individual with no reported contacts in the resource generator to a maximum of 0.367 when it is possible to mobilise all considered resources. Also, we find that the effect is statistically different from zero when age varies between 36 and 63 years. These results are compatible with Hypothesis 2. However, as shown in Table 2, results do not support an association between access to the upper class and expectations for non-employed individuals (Hypothesis 1).

Compared to pay rises, the association between individual social capital and expectations of job promotion is less robust (Table 3). Concerning extension by class (Models v and vi, Table 3), we did not find a significant association with the expectation of job promotion. The results from Model vi suggest that the capacity to mobilise resources embedded in social networks may be a relevant factor. The predicted probability of expecting career advancement is 0.173 when the social capital mobilisation (SC MOBILISATION) variable is equal to 0 and 0.313 when the same variable takes its maximum value (14). Although the difference is not large, our robustness checks signal that this result depends on model specification (discussed further in the next section). In particular, the effect is positive and significant only when age varies between 33 and 53 years when the objective probability of experiencing a career advancement is higher.

As a rule, for the population under study, the association between individual social capital and the expectation of career advancement is limited to mobilisation, in line with Hypothesis 2 but not Hypothesis 1. This result may be related to the difference between accessibility and mobilisation, that is, between mere access to a group of high-class individuals and the practical possibility of obtaining resources from a network. In other words, our findings suggest that the critical factor is inclusion in a web of exchanges and, possibly, reciprocity. In other words, the most relevant factor appears to be the active and intentional management of a network of relationships, not mere access to social positions.

Table 3. Individual social capital and expectations of job promotion. Logit regressions

Dependent variable:	Model v		Model vi	
	EXPECT CAREER ADV			
	Avg. marginal effect	Std. error	Avg. marginal effect	Std. error
Individual social capital				
SC ACCESS – UPPER CLASS	–0.004	0.003	0.000	0.012
SC ACCESS – INTERMEDIATE CLASS	0.002	0.012	0.005	0.012
SC ACCESS – WORKING CLASS	–0.014	0.013	–0.017	0.011
SC MOBILISATION	0.013***	0.012	0.009***	0.003
Control variables				
FEMALE			–0.071***	0.024
AGE			–0.008***	0.001
URBAN			0.024	0.023
SECONDARY EDU			0.026	0.068
UNIVERSITY EDU			–0.037	0.074
SECONDARY EDU – PARENTS			–0.021	0.026
UNIVERSITY EDU – PARENTS			–0.005	0.035
BELIEF IN MERITOCRACY			0.009**	0.004
INTERMEDIATE CLASS			0.025	0.031
WORKING CLASS			–0.068**	0.031
OVERQUALIFIED			0.086**	0.036
SMALL FIRM			–0.016	0.031
PART-TIME EMPLOYEE			0.086*	0.049
BUSINESS OWNER OR SELF-EMPLOYED			–0.193***	0.023
N	1227		1227	
Wald χ^2 ($P > \chi^2$)	14.90 (0.005)		150.18 (<0.001)	

Note. Significance levels: * = 0.1; ** = 0.05; *** = 0.01.

Regarding control variables, it is worth noting the role of gender. We did not find a significant association between being female and expecting a pay rise. However, the probability of expecting career advancement was significantly lower for women than men, independent of the individual social capital measure (see Table 3). This result may be related to the opportunity structure in Spanish organisations, where women's likelihood of ascending the occupational ladder is lower. Therefore, their subjective probability and, thus, their expectations reflect this reality.

Overall, Hypothesis 1 is only partially supported by our results. For non-employed individuals, access to the upper class is not related to expecting an increase in income. For employed individuals, accessibility is positively associated with the expectation of a pay rise but not with the expectation of a job promotion. Regarding the mobilisation of resources, our findings support Hypothesis 2. A higher capacity to mobilise resources embedded in social networks is positively associated with expecting both a pay rise and a

job promotion. Section “Results” further discusses these findings. Before the discussion, however, we provide some details about the robustness of the estimated models.

