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# The downward spiral of youth unemployment: An approach considering social networks and family background

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## Abstract

Taking as a starting point the relationship between unemployment and the loss of social support put forward by social exclusion theory, this article aims to analyse how long-term unemployment affects young people's support networks for job seeking. To do so, it uses the framework of social network analysis. Based on data produced by a personal network

survey of 250 young individuals in the Metropolitan Area of Barcelona, the results highlight the particularly harmful effect of long-term unemployment on the support network of young individuals with a low family socioeconomic status background. Unemployment reduces the presence of resourceful contacts among these young workers, which is not the case for young people with a higher family socioeconomic status. Moreover, gender and educational level intervene in the relationship between unemployment and loss of social support. These findings refine the social exclusion theory shedding light on how social inequalities crosscut labour market trajectories.

**Key words**: cumulative disadvantages, labour market trajectory, sociability spheres, social exclusion theory, social networks, social support, unemployment, young adults.

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## 1. Introduction

The studies carried out in the framework of *social exclusion theory* (Gallie et al., 2003; Gallie and Paugam, 2004) have pointed to the effects of unemployment as a trigger for situations of poverty and social isolation, which in turn cause a downward spiral that makes it even more difficult to get out of the unemployment situation. These arguments are taken up in the present article and empirically contrasted through a social network perspective. This approach connects with the debates originally developed in the literature on social capital about the relevance of socioeconomic inequalities in the use and development of resources embedded in social networks (Lin, 2001).[i]

The research presented in this article has the novelty of analysing the cumulative disadvantage triggered by unemployment using information on the individuals' personal networks and on the spheres of sociability to which the contacts belong –i.e., the context where personal interactions take place (Degenne and Forsé, 1999). The aim is to advance the social exclusion theory by looking at how the loss of social support contributes to the downward spiral of unemployment and by highlighting the important socioeconomic inequalities crosscutting this process. In other words, the article demonstrates the role social networks play in setting unequal paths into and within employment.

Young workers have especially suffered the effects of unemployment during the recent economic recession, particularly in European Southern countries (O'Reilly et al., 2015), such as Spain. The study presented herein focuses on young adults aged between 20 and 34 years in the Metropolitan Area of Barcelona (MAB). In addition, special attention is paid to the differences according to the family socioeconomic status (SES) background and sociodemographic characteristics of young people, all of which have proven to have

a strong explanatory value for employment trajectories affected by unemployment (Bell and Blanchflower, 2011; O'Reilly et al., 2015; Verd and López-Andreu, 2012).

The research findings reinforce the argument of social exclusion theory that unemployment is a trigger for cumulative disadvantage that makes it even more difficult to find a job. However, these results indicate that the 'isolation' of young adult workers should be understood not as an absolute loss of social support, but as a relative loss of the type of social support that is most useful for access to employment: the one located in the sociability sphere linked to the labour market. Moreover, our results show that this loss of contacts is produced by long-term unemployment and is particularly harmful among young adults of low[ii] family SES background, as young workers with a higher family SES are able to obtain similar useful support from their contacts in the family sphere. It is thus the crosscutting of detachment from the labour market and low SES that causes the most harmful processes of cumulative disadvantage among young workers. In addition, being a man and having higher education to some extent counterbalance the relation between unemployment and loss of social support. These results suggest the intersection of various factors of inequality in the size and composition of support networks.

## 2. The role of social networks in the downward spiral of unemployment

The recent expansion of unemployment among young people during the recession in developed countries (ILO, 2016) has stimulated the discussion on its possible long-term effects. One of the ongoing debates is whether unemployment is triggering a vicious circle of difficulty to find a job, thus producing cumulative disadvantages –a concept referring to a process in which a situation or event of disadvantage or inequality in a specific

moment leads to additional risks, disadvantages or inequalities over the lifetime (see DiPrete and Eirich, 2006 for a review). In this debate, the role played by social isolation and the loss of social support as a barrier to re-employment have been largely neglected. By contrast, for more than 40 years, the literature has highlighted the important role played by social networks in job seeking (Granovetter, 1973; Rees, 1966). Individuals are embedded in different relational environments that constitute a source of information on job vacancies and can provide advice or resources that are useful to enhance labour market opportunities (Granovetter, 1985; Lin, 2001; Trimble and Kmec, 2011).

In fact, the idea that lack of employment decreases the quantity and quality of supportive contacts is not new, although it has received little attention. The few studies on this topic include the classic work by Jahoda et al. (1972 [1933]), which deals with the impact of unemployment on the patterns of sociability, showing that unemployment tends to increase social isolation and withdrawal. Regarding the UK, Russell (1999) also shows that unemployment causes detachment from the world of employment, hence cutting people off from information about employment opportunities. The more recent work by Bell and Blanchflower (2011) reports that young unemployed are 'significantly more likely to feel ashamed, rejected, lost, anxious, insecure, down and depressed, isolated and unloved' (Bell and Blanchflower, 2011: 15). These approaches are of great interest for our research because they highlight the connections between unemployment, social isolation and loss of social support, thus emphasizing the sociability aspects of cumulative disadvantage.

Gallie et al. (2003) build on the above-mentioned elements to develop their *social exclusion theory*, which argues that loss of employment leads to situations of isolation that involve a loss of social support, increasing the risk of poverty, further reducing the

chances of re-employment, and increasing the risk of long-term unemployment (Canduela et al., 2015; Gallie et al., 2003; Gallie and Paugam, 2004; Lindsay, 2010). This approach emphasizes the importance of structural constraints on the unemployed and stresses the link between joblessness and the ability to relate to other people. It is reasonable to think that the individual web of social relations may become easily altered by what Leik and Chalkley (1997) call external (or exogenous) factors, such as suffering unemployment. In addition, social exclusion theory highlights the different role played by the different spheres of sociability in relation to situations of social isolation caused by unemployment.

One of the ideas underpinning social exclusion theory is that social networks multiply individual differences, thus exacerbating inequality. Di Maggio and Garip (2012) refer to this process as 'network effects' on inequality. These authors offer many examples where this effect plays a role, such as in the diffusion of information and the adoption of beneficial practices, or also in relation to cumulative advantage or disadvantage (2012: 101-109), although none of them are linked to loss of employment and subsequent difficulties in recovering it.

Somewhat surprisingly, the results of the empirical analyses that have been used to contrast social exclusion theory are mixed (Canduela et al., 2015; Gallie et al., 2003; Gallie and Paugam, 2004). The causal relationship between suffering a situation of unemployment and an increase in poverty accompanied by a decrease in subjective well-being seems incontrovertible, but the relationship between being unemployed, increasing social isolation and loss of social support is not clearly confirmed by the data. Actually, the results show no great effects of unemployment on sociability within the spheres considered: family, neighbours and organizational and associative life. Gallie et al. (2003: 27) argue that their highly inconclusive results are due to 'wide country variations in

sociability patterns' while Canduela et al. (2015) state that they found it difficult to identify differentiated sociability patterns among disadvantaged groups in the data set they analysed (the British Household Panel Survey). However, the few changes found by the above-mentioned authors in the social support received to find employment might be caused by looking at isolation as a broad phenomenon, instead of focusing on identifying the loss of really useful contacts for job seeking. According to the literature, the most useful contacts are those placed in the employment sphere (Calvo-Armengol and Jackson, 2004; Cingano and Rosolia, 2012) and with a high SES (Lin 2001; Trimble and Kmec, 2011; O'Connor, 2013), although family networks are also important for young people in their first steps in the labour market due to their inexperience in job search processes (Kramarz and Skans, 2014).

An analysis more focused on measuring changes in the network of contacts used for job seeking –based on the application of the analytical tools of social network analysis– could offer clearer results regarding the causal relationship between the sociability of unemployed individuals and the increasing difficulty of abandoning the situation of unemployment. In addition, when the idea of cumulative disadvantage is applied to labour market trajectories, it is important to highlight not only the effects of specific labour market events but also the role played by inequalities of the individuals' resources (DiPrete and Eirich, 2006). With regard to the importance of employment-related contacts, the idea that social networks tend to reproduce the unequal social positions of individuals is key. This question is addressed in the following section.

