Psychosocial Intervention

Living in the metropolitan area. Correlation of interurban mobility with the structural cohesion of personal networks and the originative sense of community

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A B S T R A C T

This study analyzed the metropolitan lifestyle with a representative personal networks survey of the population of Alcalá de Guadaíra ($n = 403$), in the urban environment of Seville (SW Spain). A factorial analysis with density, centralization, number of cliques and the number of components allowed differentiating two dimensions of variability in personal networks related to cohesion and fragmentation of the network structure. The frequency of interurban travel plays a decisive role in the development of a metropolitan lifestyle, and is associated with a lower structural cohesion of personal networks and with some moderation in the original sense of community. Based on the results, we question the hypothesis of community decline in metropolitan contexts.

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Vivir en el área metropolitana. Correlación de la movilidad interurbana con la cohesión estructural de las redes personales y el sentido de comunidad originario

R E S U M E N

En este estudio analizamos el estilo de vida metropolitano con una encuesta de redes personales representativa de la población de Alcalá de Guadaíra ($n = 403$), en el entorno urbano de Sevilla. Un análisis factorial con la densidad, la centralización, el número de cliques y el número de componentes permitió diferenciar dos dimensiones de variabilidad en las redes personales, relacionadas con la cohesión y la fragmentación de la estructura reticular. La frecuencia de desplazamientos interurbanos tiene un papel determinante en el desarrollo de un estilo de vida metropolitano, se asocia con una menor cohesión estructural de las redes personales y con cierta moderación del sentido de comunidad originario. Basándonos en los resultados, cuestionamos la hipótesis del declive comunitario en los contextos metropolitanos.

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Urban life transforms personal relationships. In the early 20th century, the pioneering studies of the Chicago School assumed that urbanization, compared with traditional societies, brings problems of loneliness, isolation, anomie or stress. From this point of view, living in the city involves the breakdown of the primary groups and has a negative psychological impact (Park, 1916, 1926). Among other changes, the individual is forced to move between separate socio-geographical contexts and alternative spaces of sociability that barely overlap. Consequently, residents of urban areas experience a relative weakening of both their integration into the community and the availability of social support resources.

However, although the thesis of the community decline has remained over time (Putnam, 2000), empirical research has demonstrated since then that people usually manage to have meaningful social support relationships in different residential contexts and also with different lifestyles (Wellman, 1979). A milestone in this direction is the work of Fischer (1982), which analyzed the impact of residential communities in personal networks, relying on an extensive survey in 50 districts of the State of California with different degrees of urbanization. According to his observations, urban residence does not result in a deterioration of psychological well-being or a lower quality of personal relationships. Nevertheless, a comparatively greater spatial dispersion of relations is observed.

The people of the cities and metropolitan areas generally have more geographically widespread relationships, and at the same time a lower relative proportion of local ties in the personal network than residents of rural areas (Fischer, 1982). It is therefore a replacement of a part of the local relations with distant relationships, and is reflected in a lower density of personal networks in urban settings (Bidart, Degenne, & Grossetti, 2011; Fischer, 1982; Wellman, 1979). However, also in this case the spatial distribution of the relationships neither diminishes significantly the quality and types of social support available, nor adversely affects the subjective well-being of urban residents.

This does not mean that geographic distance does not entail a cost for maintaining relationships. In fact, residential mobility often involves changes in the structure and composition of the personal network (de Federico de la Rúa, 2003; Domínguez & Maya-Jariego, 2008; Lubbers et al., 2010; Maya-Jariego & Armitage, 2007). Both commuting from home to work as interurban mobility routines (and, of course, international migration) causes weakening of relationships, change to a dormant state or even their disappearance (Bidart et al., 2011). Weak ties are particularly sensitive to personal transitions, to changes in the institutional contexts of interaction and to frequent geographical mobility. Instead, the strongest relationships are those that best resist the geographical distance. Specifically, confidence and friendship relationships are more likely to remain even if the individual no longer frequents (or does it less often) the contexts in which they originated (Grossetti, 2005).