We analysed model uncertainty and robustness by employing Young and Holsteen’s (2017) proposal (see Appendix 2). The results are strongly robust when the dependent variable is the expectation of a pay rise, especially when considering social capital mobilisation. The association between accessibility and pay rise expectations is slightly less robust, an issue that is more evident when the outcome variable is the expectation of job promotion. Regarding this dependent variable, the coefficient on access to the upper class is not significant in any possible combination of the control variables; the absence of association is strongly robust in this case. When mobilisation is the main explicative variable, the results are strongly robust and point to a positive association between this measure and the expectation of career advancement. All model uncertainty and robustness checks are presented in Appendix 2.

Discussion

Our results support the association between having high-class friends and access to network-embedded resources with expecting a pay rise or job promotion. When expectations influence motivation and individual behaviour, our results suggest that the formation of expectations is another mechanism that explains why well-connected people achieve better outcomes and are able to maintain their privilege. By homophily, high-status individuals tend to be connected with people belonging to the same stratum, and this circumstance favours the homogenisation of preferences and expectations (McPherson et al 2001).

Overall, our results align with previous literature to the extent that they reinforce the idea that people with more social capital enjoy better labour market outcomes. However, this paper contributes to the social network theory with novel findings and implications. Regarding the strength of social contacts and their relative importance, we have underlined the critical role of strong ties in shaping expectations. Indeed, we have shown that the composition of networks of friends affects expectations and, through this channel, labour outcomes. Although this result does not conform to the conclusions of the seminal study of Granovetter (1974) and the ‘strength-of-weak-ties’ literature, the mechanisms studied here are substantially different. Close relationships may offer limited access to new information, but they indeed exert a strong influence on opinions, attitudes, aspirations, and expectations. Also, our evidence implies that an individual may benefit from having upper-class friends without needing these contacts to intervene, suggesting a network effect. In other words, in addition to the channels that the social capital literature usually considers (information, influence, and credentials), we emphasise the group’s influence in the formation of expectations.

We observed differences between accessibility versus mobilisation and a pay rise versus job promotion. Specifically, the robustness of the association between individual social capital and expectations is higher when we employ mobilisation as an explicative variable. The association is not significant when considering expectations of job promotions and access to different social classes as a measure of social capital. Indeed, the positive association between accessibility and expectations of pay rise is limited to a narrow range of individual age. This result is particularly relevant because it points to the difference between accessibility and mobilisation discussed in Section ‘Theoretical framework: individual social capital and expectations about career advancement’. As mentioned above, the former includes potential access to a set of social positions, while the latter is inherent to the practical possibility of obtaining valuable resources. These differences may explain why mere inclusion in a social network generates effects different from the ability to mobilise social resources. It should be noted that, as for accessibility, the effect of mobilisation is positive for a specific age interval. In both cases, the interval includes the central stage of a professional career, when the endowment of social capital tends to be higher (McDonald and

Mair 2010) and individuals are more likely to obtain a job promotion (Van der Heijden *et al* 2009). Overall, our findings suggest that only mobilisation is linked with expectations of job promotion for employed individuals and an increase in income for non-employed individuals. Also, they point to the difference between expecting a pay rise or a job promotion.

Unlike an increase in remuneration, a job promotion implies an advancement to a higher social stratum, and this circumstance requires integration into the market of social resources and reciprocity, which is signalled by our measure of mobilisation. Consequently, our findings may reflect this circumstance. It should be noted that the association between individual social capital and expectations of job promotion may be weak or absent for empirical reasons. First, job promotions are much less frequent due to the pyramidal structure of most organisations. Second, the possibility of upward shifts depends on the type of occupation. Some professions, typically working-class occupations, simply do not involve job promotion, while a pay rise or an income increase is a much more general form of advancement. Also, job promotion is usually associated with pay premiums. Controlling for occupational class may capture part of this effect; however, our dataset does not permit us to consider appropriately the different structures of career opportunities of firms or sectors. For example, job promotions are more likely to occur in large firms. Our analysis considers firm size by including a binary control variable (SMALL FIRM), which assumes the threshold of ten employees to separate small firms from the rest. This threshold is coherent with the European Socioeconomic Classification. However, it limits our possibilities to investigate career advancement patterns in large organisations. Given its potential relevance, this is a drawback that future studies should undoubtedly address.