## 3. Sociability spheres and inequality

Networks are deployed in different relational environments, which are unequally accessed by individuals (Bidart and Lavenu, 2005; Granovetter, 1985). These relational environments have been called *foci* by Feld (1981), *spheres of sociability* by Degenne and Forsé (1999: 45-54) and *meeting contexts* by Grossetti (2005), who all have a similar understanding of these domains as contexts that obey institutional logics of interaction, such as family, neighbourhoods, the workplace, civic organizations, and leisure activities. The focus on spheres of sociability allows a dynamic understanding of social networks as the outcome of the construction, destruction and reconstitution of ties linked to the events and life domains that are structured and change during the life trajectories of individuals (Bidart et al., 2011). The unequal distribution of support networks among different social profiles can be explained by their different life events and the types of contexts in which individuals have developed their trajectories (Bidart and Lavenu, 2005). Therefore, this socially embedded and changing nature of social networks demands a type of research that considers the way experiences in the labour market trajectory shape the set of network resources an individual is able to access and use in subsequent employment transitions.

The structural constrictions and social divisions in sociability spheres also play a role in the reproduction of inequalities in social networks, since individuals have a differentiated access to them (Bottero, 2007; Lin, 2001; O'Connor, 2013). First of all, the inclination towards developing homophilous networks (McPherson et al., 2001), i.e. interacting and establishing ties with people with whom one shares social similarities, acts as a primary source of social reproduction of inequalities. Bottero (2007) uses the term *differential association* to refer to the phenomenon in which 'disadvantaged people tend to associate with people who are similarly disadvantaged, while the privileged likewise draw more of their contacts from the privileged' (Bottero, 2007: 815). Second, access to resources

embedded in these networks depends on the web of (unequal) social relations of individuals (Granovetter, 1985). Social divisions based on gender, age, ethnicity and social class have to be considered (Trimble and Kmec, 2011; Verhaeghe et al., 2013). Lin (1999), for instance, has extensively developed the 'strength of position' thesis, according to which the access and mobilization of resources embedded in networks, as well as the outcome in the labour market of this mobilization, depend on both the SES of individuals and their contacts (Lin, 1999; 2001). He also suggests that strong ties are more effective for individuals of high status, while weak ties will be particularly useful for the more disadvantaged.[iii] Research by Oesch and Von Ow (2017) and by Verhaeghe et al. (2013) shows that, to a large extent, a low position in parents' educational level, employment status or social class limits access to useful information and social support in the job search process of young people. Regarding the role of other inequality factors, Anthias and Cederberg (2009) highlight the articulation between ethnicity, gender and generation in the access to useful network resources for business success among the self-employed of ethnic minorities.

These few examples show that many social differences can be considered to address the inequalities existing in the use of network resources. In this article the focus is placed on the role of family background, and particularly of family SES, understood as the position parents occupy in the employment relations system,[iv] which has proven to play a major role in the reproduction of social inequalities in the labour market (Bell and Blanchflower, 2011; O'Reilly et al., 2015). However, the role played by other sociodemographic characteristics of young people and the features of the (un)employment events experienced in the labour market will also be explored.

## 4. Hypotheses

Social exclusion theory (Gallie et al., 2003; Gallie and Paugam, 2004) points to the relevance of support networks in the downward spiral brought about by the experience of unemployment. The analysis in the present article aims to take this theory further by emphasizing the role social networks play in the accumulation of disadvantages (DiMaggio and Garip, 2012) arising from individuals' resources and endowments (DiPrete and Eirich, 2006), and particularly from the different family socioeconomic background, a key element in the reproduction of social inequalities in young people's performance in the labour market (O'Reilly et al., 2015). The access to certain sociability spheres—and notably to contacts of a high SES in employed positions (Lin, 2001; O'Connor, 2013)—is another key element in the establishment and evolution of the set of network resources individuals may use. Thus, the social divisions affecting this access must be considered (Bidart et al., 2011).

Following from the main ideas of the theoretical framework briefly summarized above, two hypotheses are formulated. The first one addresses the reproduction of social inequalities in the access to sociability spheres and the composition of personal networks, and is formulated as follows:

H1: Young adults of low family socioeconomic background obtain the most useful support for job-finding from contacts met in the employment sphere, while other young people of higher status obtain this support also from family networks.

The second hypothesis takes into account the disruptive role of the unemployment experience, which has especially negative effects on young people with a low family socioeconomic background, as it leads them to lose their most resourceful contacts:

H2: Unemployment brings about an impoverishment of the network of contacts of young adults with a low family socioeconomic background, and thus limits the range and scope of useful resources and information about employment opportunities that these individuals receive from their network.

## 5. Context and methods

### *5.1. The Spanish context*[v]

Spain is a particularly relevant case for studying the role of personal networks in the cumulative disadvantage produced by unemployment, given the high use of social networks for job seeking and the impact of the recession on youth unemployment.

After the start of the economic crisis in 2007, unemployment in Spain grew dramatically from the historical low of 8.5% in 2006 to reach the historical high of 27.2% in 2013. Since then it has remained close to 20%, surpassed in EU only by Greece as of 2014. Moreover, temporary employment rates have remained over 30% since before the crisis, and affect young people in particular (CES, 2018).

Youth unemployment rates have been high during the recession, often doubling the figures for the rest of the working population (reaching a peak of 56.9% in 2013). Despite the slow recovery of the economy in Spain, the youth unemployment rate is still very high: in 2016 it was 42.9% among the under 25s and 27.3% among the under 35s. In the province of Barcelona (the smallest territorial unit that includes the MAB, where the field work was carried out), youth unemployment has followed a similar evolution to that of the whole of Spain, although with slightly lower rates and a faster recovery of

employment: among the under 25s, it fell from 51.5% in 2012 to 19.8% in 2016. The sectoral distribution of employment in the MAB shows its urban character, as a larger percentage of workers are employed in services than in Spain overall (85% compared with 67.3%) and a lower percentage in agriculture (0.07% compared with 4.7%), industry (9.9% compared with 11.8%) and construction (4.4% compared with 5.7%).[vi]

These features of Spanish youth employment are framed in a *familistic* or *sub-protective* youth transition regime (Walther, 2006), which is characterized by the weak coverage of many public social policies, the resulting importance of family support, and the role played by informal work when regular employment is not found. Indeed, the shadow economy in Spain for 2012 accounted for 19.2% of GDP, which is far from the 7.6% of Austria or the 10.1% of the UK (Eurofound, 2013: 5-6). The scale of informal work in Spain can also be related to the high use of networks for job searching (Rieucau, 2008). The presence of high unemployment and precarious jobs (Kramarz and Skans, 2014) and the importance of small firms in the Spanish economy (Rieucau, 2008) also explain this high use of networks for job seeking. This importance is reflected in the fact that in 2016 41.68% of young employees aged 16 to 34 found their jobs though personal contacts, followed by direct application to the employer (21.73%), while only 2.4% found their job through a public employment office (Spanish Statistical Institute, 2017).

### *5.2. Fieldwork and data*

The data for this article come from a survey conducted in the Metropolitan Area of Barcelona in 2014. The survey formed part of a research project aimed at examining the role of social networks in job seeking and access to the labour market among young people (see Vacchiano et al., 2018).

The data were gathered in computer-assisted personal interviews carried out with Egonet software on 250 young individuals from 20 to 34 years old who had had at least one event of activity (employment or unemployment) in their career. The interviews were carried out from February to November 2014 by the nine members of the research project team.

A non-probabilistic sampling strategy was implemented, based on proportional quotas by sex, age group (20-24, 25-29 and 30-34), neighbourhood (Barcelona, and other municipalities of the MAB), country of birth (Spain, and abroad) and educational level (primary, secondary and higher education). The interviewees were recruited by means of contacts provided by several youth educational and civic institutions, direct contact by young individuals who saw the project recruitment announcements, the interviewers' personal networks of acquaintances, and a snow-ball strategy from the interviewees. The interviewees were rewarded for their participation with a courtesy gift.