With regard to the structure of personal networks, deploying an active metropolitan way of life, with greater geographical mobility, usually results in a lower density (Bidart et al., 2011; Fischer, 1982; Wellman, 1979), higher nodal betweenness (Maya-Jariego & Armitage, 2007), and greater geographic dispersion of personal relationships (Magdol, 2000). It also often leads to a more heterogeneous demographic composition (Araya & Maya Jariego, 2005). Other forms of mobility such as changes of residence appear to be reflected in a lower degree centrality and a higher proportion of isolated nodes (Haynie & South, 2005), networks more centralized around ego (Viry, 2012), and a relative increase in the presence of ties outside the family (Degenne & Lebeaux, 2005). On the other hand, geographic mobility in all its forms, from commuting from home to work to international migration, modifies patterns of sociability and brings personal experiences that finally affect the sense of community (Maya-Jariego & Armitage, 2007), mainly through social interaction in urban neighborhoods (Valera, 1997; Sánchez-Vidal, 2001).

With this research we want (a) to describe the diversity of structures of personal networks in the general population, and (b) to identify the most relevant dimensions of this variability. For this, we take as a case study a metropolitan residential environment in the urban area of Seville, through which (c) we analyze the association of the patterns of geographical mobility with the properties of personal networks and the sense of local community.

Method

Sample

The data is based from a survey conducted between 2004 and 2005 in Alcalá de Guadaíra (Province of Seville, SW Spain), consisting of a random sample of 403 individuals selected by gender quotas, district of residence, and age. From an estimated population of 62,000 citizens registered in the city of Alcalá de Guadaíra at the time of the survey (with a total of 50,933 people that were 16 years old and over), interviews were conducted in the Northern districts ($n = 107$, 26%), South ($n = 47$, 11.7%), Midwest ($n = 97$, 24.1%) and Eastern ($n = 148$, 36.7%).

Respondents were 37.82 years old at the time of the interview (SD = 15.96), with an age range between 16 and 82 years. On average, respondents have lived in Alcalá 33.34 years (SD = 16.43), ranging from 1 to 81. The segments of the population are fairly compensated for men ($n = 188$, 46.7%) and women ($n = 214$, 53.1%), single ($n = 164$, 40.7%) and married ($n = 191$, 47.7%). Most respondents have completed primary studies ($n = 184$, 45.7%), followed in proportion by secondary studies ($n = 135$, 33.5%), university studies ($n = 46$, 11.4%) and the population without studies ($n = 23$, 5.7%).

Instruments

The survey consisted of the evaluation of personal networks, sense of community with Alcalá de Guadaíra and Seville, and metropolitan mobility patterns. In addition some questions about socio-demographic aspects and the social situation of the city of residence were made.

Personal networks

The network interview is divided into three parts. First, the *Arizona Social Support Interview Schedule* (ASSIS) as name generator (Barrera, 1980) was used. Second, respondents were asked to complete the list until a total of 25 alteri. The use of a fixed number of contacts facilitates data processing and allows comparison between different personal networks (McCarty, 2002). On each name, respondents indicated the place of residence (Alcalá, Seville or other city) and the type of relationship (distinguishing between relatives, friends, acquaintances or classmates, neighbors and "other"). Finally, respondents completed the relationship matrix (25×25), generating a total of 80,343 edges on a total of 120,900 possible relations.

Sense of community

The 12 items *Sense of Community Index* (SCI) was applied (Chavis, Hogge, McMillan, & Wandersman, 1986), which we used in previous studies with international immigrants (Domínguez & Maya-Jariego, 2008), and population involved in a pattern of metropolitan mobility (Maya-Jariego & Armitage, 2007). As with the original, the Spanish version of the scale assesses the factors of membership, influence, satisfaction of needs and shared emotional connection (Maya-Jariego, 2004; McMillan & Chavis, 1986). SCI is composed of simple questions like "very few neighbors know me" or "it's very important for me to live in this neighborhood," which were filled with values from 1 ("Completely disagree") to 4 ("Totally agree"). In this case it was administered in duplicate, based on the place of residence (Alcalá de Guadaíra) and the capital where they normally pursue their university studies (Seville). The values ranged from a low of 14 and a maximum of 47 in the case of Alcalá, compared to 12 and 44 in the case of Seville.

Socio-demographic aspects and metropolitan mobility

Respondents indicated the frequency of travel between Alcalá and Seville choosing between "less than once a month", "once a