Additionally, the different results obtained for access and mobilisation might reveal the relative importance of different social capital influence channels. It is not only being part of a group and, perhaps, sharing their norms and values that matter in forming expectations. Referrals and the flow of information may constitute the most relevant mechanisms. However, our dataset does not permit us to study and differentiate the importance of each channel of influence on the formation of expectations. This limitation constitutes a possible line for future research.

Finally, caution should be exercised in drawing general conclusions from this study. The empirical analysis provides information about Spanish society. In Spain, networks of social ties play a critical role in work and employment. For example, in 2015, approximately 40% of employed young people found a job thanks to family, friends, or acquaintances. Indeed, referrals are the most commonly used means to find a job in Spain (Instituto Nacional de Estadística 2016). According to Eurofound's European Quality of Life Survey (2017), in 2016, 78% of residents in Spain declared that they would rely on their contacts if they were searching for a job, while only 11 out of 100 individuals would employ formal mechanisms (the averages for the European Union are 60% and 22%, respectively). Additionally, in Spain, social networks are especially homophilic regarding occupational class and social status (Pena-López *et al* 2021). This context favours the existence of a relationship between individual social capital and expectations. Therefore, the generalisation of our findings to different societies should be supported by further research. In particular, studying other societies may shed light on how the relationship between social networks and expectations varies depending on the social setting and the relevance of social networks for job outcomes.

Conclusions

The literature on social capital has established a link between individual networks and various labour outcomes, from simply being employed to obtaining higher wages and social positions. In this article, we asked whether the composition of social networks and the capacity to mobilise network-embedded resources also affect individual expectations of career advancement in two senses, pay rise and job promotion. From a theoretical point

of view, individual social capital may influence expectations through different channels. A network may provide valuable referrals and credentials, thus increasing the likelihood of the outcome or, at least, the subjective perception of the probability of attainment. Heterogeneous social ties may provide critical information to assess the situation and understand the possible paths to attainment. Additionally, knowledge about the 'rules of the game', which friends and acquaintances may provide, increases the ability to find a way to success. Group norms and values may affect the desirability of career advancement and the pressure and motivation to achieve it. Therefore, we expected a positive and significant association between different measures of individual social capital (i.e., network extension, access to the upper class and the ability to mobilise resources) and career advancement expectations.

We studied these associations by employing a dataset representing employed people in Spain. First, network extension does not appear to explain the variability in individual expectations. Second, access to the upper class is positively and significantly associated with expecting a pay rise but not a job promotion. Third, the ability to mobilise network-embedded resources is positively linked with both measures of career advancement. These findings support the possible influence of individual social capital on expectation formation in a work setting.

As mentioned in the introduction, a strand of the social psychology literature emphasises the power of expectations and aspirations in shaping motivation and individual behaviour. These constructs have been extensively considered drivers of attainment, especially in education. If expectations of career advancement shape behaviour in the workplace, then this study indicates that well-connected people who expect better outcomes at work may adopt rules and behaviours that favour achieving those outcomes. On the other hand, individuals who lack the push that comes with expecting these results will perform worse and fail to achieve career advancement. This conclusion implies that influencing aspirations and expectations may affect the behaviour of less well-connected individuals, ultimately boosting social mobility. However, in a society where groups tend to be closed and homogeneous in terms of socioeconomic status and class, such as Spanish society, these findings may highlight another mechanism through which individual social capital influences career-related outcomes, i.e., by affecting individual expectations. Indeed, expectations may reflect the structural constraints embedded in the opportunity structure of society. First, expectations can be considered part of the class habitus, and due to class homophily, they may facilitate the reproduction of the social structure (Bourdieu 1986). Second, the wealthy and well-connected, who are aware of the mechanisms that warrant the maintenance of their privilege, believe they are entitled to higher wages and promotions and expect to attain them. In this sense, expectations are a manifestation of the future achievement of the upper class. If this is the case, this study confirms that improved individual social capital, particularly access to the highest strata of society and participation in a net of reciprocity, increases the likelihood of obtaining a pay rise or career advancement.