The survey used to gather the data was hybrid (Axinn and Pearce, 2006: 103-137), combining a standard quantitative questionnaire with qualitative elements, such as a longitudinal qualitative life grid. Three types of data were collected:

a) Sociodemographic characteristics of the person interviewed and his/her family background.

b) Longitudinal information on the succession of events along the trajectory related to training and (un)employment since the interviewees were 16 years old. For every event of employment the interviewee was asked about how the job was found, and if a contact was involved. A life grid was used to reconstruct the trajectory by drawing all events month-by-month on the grid. As shown in previous studies, this tool facilitates the recall of interviewees (e.g. Blane, 1996) and helps

to engage the interviewees in telling their stories (e.g. Wilson et al., 2007), therefore minimizing retrospective biases.

c) Personal network composition. A free-list name generator (McCarty, 2002) was used to identify up to 20 contacts who were helpful or offered support in any way in the job-seeking process (the name generator and strategies employed to minimize recall biases are available in Appendix 1). Some information about the contacts was provided: their socioeconomic background, age, gender, educational level and situation in the labour market; their role in assisting the interviewee in job seeking and the outcome of that support; and when and in which sociability sphere they were met: employment, family, educational, and other spheres (which include contacts met in the neighbourhood, or in associations and leisure spaces).

The data collected provided three types of units of analysis: (a) interviewees (n=250), (b) interviewees' training and (un)employment events (n=1734) and (c) supportive contacts (n=2336).

A descriptive summary of the main variables used in the article is included in Appendix 2. Given their importance in the analysis, the two categories of SES generated from the initial 15 occupational categories collected in the survey are specified below. The category of 'low SES' refers to 'semi- and low-skilled occupations' and is made up of wage earners in jobs that require intermediate, low or minimum qualifications. They also include jobs that involve some tasks of coordination or command of a few workers. The other category of 'middle and high SES' is a merge of two categories: the intermediate category, 'intermediate occupations', made up of higher and lower grade professionals (i.e. scientists, salaried engineers and higher education professionals) and foremen and

section heads; and the top category of ‘business owners and managers’, which includes all the situations in which the person owns the business and those in which they work as a business manager. Although the use of a broad category like this is not usual, the requirement of having enough cases with long unemployment periods in each SES category for statistical comparison between them made this merged category appropriate. Finally, the *dominant position* criterion (Erikson, 1984), which establishes that the category which is highest hierarchically (whether it is the mother or the father) should be chosen, was used to obtain the variable *family SES background*.

### *5.3. Analysis*

Two sets of analyses were performed to test the hypotheses. First, descriptive and regression analyses explored the differences in SES in the set of network resources that are mobilized in order to look for and find employment. A special mention is required to describe the analyses shown in Table 3, which inquire about the characteristics of contacts that helped the interviewees look for jobs, based on multilevel logistic regressions. The multilevel model takes into account the hierarchical nature of nested data, i.e. the fact that the data have variables related to different levels of analysis (see Snijders and Bosker, 1999). It can be used to assess the effects of contact-level variables (in other words, characteristics of the contacts), controlled by their belonging to a personal network. These models included the independent variables as fixed effects and interviewee variance as a random effect. The data were fitted using a maximum likelihood approach (Laplace approximation) with the glmer function of the lme4 package in R statistical software. All the rest of the analyses were performed using SPSS.

Second, a set of linear regression analyses assessed the impact of the experience of unemployment during the Great Recession (from October 2007 to March 2014) on the scope of the support networks available to the young people at the moment of data collection.

All these analyses were also stratified on the grounds of the young adults' family SES background. Moreover, the results were in all cases controlled by the interviewee's sex, origin and age (when applicable).

## 6. Results

### *6.1. Young adults' inequalities in labour market trajectories and social networks by family SES background*

Figure 1 below presents an initial descriptive approach to the labour market trajectories of young adults of different family SES backgrounds during the Great Recession (see also Table A1 in the Appendix). While a greater proportion of those with parents of middle and high SES were studying during the crisis (as they tend to stay longer in the educational system), young adults with parents of a low SES suffered unemployment and unstable employment (temporary contracts, internships, working without contract or in short odd jobs) to a greater extent ($p<0.01$) and were less time in stable employment (with open-ended contracts or non-salaried employment) during the recession. Therefore, the young adults included in the sample experienced the economic crisis in different ways. Placed in context, not only young people were particularly affected by the lack of employment in Spain during the Great Recession, but among them the influence of the

family's socioeconomic background clearly defined their endowments and strategies for navigating in the labour market (See López-Andreu and Verd, 2016).

Figure 1 here

The patterns of inequality can also be seen in the personal networks used for job seeking, suggesting an overlap of (dis)advantages. Table 1 shows that though young adults of different family backgrounds mobilized a similar number of contacts to look for jobs, they found them in different spheres and the contacts had different SES. The first column of Table 1 shows that the interviewees had an average of 9.34 supportive contacts. This number was slightly higher for young adults of low SES family background, but the difference was not statistically significant. The following columns describe some of their characteristics. First, young people of a low family SES background met the contacts in closer circles (mainly the family, neighbourhood and leisure spheres) to a greater extent than young adults of a middle and high SES background. Second, young adults of a low family SES background had more unemployed people in their support network, which means that they had to rely on the help of contacts who were unable to even secure employment for themselves. Moreover, a smaller number of their supportive contacts were or had been employed in qualified positions. In short, young people of low SES family background in general had access to contacts placed in lower positions of the labour market hierarchies.

Table 1 here

*6.2. Use and development of young people's social networks*

Some descriptive statistics (table not shown) reveal that using family networks to look for jobs is a widespread practice among young people: 90% of the interviewees stated that at least one family member helped them to look for jobs, with no statistical differences across family SES, and that 14.5% of the jobs they had had were obtained through a family contact. This practice is particularly important at the beginning of the career path: for 26.5% of the individuals interviewed this was the mechanism that led them to find their first job, and its importance rose in the context of the Great Recession, with the percentage of young individuals who found their first job in this way rising to 42.3% from 2008 onwards. These results show a picture resembling the case of Sweden analysed by Kramarz and Skans (2014), in which family contacts are crucial for young people to find their first job, especially in times of employment scarcity.

Notwithstanding this extended use of family networks to look for and find a job, Table 2 shows that the likelihood of obtaining the first job through family networks was smaller among young people of a low family SES than among young people of a middle and high family SES. These results therefore show a greater weakness of family ties among young adults with lower SES with regard to support in job seeking.

Table 2 here

Table 3 shows that the employment sphere provided the young adults of a low family SES with resourceful contacts that compensated the "low quality" of family networks, as mentioned in H1. Their likelihood of meeting supportive contacts who were employed was 309% higher in their employment sphere than in their family sphere. It was also 202%

more likely that they would meet there contacts of a higher SES and 182% less likely that these contacts would be or become unemployed. These findings suggest that these settings allow young people from a low background to transcend their closest working-class environment and to reach other milieus that might assist them better in developing their employment trajectory. By contrast, for young adults from a middle and high SES background, the likelihood of meeting more high-status contacts was 117% less in the employment sphere than in their family sphere. The contacts they met in the employment sphere were more employed than their family members, but the contrast was smaller than among young adults of a low SES background, and their family ties were much less unemployed than those they met from other spheres. Altogether, these results shown in Tables 2 and 3 confirm H1.

Table 3 here

Contacts from the employment sphere were also important in the recursive process of acquiring and using social networks along the labour market trajectory. As shown in TableA5 (in the Appendix), employment-related contacts were the most useful ties for finding jobs in which to meet new people helpful for job seeking. These ties were particularly significant for young individuals from a low family SES background because they exerted a multiplying effect in their employment trajectory by expanding their networks and fostering their careers.

*6.3. The impact of unemployment on the social networks of young individuals*

Regarding H2, Table 4 shows that the experience of long periods of unemployment during the crisis (operationalized considering spells of unemployment of a minimum of one year that total at least two years during the whole period of the crisis) decreased the number of contacts from the employment sphere. The fact that the coefficient is significant for all the social profiles considered suggests that being unemployed for a long time hinders the creation or the maintenance of employment-related contacts for young people of any SES background. Nevertheless, this loss had a differentiated impact between the two groups considered, as explained below.

Table 4 also shows that, for young people from low family SES background, the experience of long periods of unemployment also affected the range and scope of their social network in terms of the number of contacts that were employed and the number of contacts from a middle or high family SES background. In other words, reducing employment-related ties had adverse implications for young people of a low family SES background, for whom these ties were much "better" than their family ties. By contrast, this reduction was not so important for young adults from a middle and high family SES background, who maintained contacts who were employed and of a higher SES from other spheres. Only among the former did long-term unemployment bring about an impoverishment of personal networks, thus confirming H2.