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References

- Andersen R (2008) *Modern Methods for Robust Regression*. Thousand Oaks, CA: Sage. <https://doi.org/10.4135/9781412985109>
- Bénabou R and Tirole, J (2016) Mindful economics: the production, consumption, and value of beliefs. *Journal of Economic Perspectives* 30(3), 141–164. <https://doi.org/10.1257/jep.30.3.141>
- Betz NE and Hackett G (2006) Career self-efficacy theory: back to the future. *Journal of Career Assessment* 14(1), 3–11. <https://doi.org/10.1177/1069072705281347>

- Bolíbar M, Verd JM and Barranco O (2019) The downward spiral of youth unemployment: An approach considering social networks and family background. *Work, Employment and Society* 33(3), 401–421.
- Bolte L, Immorlica N and Jackson MO (2020) The role of referrals in inequality, immobility, and inefficiency in labor markets. Available at SSRN: <https://ssrn.com/abstract=3512293> or <https://doi.org/10.2139/ssrn.3512293>
- Bourdieu P (1973) Cultural reproduction and social reproduction. In Brown RK (ed), *Knowledge, Education, and Cultural Change: Papers in the Sociology of Education*. London: Tavistock, 71–112. <https://doi.org/10.4324/9781351018142-3>
- Bourdieu P (1986) The forms of capital. In Richardson JG (ed), *Handbook of Theory and Research for the Sociology of Education*. Westport, CT: Greenwood, 241–258.
- Brown P, Power S, Tholen G and Allouch A (2016) Credentials, talent and cultural capital: A comparative study of educational elites in England and France. *British Journal of Sociology of Education* 37(2), 191–211. <https://doi.org/10.1080/01425692.2014.920247>
- Burchardi KB and Hassan TA (2013) The economic impact of social ties: evidence from German reunification. *Quarterly Journal of Economics* 128, 1219–1271. <https://doi.org/10.1093/qje/qjt009>
- Burt RS (1992) *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard University Press. <https://doi.org/10.4159/9780674029095>
- Calvo-Armengol A and Jackson MO (2004) The effects of social networks on employment and inequality. *American Economic Review* 94, 426–454. <https://doi.org/10.1257/0002828041464542>
- Calvo-Armengol, A and Jackson, MO (2007) Networks in labor markets: Wage and employment dynamics and inequality. *Journal of Economic Theory* 132(1), 27–46. <https://doi.org/10.1016/j.jet.2005.07.007>
- Chetty R, Jackson MO, Kuchler T, Stroebel J, Hendren N, Fluegge RB, Gong S, Gonzalez F, Grondin A, Jacob M, Johnston D, Koenen M, Laguna-Muggenburg E, Mudekereza F, Rutter T, Thor N, Townsend W, Zhang R, Bailey M, Barberá P, Bhole M and Wernerfelt N (2022) Social capital in the United States I: measurement and associations with economic mobility. *Nature* 608, 108–121.
- Coleman JS (1988) Social capital in the creation of human capital. *American Journal of Sociology* 94, S95–S120. <https://doi.org/10.1086/228943>
- Cook D (1977) Detection of influential observations in linear regression. *Technometrics* 19, 15–18. <https://doi.org/10.1080/00401706.1977.10489493>
- Creed P, Buys N, Tilbury C and Crawford M (2013) The relationship between goal orientation and career striving in young adolescents. *Journal of Applied Social Psychology* 43(7), 1480–1490.
- Erikson BH (1996) Culture, class and connections. *American Journal of Sociology* 102(1), 217–251. <https://doi.org/10.1086/230912>
- Erikson R and Goldthorpe J (1992) *The Constant Flux: A Study of Class Mobility in Industrial Countries*. New York: Oxford University Press.
- Eurofound (2017) *European Quality of Life Survey 2016: Quality of Life, Quality of Public Services, and Quality of Society*. Luxembourg: Publications Office of the European Union.
- Gayen K, Raeside R and McQuaid R (2019) Social networks, accessed and mobilised social capital and the employment status of older workers: a case study. *International Journal of Sociology and Social Policy* 39(5), 356–375.
- Goldthorpe J (2006) Chapter five social class and the differentiation of employment contracts. *On Sociology Second Edition Volume Two: Illustration and Retrospect*. Redwood City: Stanford University Press, 101–124. <https://doi.org/10.1515/9781503624801-005>
- Granovetter MS (1974) *Getting a Job*. Cambridge, MA: Harvard University.
- Instituto Nacional de Estadística (2016) Economically active population survey. Available at: https://www.ine.es/jaxiPx/Tabla.htm?path=/t22/e308/meto_05/modulo/base_2011/2016/l0/&file=01017.px&L=1
- Jackson MO (2020) A typology of social capital and associated network measures. *Social Choice and Welfare* 54, 311–336. <https://doi.org/10.1007/s00355-019-01189-3>.
- Jackson MO (2021) Inequality's economic and social roots: the role of social networks and homophily. Available at SSRN: <https://doi.org/10.2139/ssrn.3795626>.
- Lent, RW and Brown, SD (1996) Social cognitive approach to career development: an overview. *The Career Development Quarterly* 44, 310–321. <https://doi.org/10.1002/j.2161-0045.1996.tb00448.x>
- Lin N (1999a) Building a network theory of social capital. *Connections* 22, 28–51.
- Lin N (1999b) Social networks and status attainment. *Annual Review of Sociology* 25, 467–87. <https://doi.org/10.1146/annurev.soc.25.1.467>
- Lin N (2001), *Social Capital: A Theory of Social Structure and Action*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511815447>
- Lin N and Dumin M (1986) Access to occupations through social ties. *Social Networks* 8, 365–385. [https://doi.org/10.1016/0378-8733\(86\)90003-1](https://doi.org/10.1016/0378-8733(86)90003-1)
- Lin N, Ensel WM and Vaughn JC (1981) Social resources and the strength of ties. *American Sociological Review* 46, 393–405. <https://doi.org/10.2307/2095260>

- Lin N and Erickson BH (2008) Theory, measurement, and the research enterprise on social capital. In Lin N and Erickson BH (eds), *Social Capital. An International Research Program*. New York: Oxford University Press, 1–24. <https://doi.org/10.1093/acprof:oso/9780199234387.003.0010>
- McDonald S and Mair C (2010) Social capital across the life course: Age and gendered patterns of network resources. *Sociological Forum* 25(2), 335–359.
- McPherson J, Smith-Lovin L and Cook JM (2001) Birds of a feather: homophily in social networks. *Annual Review of Sociology* 27, 415–444.
- Montgomery JD (1991) Social networks and labor-market outcomes: toward an economic analysis. *American Economic Review* 81, 1408–1418.
- Montgomery JD (1992) Job search and network composition: implications of the strength-of-weak-ties hypothesis. *American Sociological Review* 57, 586–596. <https://doi.org/10.2307/2095914>
- Mouw T (2003) Social capital and finding a job: do contacts matter? *American Sociological Review* 68, 868–898. <https://doi.org/10.2307/1519749>
- Olson JM, Roese NJ and Zanna MP (1996) Expectancies. In Higgins ET and Kruglanski AW (eds), *Social Psychology: Handbook of Basic Principles*. New York: The Guilford Press, 211–238.
- Pena-López JA, Rungo P and Sánchez-Santos JM (2021) Inequality and individuals' social networks: the other face of social capital. *Cambridge Journal of Economics* 45(4), 675–694.
- Pena-López JA and Sánchez-Santos JM (2017) Individual social capital: Accessibility and mobilization of resources embedded in social networks. *Social Networks* 49, 1–11. <https://doi.org/10.1016/j.socnet.2016.11.003>
- Podolny JM and Baron JN (1997) Resources and Relationships: Social Networks and Mobility in the Workplace. *American Sociological Review* 62, 673–693. <https://doi.org/10.2307/2657354>
- Portes A (1998) Social capital: its origins and applications in modern sociology. *Annual Review of Sociology* 24, 1–24. <https://doi.org/10.1146/annurev.soc.24.1.1>
- Raftery AE (1995) Bayesian model selection in social research. *Sociological Methodology* 25, 111–163. <https://doi.org/10.2307/271063>
- Roese NJ and Sherman, JW (2007) Expectancy. In Kruglanski AW and Higgins ET (eds), *Social Psychology: Handbook of Basic Principles*. New York: The Guilford Press, 91–115.
- Rose D and Harrison E (2007) The European socio-economic classification: a new social class schema for European research. *European Societies* 9(3), 459–490. <https://doi.org/10.1080/14616690701336518>
- Rose D and Harrison E (2010) *Social Class in Europe: An Introduction to The European Socio-economic Classification*. London: Routledge.
- Seibert SE, Kraimer ML and Liden RC (2001) A social capital theory of career success. *Academy of Management Journal* 44, 219–237. <https://doi.org/10.5465/3069452>
- Stone W, Gray M and Hughes J (2004) Social capital at work. *The Economic and Labour Relations Review* 14(2), 235–255.
- Vacchiano M (2022) Nine mechanisms of job-searching and job-finding through contacts among young adults. *Sociological Research Online*, 27(2), 361–378.
- Vacchiano M, Martí J, Yepes-Cayuela L and Verd JM (2018) Personal Networks in Job Insertion among Young Adults in Times of Crisis: An Analysis in Barcelona. *Revista Española de Investigaciones Sociológicas*, 161, 121–140.
- Van der Heijden BI, de Lange AH, Demerouti E and Van der Heijde CM (2009) Age effects on the employability-career success relationship. *Journal of Vocational Behavior* 74(2), 156–164.
- Wood R and Bandura A (1989) Social cognitive theory of organizational management. *Academy of Management Review* 14, 361–384. <https://doi.org/10.2307/258173>
- Wright EO (1985) *Classes*. London: Verso.
- Young C and Holsteen K (2017) Model uncertainty and robustness: A computational framework for multimodel analysis. *Sociological Methods & Research* 46(1), 3–40. <https://doi.org/10.1177/0049124115610347>