Table 4 here

Interestingly, although it is not the main focus of this article, the results also point to gender inequalities, as males from a middle and high SES background had mobilized more social support in the employment sphere, and with contacts who were in a better

position in the labour market (both employed and with a higher SES). This effect, however, was not significant among young adults from a low SES background. This gender effect contrasts with the effect of higher education, which increased by almost two contacts the number of ties with middle or high SES individuals, also among young adults from a low family SES background. This finding suggests that having a university education had a positive impact on young people's networks, which might have counterbalanced the effect of long-term unemployment among those from a low family SES background because they met contacts of higher status in the educational sphere. Finally, having had a higher number of different jobs only improved networks of young people from higher SES backgrounds. In short, the results suggest the intersection of various factors of inequality in the size and composition of the network.

## 7. Conclusions

This article has addressed the harmful impact of unemployment on young people's support networks for job seeking. It has aimed to identify the sociability dimension of the cumulative disadvantage triggered by unemployment, thus contributing to the understanding of the network effects on inequality (Di Maggio and Garip, 2012) in the labour market. It does so by looking at the changes in the subset of the personal network of contacts that constitutes a resource for job seeking.

The article contributes to better understand the relationship between unemployment and the loss of social support put forward by social exclusion theory (Gallie et al, 2003). First, it has highlighted the importance of social networks in the downward spiral caused by unemployment by confirming empirically that long-term unemployment causes a rupture

with supportive contacts for job seeking. These effects were possible to observe systematically by virtue of using the analytical tools of social network analysis. The results show that suffering long periods of unemployment diminishes the resources embedded in personal networks that are most useful in the labour market, namely those placed in the employment sphere.

Second, the article provides the basis for a refinement of the theory by taking into consideration the potential compensating effects among different sociability spheres (particularly between the family sphere and the employment sphere) and emphasizing the role played by family SES background during this process. Specifically, the results show that while the development of new ties in the labour market helps young people from a low SES background to improve their social network of support, the experience of long-term unemployment hinders this improvement, bringing about an impoverishment in two crucial elements of social network "quality": ties to contacts who are employed and ties to contacts who have a higher SES. By contrast, for young people from middle and high SES backgrounds, the experience of unemployment does not produce these disadvantages, because they are able to maintain supportive contacts, accessing resourceful networks directly through their family and immediate social milieu. It is thus the crosscutting of detachment from the labour market and low SES that causes the most harmful processes of cumulative disadvantage among young workers.

The causes of this differential effect of unemployment on young people lie in the importance of the family for the provision of welfare and social support in Spain (Russell and O'Connell, 2001; Walther, 2006). Ties built in the family sphere are particularly important for entering the labour market, but they are more effective for individuals of a middle and high family SES background.

Finally, the article has identified that, together with the key role played by family SES background, being a man and having higher education to some extent counterbalance the relation between unemployment and loss of social support. The article thus shows that the harmful effects of unemployment on the network of supportive contacts are produced at the crossroads of different axes of inequality, and that many social divisions, boundaries and inequalities should be considered in the intersection of social ties with social position (Anthias, 2012).

The results obtained in the analysis have interesting implications in terms of policies geared towards reducing unemployment and social exclusion. Because the effects of unemployment cannot be considered in isolation from the labour market trajectory and the family SES background, there is a need for targeted and tailored measures for young unemployed people from a low SES family background. These measures should facilitate access to employment opportunities and community-based resources that could counterbalance personal network shortages and the exclusionary negative dimension of social networks among deprived groups (Portes, 1998).

Further analysis would help to fulfil the objectives set out in this article in greater depth. It would be useful to look at the ability of networks to "recover" after long periods of unemployment and to see the impact of unemployment on personal networks in other countries with more protective welfare regimes, where the family does not play such a key role in the provision of welfare (Gallie, 2013), and where youth unemployment is less important. The role played by the poor employment opportunities for young people in the labour market and the subjective experience of unemployment should also be explored. Finally, a fully intersectional approach could be developed, in order to further

explore how the crosscutting of family SES background, gender and educational level reproduce and amplify the unequal access to social support created by unemployment.

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**Notes**

[i] Moreover, our name generator operationalizes Lin's (1999) notion of accessed and used social capital. However, for the sake of the arguments' sharpness, and given the controversy around the concept of social capital, the concept used in the article is *social networks*.

[ii] This term is used hereafter to refer to the 'semi- and low-skilled' occupations. See Section 5.2 for a detailed description of the two categories of SES used in the analysis.

[iii] Using Granovetter's definition (1973), weak ties refer to those that provide access to social circles other than one's own and thus to new unknown information; strong ties are those established in the same social circle.

[iv] In this article, aggregates of occupations are used as an indicator of socioeconomic status. Although since the 1970s these aggregates of occupations have been identified as social classes by several authors (such as Erikson and Goldthorpe, 1992; or Rose and Harrison, 2007), the authors of this article consider (following Bourdieu, 1987; and Savage, 2016) that it is better to use the concept of social class to account for collectives of people who share not only a socioeconomic position but also some identity and practices.

[v] The data on unemployment come from the European Labour Force Survey of the referred years in the text.

[vi] The data related to the MAB are from IERMB (2018: 55), while those related to the whole of Spain are from the Spanish National Statistics Institute.

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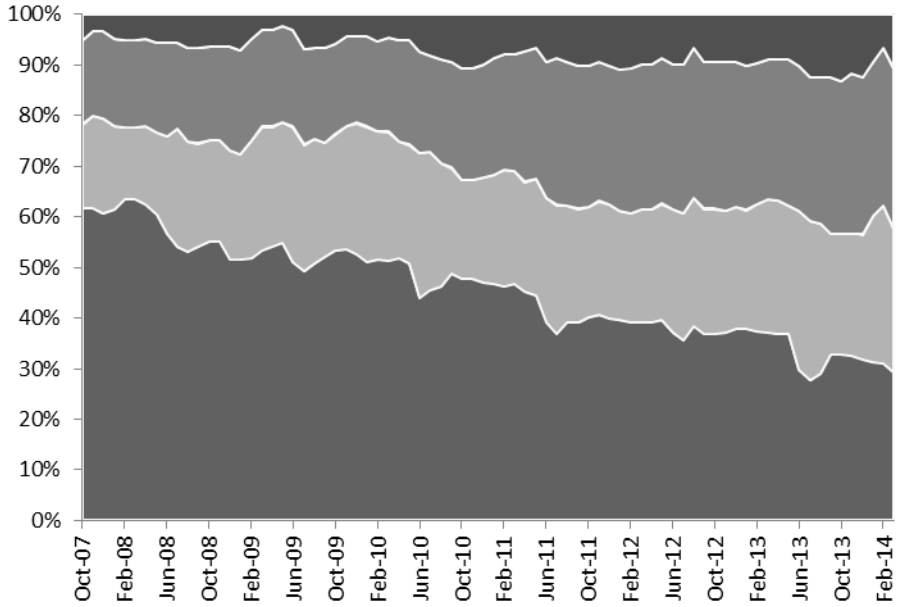
**Tables and figures**

*Figure 1: Monthly distribution of labour market status (studying, in unstable employment, in stable employment and unemployed) of young adults during the period of the recession, by family SES background*

*(a) Middle and high family SES background (N=141)*




*(b) Low family SES background (N=107)*

*Table 1: Analysis of variance showing the number of supportive contacts that had helped the interviewees to look for jobs, the spheres in which these contacts were met, and the employment status and SES of the contacts by young people's family SES background.*

| | | Job-seeking support | Spheres in which the supportive contacts were met | | | | Labour market and status of the supportive contacts | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number of contacts that helped to look for jobs | Number met in the family sphere * | Number met in the employment sphere | Number met in the educational sphere | Number met in other spheres ** | Number currently employed | Number currently unemployed ** | Number of middle and high SES ** |
| Middle and high family SES background | Mean | 8.94 | 2.50 | 1.86 | 2.17 | 2.40 | 7.26 | .42 | 4.97 |
| | N | 141 | 141 | 141 | 141 | 141 | 141 | 141 | 141 |
| | SD | 4.81 | 1.85 | 2.13 | 2.50 | 2.35 | 4.08 | .74 | 3.55 |
| Low family SES background | Mean | 9.84 | 3.07 | 1.74 | 1.76 | 3.22 | 7.54 | 1.02 | 3.29 |
| | N | 107 | 107 | 107 | 107 | 107 | 107 | 107 | 107 |
| | SD | 4.38 | 2.18 | 1.86 | 2.30 | 2.55 | 3.76 | 1.35 | 2.54 |