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Appendix I. Social capital instruments

The empirical analysis employs two instruments to measure social capital: the position generator and the resource generator. This Appendix presents the 'positions' and the 'resources' included in those instruments (originally in Spanish).

Position generator

Question: Do you have any friends who work in any of the following occupations?

1. Owner of a large firm.
2. University professor.
3. Journalist.
4. Architect.
5. Office clerk without supervisory role
6. Department store manager
7. Owner of a small firm.
8. Self-employed taxi driver.
9. Elderly caretaker.
10. Cashier.
11. Builder.
12. Cleaning staff.

Note. Positions 1–4 are classified as 'upper class'; positions 5–8 are classified as 'intermediate class'; and positions 9–12 are classified as 'working class'.

Resource generator

Question: Do you have anyone among your friends to ask for help if you need any of the following?

1. Finding a job for a family member.
2. Advising you on legal issues (if someone has filed a complaint against you).
3. Help you in a move.
4. Advise you and/or help you with educational issues.
5. Help you shop when you are sick.
6. Give medical advice when dissatisfied with your doctor (second medical opinion).
7. Lend you 6000 euros.
8. Leave you a place to sleep while you can't use your home.
9. Advise you or help you with tax issues.
10. Advising you on financial issues (to invest your money).
11. Facilitate a hospital admission (speed up your admission if you need it).
12. Advise you on starting a business activity (explain the procedures to set up your business).
13. Take care of children in case of need, if you have them or have them.
14. Caring for older family members, if you have or had.

Table A1. Model robustness of the individual social capital effect

Outcome variable:	EXPECT PAY RISE, employed individuals		EXPECT PAY RISE, non-employed individuals		EXPECT CAREER ADV	
Variable of interest:	SC ACCESS – UPPER CLASS	SC MOBILISATION	SC ACCESS – UPPER CLASS	SC MOBILISATION	SC ACCESS – UPPER CLASS	SC MOBILISATION
Model robustness statistics						
Mean of coefficient	0.130	0.077	0.003	0.109	0.006	0.067
Sampling SE	0.062	0.018	0.155	0.037	0.076	0.022
Modelling SE	0.031	0.002	0.097	0.021	0.034	0.004
Total SE	0.069	0.018	0.183	0.042	0.083	0.022
Robustness ratio	1.882	4.307	0.017	2.591	0.069	2.991
Significance testing						
Sign stability	100%	100%	53%	100%	58%	100%
Significance rate	62%	100%	0%	99%	0%	100%
Positive	100%	100%	47%	100%	58%	100%
Positive and sig.	62%	100%	0%	99%	0%	100%
Negative	0%	0%	53%	0%	42%	0%
Negative and sig.	0%	0%	0%	0%	0%	0%
Number of estimated models	2048	2048	429	256	2048	2048

Appendix 2. Model uncertainty and robustness

We followed Young and Holsteen (2017) to assess model uncertainty and robustness. First, for models ii and iii in Table 2 and model vi in Table 3 (the complete models with all control variables), we estimated the distribution of estimates for our interest variables across all combinations of controls. Second, we analysed how each control variable affected the coefficient of our measures of individual social capital. This robustness analysis permitted us to contextualise our estimations within the distribution of all other plausible estimates. Additionally, the findings of this robustness check underlined which model assumptions were critical to our results.

Table A1 presents the results of the robustness analysis. The variables of interest are our measures of individual social capital. Therefore, the analysis examines the effect of different combinations of controls on the sign and significance of the coefficient of those measures. Factor control variables are always considered jointly: for example, when ‘education’ is included in a model, both UNIVERSITY EDUCATION and SECONDARY EDUCATION are included. The same occurs for measures of social capital extensions by class. The table presents different measures of model robustness and significance testing. The sampling standard error is an indication of how much the estimation of the coefficient of the social capital measure would be expected to change if we drew a new sample. Modelling standard error, however, assumes that we are not confident about the proposed model. Consequently, there could be a set of plausible models that can be applied to our data that would generate a unique estimate of the coefficient under study. In this case, our set of models includes all models with the interest variable (each social capital measure) and all combinations of controls (a total of 2048 models when considering the sample of employed individuals, and 429 or 256 when considering the non-employed). The resulting set of estimates forms

Table A2. Model influence results for individual social capital effect on expectations