Significance level: **0.01 *0.05

*Table 2: Odds Ratios of a multinomial logistic regression analysis testing the factors associated with using networks to find the first job. Baseline category: using formal mechanisms or self-application (N=250)*

| | First job obtained through family networks | First job obtained through non-family networks |
|---|---|---|
| Low family SES background (vs. middle and high SES) | .478* | .774 |
| Sex: male (vs. female) | 1.795 | .651 |
| Origin: born abroad (vs. born in Spain) | 1.305 | 1.375 |
| Event started during the crisis (vs. started before 2008) | 4.133** | 1.433 |
| Age at start of first job | .705** | .803* |

Significance level: **0.01 *0.05

*Table 3: Odds Ratios of binary multilevel regression models showing the association of the interviewee's sex, origin, age, level of education and the sphere where contacts were met with the employment status (employed or unemployed) and SES (middle or high) of the contacts (N=250 interviewees, N=2336 contacts who had helped look for jobs)*

| | | Status of the contact: employed | Status of the contact: unemployed | Status of the contact: middle or high SES |
|---|---|---|---|---|
| Middle and high family SES background | Contact sociability sphere: employment (vs. family) | 2.631** | 1.384 | 0.460** |
| | Contact sociability sphere: educational (vs. family) | 0.874 | 2.442* | 0.371** |
| | Contact sociability sphere: other (vs. family) | 1.078 | 2.365* | 0.337** |
| | Interviewee sex: male (vs. female) | 0.985 | 0.799 | 1.130 |
| | Interviewee origin: born abroad (vs. born in Spain) | 1.086 | 1.802 | 0.631 |
| | Interviewee age: 25-29 (vs. 20-24) | 1.707** | 2.237 | 0.898 |
| | Interviewee age: 30-34 (vs. 20-24) | 1.176 | 3.090* | 1.187 |
| | Interviewee education: higher (vs. primary and secondary) | 1.438 | 0.757 | 3.136** |
| Low family SES background | Contact sociability sphere: employment (vs. family) | 4.094** | 0.354* | 3.028** |
| | Contact sociability sphere: educational (vs. family) | 1.471 | 1.078 | 2.851** |
| | Contact sociability sphere: other (vs. family) | 1.403 | 0.908 | 1.292 |
| | Interviewee sex: male (vs. female) | 1.158 | 0.838 | 0.819 |
| | Interviewee origin: born abroad (vs. born in Spain) | 1.188 | 0.914 | 0.619 |
| | Interviewee age: 25-29 (vs. 20-24) | 1.032 | 1.075 | 1.369 |
| | Interviewee age: 30-34 (vs. 20-24) | 1.063 | 1.122 | 1.245 |
| | Interviewee education: higher (vs. primary and secondary) | 1.260 | 0.609 | 1.896** |

Significance level: **0.01 *0.05

*Table 4. Regression coefficients of linear regression models showing the association of long-term unemployment during the recession with the number of contacts who had helped to look for jobs who were met in the employment sphere (model a), who were employed (model b) and who had middle or high SES (model c), segmented according to the interviewees' family SES background (N=250 interviewees)*

| | | 4a | 4b | 4c |
|---|---|---|---|---|
| | | No. of contacts in the employment sphere | No. of contacts employed | No. of contacts of middle or high SES |
| Middle and high family SES background | Events of unemployment, short (<12 months) or long (>=12months), that total between 12 and 24 months (vs. never unemployed or unemployed less than 12 months) | -.969 | -0.037 | -0.712 |
| | Long events of unemployment (>=12 months) that total 24 months or more (vs. never unemployed or unemployed less than 12 months) | -2.395** | -0.851 | -0.893 |
| | Length of trajectory in years | 0.009 | -0.155 | -0.031 |
| | Number of jobs | .273** | 0.303* | 0.178 |
| | Education: higher (vs. primary and secondary) | 0.285 | 0.812 | 1.999** |
| | Sex: male (vs. female) | 0.859** | 1.738* | 1.318* |
| | Origin: born abroad (vs. born in Spain) | -0.387 | 1.824 | 0.295 |
| Low family SES background | Events of unemployment, short (<12 months) or long (>=12months), that total between 12 and 24 months (vs. never unemployed or unemployed less than 12 months) | 0.341 | 0.312 | -0.054 |
| | Long events of unemployment (>=12 months) that total 24 months or more (vs. never unemployed or unemployed less than 12 months) | -0.911* | -2.208* | -1.517* |
| | Length of trajectory in years | 0.096 | -0.072 | -0.016 |
| | Number of jobs | 0.003 | 0.115 | 0.020 |
| | Education: higher (vs. primary and secondary) | 0.233 | 0.964 | 1.933** |
| | Sex: male (vs. female) | -0.071 | 0.605 | -0.150 |
| | Origin: born abroad (vs. born in Spain) | -0.591 | 1.238 | -0.349 |

Significance level: **0.01 *0.05

## Appendix 1: Questionnaire

### Name generator

*Please write down a list of 20 people that you know by name and vice versa with whom you have had contact at least in the last two years by any means of communication, and whom you could be able to contact again if necessary or advisable. Do not include people younger than 18 years old. It can by anyone. Try to write down first the people who are close and very important to you. Second, write down the people who have already been mentioned during the interview because they have helped you in your career, as well as other people not mentioned who have helped or provided support with information and help to get a job (whether they are close or distant from you). Finally, write down any other people you tend to see often, even if they are not very close or helpful. You can also include other people. It might be helpful for you to think of different groups of people in different places (family, friends, colleagues, neighbours, etc.). Write down the first name or full name so that only you can recognize these people but you will be able to recognize them later on. For instance: "Mig Cervan" for "Miguel de Cervantes".*

This name generator gathered a fixed-number list of 20 contacts, including three types of contacts: (i) all important intimate contacts; (ii) all contacts who were helpful or supportive in any way in the job seeking process; (iii) any other contacts who were not so close as the first ones or as useful or supportive as the second ones, but who were met often. This category was included in order to reach the fixed number of 20 reported contacts in total, which guaranteed that the number of contacts mentioned in the two previous categories was not biased by fatigue or desirability effects. However, only those who helped the interviewee look for jobs were included in the analysis (even if their assistance did not lead to actually finding a job). The fact that just before this question

the questionnaire had explored all the employment events of the trajectory and the strategies applied to find them helped the people to recall who had helped in the job seeking process.

In order to ensure the quality of the responses on the characteristics of these contacts, the list included only names of people with whom the interviewee had been in touch in the last two years. As a result, contacts who had helped the interviewee to find a job in the past but with whom he or she had not had contact in the last two years were excluded from the list. In Tables A1 and A5, when the main focus is on the past events and not on the present network, they are referred to as “old unknown contacts”.

## Appendix 2: Additional tables

### Table A1: Summary statistics for study variables:

| | | |
|---|---|---|
| **Interviewee characteristics (%)** (N=250) | | |
| Education | Primary education | 25.2 % |
| | Secondary education | 26.8 % |
| | Higher education | 48.0 % |
| Age | 20-24 | 22.8 % |
| | 25-29 | 34.0 % |
| | 30-34 | 43.2 % |
| Place of residence | Barcelona | 49.2 % |
| | Other municipalities of the Metropolitan Area of Barcelona | 50.8 % |
| Origin | Born in Spain | 87.2 % |
| | Born abroad | 12.8 % |
| Sex | Female | 52.0 % |
| | Male | 48.0 % |
| Main situation of activity (at the time of the interview) | Studying | 20.4 % |
| | Employed | 55.2 % |
| | Unemployed | 22.4 % |
| | Others | 2.0 % |
| Family SES background | High | 25.8 % |
| | Middle | 31.0 % |
| | Low | 43.1 % |
| **Network characteristics** of the sub-set of contacts who had helped the interviewees to look for jobs (Mean number of contacts and standard deviation) (N=250): | | |
| Overall number | | 9.34(4.63) |
| Sociability sphere: Family | | 2.75(2.01) |
| Sociability sphere: Employment | | 1.81(2.01) |
| Sociability sphere: Education | | 2.0(2.42) |
| Sociability sphere: Other | | 2.75(2.46) |
| Employed contacts | | 7.4(3.93) |
| Unemployed contacts | | 0.67(1.09) |
| Contacts of low SES | | 4.48(3.59) |
| Contacts of middle or high SES | | 4.224(3.26) |
| Weak ties (“not close at all”) | | 1.38(1.49) |
| Strong ties (“intimate” and “close”) | | 7.94(4.08) |
| Contacts who had actually helped to find a job | | 2.56(2.10) |
| **Events characteristics (%)** (N=1734) | | |
| Type of event | Education | 17.3 % |
| | Employment | 65.1 % |
| | Unemployment | 14.2 % |
| | Others | 3.5 % |
| Mechanism used for finding employment events | Family contacts | 14.5 % |
| | Employment contacts | 8.1 % |
| | Educational contacts | 6.3 % |
| | Other contacts | 9.3 % |
| | Old unknown contacts | 24.9 % |
| | Formal mechanism | 19.2 % |
| | Self-application | 17.7 % |
| Mechanism used for finding the first job | Family contacts | 26.5 % |
| | Non-family contacts | 42.4 % |
| | Other mechanisms (formal & self-application) | 31.1 % |