	EXPECT PAY RISE, employed individuals				EXPECT PAY RISE, non-employed individuals				EXPECT CAREER ADV			
	SC MOBILISATION		SC ACCESS – UPPER CLASS		SC MOBILISATION		SC ACCESS – UPPER CLASS		SC MOBILISATION		SC ACCESS – UPPER CLASS	
	Marginal effect of variable inclusion	Percent change from mean	Marginal effect of variable inclusion	Percent change from mean	Marginal effect of variable inclusion	Percent change from mean	Marginal effect of variable inclusion	Percent change from mean	Marginal effect of variable inclusion	Percent change from mean	Marginal effect of variable inclusion	Percent change from mean
SC ACCESS	0.001	1.3%			0.004	3.6%			0.004	5.5%		
SC MOBILISATION			-0.034	-26.40%			-0.036	-1124.0%			-0.035	-606.7%
FEMALE	0.001	0.8%	-0.010	-7.70%	0.006	5.3%	-0.009	-279.2%	0.000	0.7%	-0.016	-289.4%
AGE	-0.003	-3.9%	0.040	31.10%	-0.035	-32.2%	0.045	1434.2%	-0.005	-7.3%	0.036	639.6%
URBAN	-0.001	-0.9%	-0.007	-5.20%	0.001	0.6%	0.002	74.6%	-0.001	-1.2%	-0.008	-142.2%
Education	0.000	0.6%	0.020	15.70%	-0.010	-8.8%	-0.016	-5088.9%	-0.001	-1.2%	0.005	85.7%
Education – parents	0.000	-0.6%	0.001	1.00%	0.001	0.6%	-0.014	-447.2%	-0.001	-1.3%	-0.002	-41.3%
BELIEF IN MERITOCRACY	-0.001	-1.2%	-0.003	-2.30%	-0.002	-2.2%	-0.012	-370.0%	-0.001	-1.9%	-0.004	-6220.0%
Social class	0.000	-0.6%	-0.005	-3.60%					-0.001	-0.1%	-0.001	-23.4%
OVERQUALIFIED	-0.002	-2.4%	-0.007	-7.70%					-0.004	-5.4%	-0.016	-285.9%
LARGE FIRM	0.001	0.7%	0.002	1.80%					0.000	0.2%	0.003	47.3%
Labour relation	0.001	1.2%	0.014	10.80%					0.003	4.8%	0.034	592.7%
DOMESTIC WORKER					-0.010	-9.3%	0.079	2503.9%				
Constant	0.079		0.124		0.132		0.055		0.069		0.008	
R ²	0.806		0.9728		0.879		0.953		0.856		0.950	

the modelling distribution. The modelling standard error shows how much the estimate is expected to change if we draw a new randomly selected model from our set of models. The total standard error takes into account all possible sources of variation in the estimates, including sampling and the choice of model. The ‘robustness ratio’ combines the mean estimate of the coefficient and the total standard error, which is constructed as a *t*-statistic: the ratio between the estimated coefficient and the total standard error. The other statistics from the modelling distribution include sign stability (the percentage of estimates that have the same sign), the significance rate (the percentage of models that report a statistically significant coefficient), and statistics for the combinations of each sign and significance (see Young and Holsteen 2017, for further details).

Regarding the models where the dependent variable is the expectation of a pay raise, we observe in Table A1 that the results appear strongly robust for the sample of employed individuals. The estimated coefficient on social capital mobilisation is positive and significant in all 2048 combinations of control variables (the sign stability and significance rate are equal to 100%). The coefficient on access to the upper class is positive in all combinations but significant in 62% of models, which can be considered only moderate robustness (Raftery 1995: 146). This finding points to a lower robustness of the association of this variable with expectations, an issue that is more evident when the outcome variable is the expectation of career advancement. Indeed, regarding this dependent variable, the coefficient on access to the upper class is not significant in any possible combination of the control variable; the absence of association is strongly robust. Regarding mobilisation, however, the results are strongly robust and point to a positive association between this measure and the expectation of career advancement (the sign stability and significance rate are equal to 100%).

The second step of the robustness analysis examines the model's influence on the individual social capital effect (for a discussion of the methodology, see Young and Holsteen 2017; Andersen 2008; Cook 1977). In other words, how does the inclusion of each control affect the estimate of the coefficient on the social capital measure? Table A2 shows the influence of control variables on the coefficient of the individual social capital measures (both the absolute magnitude influence on the mean estimate and, for easier interpretation, the per cent change in the estimate from the mean of the modelling estimate).

First, when considering expectations of career advancement and expectations of a pay rise for the employed, we observe that the coefficients on access to the upper class vary substantially with the model specification (see Table A2). These results confirm the results observed in models iv and vi.

Regarding models in which the main explicative variable is social capital accessibility, we observe much less variation. However, age may play a significant role, provided that its inclusion as control has a substantial impact on the size of the effect. The same issue arises when considering the association of access to the upper class with the expectation of a pay rise for the employed. As already discussed in the paper, the association between individual social capital and expectations is positive and significant only for specific age intervals. Results in Table A2 reflect this circumstance and confirm the appropriateness of including age as control.