## Table A1: Summary statistics for study variables (continuation)

**Characteristics of the trajectory during the recession** (from October 2007 to March 2014) (N=250):

| | | |
|---|---|---|
| Labour market status (mean number of months in the following states and standard deviation) | Studying | 27.59(28.45) |
| | Unstable employment (temporary contracts, internships, working without contract or in short odd jobs) | 20.93(23.29) |
| | Stable employment (open-ended contracts or non-salaried employment) | 16.10(25.49) |
| | Unemployed | 9.77(16.25) |
| Experience of unemployment during the crisis | Never unemployed or unemployed less than 12 months | 72.0% |
| | Events of unemployment, short (<12 months) or long (>=12months), that total between 12 and 24 months | 14.4% |
| | Long events of unemployment (>=12 months) that total 24 months or more | 13.6% |

***Table A2:*** **Additional information for Table 2: Multinomial logistic regression analysis testing the factors associated with using networks to find the first job. Baseline category: using formal mechanisms or self-application (N=250).**

| | | B | SE | Sig. | Exp(B) |
|---|---|---|---|---|---|
| First job obtained through family networks | Intercept | 5.604 | 1.785 | ** | |
| | Age at the start of the first job | -.349 | .105 | ** | .705 |
| | Low family SES background (vs. middle and high family SES background) | -.739 | .367 | * | .478 |
| | Sex: male (vs. female) | .585 | .361 | | 1.795 |
| | Event started during the crisis (vs. event started before 2008) | 1.419 | .454 | ** | 4.133 |
| | Origin: born abroad (v. born in Spain) | .266 | .578 | | 1.305 |
| First job obtained through non-family networks | Intercept | 4.361 | 1.499 | ** | |
| | Age at the start of the first job | -.219 | .086 | * | .803 |
| | Low family SES background (vs. middle and high family SES background) | -.257 | .312 | | .774 |
| | Sex: male (vs. female) | -.430 | .314 | | .651 |
| | Event started during the crisis (vs. event started before 2008) | .360 | .441 | | 1.433 |
| | Origin: born abroad (v. born in Spain) | .319 | .488 | | 1.375 |

R2 Nagelkerke : 0.149**

Significance level: **0.01 *0.05

**Table A3a: Additional information for Table 3: Odds Ratios and 95% Confidence Intervals (between brackets) of binary multilevel regression models showing the association of the interviewee's sex, origin, age, level of education and the sphere where contacts were met with the employment status (employed) of the contacts (N=250 interviewees, N=2336 contacts who had helped look for jobs).**

| | | | | |
|---|---|---|---|---|
| Middle and high family SES background | Random effects: | | | |
| | Interviewee variance | 0.532 | 0.439 | 0.330 |
| | Fixed effects: | | | |
| | Contact sociability sphere: employment (vs. family) | | 2.680(1.58-4.53)** | 2.631(1.55-4.46)** |
| | Contact sociability sphere: education (vs. family) | | 0.869(0.58-1.30) | 0.874(0.59-1.31) |
| | Contact sociability sphere: other (vs. family) | | 1.083(0.73-1.62) | 1.078(0.72-1.61) |
| | Interviewee sex: male (vs. female) | | | 0.985(0.66-1.47) |
| | Interviewee origin: born abroad (vs. born in Spain) | | | 1.086(0.63-1.88) |
| | Interviewee age: 25-29 (vs. 20-24) | | | 1.707(1.00-2.91)** |
| | Interviewee age: 30-34 (vs. 20-24) | | | 1.176(0.68-2.04) |
| | Interviewee education: higher (vs. primary and secondary education) | | | 1.438(0.94-2.21) |
| | AIC | 1165.9 | 1148.8 | 1149.4 |
| | BIC | 1176.1 | 1174.4 | 1200.5 |
| | ICC | 0.139 | 11.800 | 9.100 |
| Low family SES background | Random effects: | | | |
| | Interviewee variance | 0.435 | 0.409 | 0.405 |
| | Fixed effects: | | | |
| | Contact sociability sphere: employment (vs. family) | | 4.087(2.29-7.28)** | 4.094(2.29-7.332)** |
| | Contact sociability sphere: education (vs. family) | | 1.495(0.95-2.36) | 1.471(0.93-2.33) |
| | Contact sociability sphere: other (vs. family) | | 1.394(0.96-2.03) | 1.403(0.96-2.05) |
| | Interviewee sex: male (vs. female) | | | 1.158(0.75-1.78 |
| | Interviewee origin: born abroad (vs. born in Spain) | | | 1.188(0.66-2.13) |
| | Interviewee age: 25-29 (vs. 20-24) | | | 1.032(0.60-1.78) |
| | Interviewee age: 30-34 (vs. 20-24) | | | 1.063(0.63-1.79) |
| | Interviewee education: higher (vs. primary and secondary education) | | | 1.260(0.79-2.01) |
| | AIC | 1069.3 | 1045.5 | 1054.1 |
| | BIC | 1079.1 | 1070.1 | 1103.2 |
| | ICC | 0.117 | 0.111 | 0.110 |

Significance level: **0.01 *0.05

**Table A3b: Additional information for Table 3: Odds Ratios and 95% Confidence Intervals (between brackets) of binary multilevel regression models showing the association of the interviewee's sex, origin, age, level of education and the sphere where contacts were met with the employment status (unemployed) of the contacts (N=250 interviewees, N=2336 contacts who had helped look for jobs).**

| | | | | |
|---|---|---|---|---|
| Middle and high family SES background | Random effects: | | | |
| | Interviewee variance | 0.438 | 0.380 | 0.039 |
| | Fixed effects: | | | |
| | Contact sociability sphere: employment (vs. family) | | 1.380(0.53-3.58) | 1.384(0.53-3.58) |
| | Contact sociability sphere: education (vs. family) | | 2.389(1.04-5.49)* | 2.442(1.07-5.59)* |
| | Contact sociability sphere: other (vs. family) | | 2.554(1.14-5.74)* | 2.365(1.06-5.28)* |
| | Interviewee sex: male (vs. female) | | | 0.799(0.45-1.43) |
| | Interviewee origin: born abroad (vs. born in Spain) | | | 1.802(0.74-3.47) |
| | Interviewee age: 25-29 (vs. 20-24) | | | 2.237(0.86-5.80) |
| | Interviewee age: 30-34 (vs. 20-24) | | | 3.090(1.17-8.19)* |
| | Interviewee education: higher (vs. primary and secondary education) | | | 0.757(0.41-1.41) |
| | AIC | 463.9 | 462.3 | 463.8 |
| | BIC | 474.1 | 487.9 | 515 |
| | ICC | 0.117 | 10.300 | 1.200 |
| Low family SES background | Random effects: | | | |
| | Interviewee variance | 0.621 | 0.591 | 0.549 |
| | Fixed effects: | | | |
| | Contact sociability sphere: employment (vs. family) | | 0.360(0.16-0.82)* | 0.354(0.16-0.81)* |
| | Contact sociability sphere: education (vs. family) | | 1.029(0.56-1.88) | 1.078(0.58-1.99) |
| | Contact sociability sphere: other (vs. family) | | 0.933(0.56-1.57) | 0.908(0.54-1.53) |
| | Interviewee sex: male (vs. female) | | | 0.838(0.48-1.48) |
| | Interviewee origin: born abroad (vs. born in Spain) | | | 0.914(0.43-1.94) |
| | Interviewee age: 25-29 (vs. 20-24) | | | 1.075(0.52-2.22) |
| | Interviewee age: 30-34 (vs. 20-24) | | | 1.122(0.57-2.22) |
| | Interviewee education: higher (vs. primary and secondary education) | | | 0.609(0.32-1.15) |
| | AIC | 660.5 | 657.1 | 664.6 |
| | BIC | 670.3 | 681.6 | 713.7 |
| | ICC | 0.159 | 15.200 | 14.300 |

Significance level: **0.01 *0.05

***Table A3c:*** **Additional information for Table 3: Odds Ratios and 95% Confidence Intervals (between brackets) of binary multilevel regression showing the association of the interviewee's sex, origin, age, level of education and the sphere where contacts were met with the SES (middle or high) of the contacts (N=250 interviewees, N=2336 contacts who had helped look for jobs).**

| | | | | |
|---|---|---|---|---|
| Middle and high family SES background | Random effects: | | | |
| | Interviewee variance | 1.313 | 1.388 | 1.003 |
| | Fixed effects: | | | |
| | Contact sociability sphere: employment (vs. family) | | 0.487(0.32-0.74)** | 0.460(0.30-0.70)** |
| | Contact sociability sphere: education (vs. family) | | 0.388(0.26-0.58)** | 0.371(0.25-0.56)** |
| | Contact sociability sphere: other (vs. family) | | 0.342(0.23-0.51)** | 0.337(0.23-0.50)** |
| | Interviewee sex: male (vs. female) | | | 1.130(0.70-1.81) |
| | Interviewee origin: born abroad (vs. born in Spain) | | | 0.631(0.32-1.26) |
| | Interviewee age: 25-29 (vs. 20-24) | | | 0.898(0.47-1.71) |
| | Interviewee age: 30-34 (vs. 20-24) | | | 1.187(0.60-2.34) |
| | Interviewee education: higher (vs. primary and secondary education) | | | 3.136(1.88-5.24)** |
| | AIC | 1458.8 | 1428 | 1410 |
| | BIC | 1469 | 1453.3 | 1460.6 |
| | ICC | 0.285 | 29.700 | 23.400 |
| Low family SES background | Random effects: | | | |
| | Interviewee variance | 0.825 | 0.699 | 0.499 |
| | Fixed effects: | | | |
| | Contact sociability sphere: employment (vs. family) | | 3.117(1.98-4.90)** | 3.028(1.93-4.75)** |
| | Contact sociability sphere: education (vs. family) | | 2.951(1.87-4.67)** | 2.851(1.80-4.51)** |
| | Contact sociability sphere: other (vs. family) | | 1.282(0.86-1.92) | 1.292(0.86-1.93) |
| | Interviewee sex: male (vs. female) | | | 0.819(0.53-1.27) |
| | Interviewee origin: born abroad (vs. born in Spain) | | | 0.619(0.33-1.15) |
| | Interviewee age: 25-29 (vs. 20-24) | | | 1.369(0.77-2.43) |
| | Interviewee age: 30-34 (vs. 20-24) | | | 1.245(1.19-3.02) |
| | Interviewee education: higher (vs. primary and secondary education) | | | 1.896(1.19-3.02)** |
| | AIC | 1168.2 | 1125.3 | 1118.7 |
| | BIC | 1177.9 | 1149.4 | 1166.9 |
| | ICC | 0.200 | 17.500 | 13.200 |

Significance level: **0.01 *0.05

**Table A4a: Additional information for Table 4. Linear regression analysis showing the association of long-term unemployment during the recession with the number of contacts who had helped to look for jobs who were met in the employment sphere, segmented according to the interviewees' family SES background (N=250 interviewees):**

| | | B | SE | Beta | Sig. | TOL | B | SE | Beta | Sig. | TOL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Middle and high family SES background | Intercept | 0.945 | 0.408 | | * | | 0.617 | 0.426 | | | |
| | Length of trajectory in years | 0.025 | 0.044 | 0.050 | | 0.750 | 0.009 | 0.047 | 0.019 | | 0.635 |
| | Number of jobs | 0.283 | 0.063 | 0.411 | ** | 0.699 | 0.273 | 0.063 | 0.397 | ** | 0.671 |
| | Events of unemployment, short (<12 months) or long (>=12months), that total between 12 and 24 months (vs. never unemployed or unemployed less than 12 months) | -1.196 | 0.534 | -0.183 | * | 0.884 | -0.969 | 0.533 | -0.149 | | 0.852 |
| | Long events of unemployment (>=12 months) that total 24 months or more (vs. never unemployed or unemployed less than 12 months) | -2.340 | 0.775 | -0.240 | ** | 0.944 | -2.395 | 0.773 | -0.245 | ** | 0.912 |
| | Education: higher (vs. primary and secondary) | | | | | | 0.285 | 0.357 | 0.067 | | 0.812 |
| | Sex: male (vs. female) | | | | | | 0.859 | 0.328 | 0.202 | ** | 0.958 |
| | Origin: born abroad (vs. born in Spain) | | | | | | -0.387 | 0.494 | -0.059 | | 0.991 |
| | R2 | | 0.192 | | ** | | | 0.241 | | ** | |
| Low family SES background | Intercept | 0.827 | 0.507 | | | | 0.949 | 0.568 | | | |
| | Length of trajectory in years | 0.115 | 0.051 | 0.254 | * | 0.678 | 0.096 | 0.054 | 0.212 | | 0.611 |
| | Number of jobs | -0.026 | 0.067 | -0.046 | | 0.646 | 0.003 | 0.073 | 0.004 | | 0.551 |
| | Events of unemployment, short (<12 months) or long (>=12months), that total between 12 and 24 months (vs. never unemployed or unemployed less than 12 months) | 0.370 | 0.485 | 0.076 | | 0.863 | 0.341 | 0.491 | 0.071 | | 0.853 |
| | Long events of unemployment (>=12 months) that total 24 months or more (vs. never unemployed or unemployed less than 12 months) | -1.014 | 0.426 | -0.235 | * | 0.888 | -0.911 | 0.451 | -0.211 | * | 0.802 |
| | Education: higher (vs. primary and secondary) | | | | | | 0.233 | 0.485 | 0.053 | | 0.734 |
| | Sex: male (vs. female) | | | | | | -0.071 | 0.373 | -0.019 | | 0.869 |
| | Origin: born abroad (vs. born in Spain) | | | | | | -0.591 | 0.536 | -0.108 | | 0.920 |
| | R2 | | 0.124 | | ** | | | 0.139 | | * | |

Significance level: **0.01 *0.05

**Table A4b: Additional information for Table 4. Linear regression analysis showing the association of long-term unemployment during the recession with the number of contacts who had helped to look for jobs who were employed, segmented according to the interviewees' family SES background (N=250 interviewees):**

| | | B | SE | Beta | Sig. | TOL | B | SE | Beta | Sig. | TOL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Middle and high family SES background | Intercept | 7.416 | 0.852 | | ** | | 6.412 | 0.882 | | ** | |
| | Length of trajectory in years | -0.111 | 0.091 | -0.118 | | 0.750 | -0.155 | 0.096 | -0.164 | | 0.635 |
| | Number of jobs | 0.316 | 0.132 | 0.240 | * | 0.699 | 0.303 | 0.131 | 0.230 | * | 0.671 |
| | Events of unemployment, short (<12 months) or long (>=12months), that total between 12 and 24 months (vs. never unemployed or unemployed less than 12 months) | -0.558 | 1.115 | -0.045 | | 0.884 | -0.037 | 1.103 | -0.003 | | 0.852 |
| | Long events of unemployment (>=12 months) that total 24 months or more (vs. never unemployed or unemployed less than 12 months) | -0.761 | 1.618 | -0.041 | | 0.944 | -0.851 | 1.599 | -0.045 | | 0.912 |
| | Education: higher (vs. primary and secondary) | | | | | | 0.812 | 0.738 | 0.100 | | 0.812 |
| | Sex: male (vs. female) | | | | | | 1.738 | 0.679 | 0.213 | * | 0.958 |
| | Origin: born abroad (vs. born in Spain) | | | | | | 1.824 | 1.023 | 0.146 | | 0.991 |
| | R2 | | 0.041 | | | | | 0.116 | | * | |
| Low family SES background | Intercept | 8.432 | 1.057 | | ** | | 7.654 | 1.180 | | ** | |
| | Length of trajectory in years | -0.076 | 0.107 | -0.082 | | 0.678 | -0.072 | 0.113 | -0.079 | | 0.611 |
| | Number of jobs | 0.104 | 0.139 | 0.090 | | 0.646 | 0.115 | 0.151 | 0.099 | | 0.551 |
| | Events of unemployment, short (<12 months) or long (>=12months), that total between 12 and 24 months (vs. never unemployed or unemployed less than 12 months) | 0.273 | 1.010 | 0.028 | | 0.863 | 0.312 | 1.020 | 0.032 | | 0.853 |
| | Long events of unemployment (>=12 months) that total 24 months or more (vs. never unemployed or unemployed less than 12 months) | -2.244 | 0.888 | -0.257 | * | 0.888 | -2.208 | 0.937 | -0.253 | * | 0.802 |
| | Education: higher (vs. primary and secondary) | | | | | | 0.964 | 1.007 | 0.107 | | 0.734 |
| | Sex: male (vs. female) | | | | | | 0.605 | 0.775 | 0.081 | | 0.869 |
| | Origin: born abroad (vs. born in Spain) | | | | | | 1.238 | 1.112 | 0.112 | | 0.920 |
| | R2 | | 0.073 | | | | | 0.094 | | | |

Significance level: **0.01 *0.05

**Table A4c: Additional information for Table 4. Linear regression analysis showing the association of long-term unemployment during the recession with the number of contacts who had helped to look for jobs who had middle or high SES, segmented according to the interviewees' family SES background (N=250 interviewees):**

| | | B | SE | Beta | Sig. | TOL | B | SE | Beta | Sig. | TOL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Middle and high family SES background | Intercept | 4.002 | 0.743 | | ** | | 3.231 | 0.755 | | ** | |
| | Length of trajectory in years | 0.073 | 0.080 | 0.089 | | 0.750 | -0.031 | 0.083 | -0.037 | | 0.635 |
| | Number of jobs | 0.149 | 0.116 | 0.130 | | 0.699 | 0.178 | 0.112 | 0.155 | | 0.671 |
| | Events of unemployment, short (<12 months) or long (>=12months), that total between 12 and 24 months (vs. never unemployed or unemployed less than 12 months) | -1.444 | 0.973 | -0.133 | | 0.884 | -0.712 | 0.945 | -0.065 | | 0.852 |
| | Long events of unemployment (>=12 months) that total 24 months or more (vs. never unemployed or unemployed less than 12 months) | -1.328 | 1.411 | -0.081 | | 0.944 | -0.893 | 1.369 | -0.055 | | 0.912 |
| | Education: higher (vs. primary and secondary) | | | | | | 1.999 | 0.632 | 0.282 | ** | 0.812 |
| | Sex: male (vs. female) | | | | | | 1.318 | 0.581 | 0.186 | * | 0.958 |
| | Origin: born abroad (vs. born in Spain) | | | | | | 0.295 | 0.876 | 0.027 | | 0.991 |
| | R2 | | 0.038 | | | | | 0.145 | | ** | |
| Low family SES background | Intercept | 4.002 | 0.743 | | ** | | 3.452 | 0.735 | | ** | |
| | Length of trajectory in years | 0.073 | 0.080 | 0.089 | | 0.750 | -0.016 | 0.070 | -0.025 | | 0.611 |
| | Number of jobs | 0.149 | 0.116 | 0.130 | | 0.699 | 0.020 | 0.094 | 0.025 | | 0.551 |
| | Events of unemployment, short (<12 months) or long (>=12months), that total between 12 and 24 months (vs. never unemployed or unemployed less than 12 months) | -1.444 | 0.973 | -0.133 | | 0.884 | -0.054 | 0.635 | -0.008 | | 0.853 |
| | Long events of unemployment (>=12 months) that total 24 months or more (vs. never unemployed or unemployed less than 12 months) | -1.328 | 1.411 | -0.081 | | 0.944 | -1.517 | 0.584 | -0.257 | * | 0.802 |
| | Education: higher (vs. primary and secondary) | | | | | | 1.933 | 0.627 | 0.319 | ** | 0.734 |
| | Sex: male (vs. female) | | | | | | -0.150 | 0.483 | -0.030 | | 0.869 |
| | Origin: born abroad (vs. born in Spain) | | | | | | -0.349 | 0.693 | -0.047 | | 0.920 |
| | R2 | | 0.141 | | ** | | | 0.230 | | ** | |

Significance level: **0.01 *0.05

**Table A5: Odds Ratios and 95% Confidence Intervals (between brackets) of binary multilevel regression models showing whether spells of employment are occasions for acquiring further contacts, according to the mechanism used for obtaining jobs (N=250 interviewees, N=1734 events of employment).**

| | | | | |
|---|---|---|---|---|
| | Random effects: | | | |
| | Interviewee variance | 0.472 | 0.333 | 0.362 |
| | Fixed effects: | | | |
| | Intercept | | | |
| | Job-finding mechanism: employment contact (vs. family) | | 2.330(0.97-5.57) | 2.282(0.94-5.54) |
| | Job-finding mechanism: educational contact (vs. family) | | 2.344(0.92-5.95) | 2.353(0.90-6.17) |
| | Job-finding mechanism: contacts from other spheres (vs. family) | | 2.909(1.25-6.77)* | 2.949(1.25-6.94)* |
| Middle and | Job-finding mechanism: old unknown contact (vs. family) | | 0.839(0.38-1.85) | 0.805(0.36-1.81) |
| high family | Job-finding mechanism: formal mechanism (vs. family) | | 0.927(0.39-2.20) | 0.908(0.37-2.21) |
| SES | Job-finding mechanism: self-application (vs. family) | | 1.100(0.49-2.45) | 1.120(0.50-2.51) |
| background | Interviewee sex: male (vs. female) | | | 1.110(0.67-1.85) |
| | Interviewee origin: born abroad (vs. born in Spain) | | | 1.150(0.52-2.57) |
| | Interviewee age: 25-29 (vs. 20-24) | | | 1.041(0.59-1.82) |
| | Interviewee age: 30-34 (vs. 20-24) | | | 0.458(0.12-1.71) |
| | Interviewee education: higher (vs. primary and secondary education) | | | 1.206(0.72-2.03) |
| | AIC | 615.8 | 600.4 | 608.1 |
| | BIC | 625.2 | 637.7 | 668.7 |
| | ICC | 0.125 | 9.200 | 9.900 |
| | Random effects: | | | |
| | Interviewee variance | 0.359 | 0.165 | 0.000 |
| | Fixed effects: | | | |
| | Intercept | | | |
| | Job-finding mechanism: employment contact (vs. family) | | 3.784(1.25-11.44)* | 3.825(1.29-11.38)* |
| | Job-finding mechanism: educational contact (vs. family) | | 0.819(0.15-4.44) | 0.663(0.12-3.60) |
| | Job-finding mechanism: contacts from other spheres (vs. family) | | 1.716(0.55-5.37) | 1.618(0.52-5.07) |
| | Job-finding mechanism: old unknown contact (vs. family) | | 1.493(0.55-4.07) | 1.296(0.48-3.49) |
| Low family | Job-finding mechanism: formal mechanism (vs. family) | | 2.136(0.80-5.68) | 2.024(0.76-5.39) |
| SES | Job-finding mechanism: self-application (vs. family) | | 1.099(0.35-3.43) | 0.920(0.30-2.83) |
| background | Interviewee sex: male (vs. female) | | | 0.583(0.33-1.03) |
| | Interviewee origin: born abroad (vs. born in Spain) | | | 0.654(0.28-1.51) |
| | Interviewee age group: 25-29 (vs. 20-24) | | | 0.883(0.48-1.62) |
| | Interviewee age group: 30-34 (vs. 20-24) | | | 0.228(0.03-1.77) |
| | Interviewee education: higher (vs. primary and secondary education) | | | 1.102(0.60-2.03) |
| | AIC | 451.1 | 447.9 | 448.2 |
| | BIC | 459.8 | 482.7 | 504.6 |
| | ICC | 0.098 | 4.800 | 0.000 |

Significance level: **0.01 *0.05