Gender difference of social support networks of China's rural-urban migrants: A whole network analysis

Extended abstract

Yike Ren and Haifeng Du

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Background

Since mid-1980, millions of rural Chinese have migrated to cities. According to data from the Fifth Census in China, the population of rural-urban migrants were mainly males and younger people with a lower education level. After migration, there will be gender differences in the reconstruction of social networks. Social networks consist of all the formal and informal social relationships between individuals and others. In social networks analysis, there are two perspectives: ego-centered or individual network, and whole network. The ego-centered network consists of a focus individual, termed ego, and a set of other individuals who have ties to the ego. Usually an ego-centered network has no determinate boundaries and there are no connections between social network members except to the focus individual. Therefore, there is no useful structure in the ego-centered network. On the other hand, the whole network consists of a certain group of individuals and their social relationships, which induce a determinate boundary and structure of whole network can be studied. National statistics indicate that the number of male migrants is significantly greater than that of female migrants. After rural-urban migrants arrive in cities, the changes of living environment and life-style produce changes in their social support networks (including instrumental support, emotional support and social contact support), which has a strong influence on their work and life. Social network analysis methods are employed to study the whole networks, in particular gender

differences in rural-urban migrants' social support network.

Objectives

This paper aims to study gender differences in rural-urban migrants' social support networks through whole network analysis. Gender differences in rural-urban migrants' social support networks at the level of individuals, dyads, triads, as well as their whole networks, will be analyzed quantitatively.

Data and Methods

Data

The data used in this paper were collected from Shenzhen city in China, using a sampling survey conducted by the Institute for Population and development studies at Xi'an Jiaotong University in April, 2005. Shenzhen city was selected as a survey site because it is an excellent representative of coastal developed cities in China, where temporary residents are 4.77 times as many as registered permanent residents. In this survey, rural-urban migrants above 15 years old were selected as our respondents using stratified sampling from districts, streets, and communities. The number of satisfactory samples is 1,739, the proportion of males is 51.1 percent, and that of females is 48.9 percent; the average age of respondents is about 31. The percentage of respondents aged below 25 is 27.0 percent, 40.0 percent are aged 25-34, and 33.0 percent above 35. The percentages of people who graduated from junior high school and senior high school and above are 58.1 and 29.5 respectively. The number of concentrated residence samples is 547, and these were collected from 5 survey sites. The data on whole networks used in this paper were collected from 3 concentrated residence survey sites, HM, XYX and CZ companies, and the numbers of samples are 200, 90 and135 respectively. Because these companies represent different industries, all of the respondents from HM, an electrical equipment factory, are females; those from XYX include males and females and have a balanced sex ratio; those from CZ, a construction site, are mainly males. On the whole, the respondents of these three

survey sites should be representative of the situations of concentrated residents of the rural-urban migrants in Shenzhen.

Methods

This paper aims to study gender difference among rural-urban migrants at the level of individuals, dyads, triads as well as whole network. At the level of individuals, we calculate individuals' indegree and outdegree respectively, and categorize the network members by gender. To compare the difference in gender distribution and average size of network members, LR test and t-test are used. At the level of dyads, we compare gender difference in asymmetry and mutual relationships of the social support networks in the three survey sites by counting the 3 possible dyads (dyad census). At the level of triads, we compare gender difference in relationship structure of triads by computing the 16 possible triad (triads census). Finally, we compare gender difference in rural-urban migrants' social network by computing properties of the whole networks.

Results and conclusions

Using whole network analysis, this paper studies gender differences in rural-urban migrants' social networks. Our findings are:

At the level of individuals, there is a significant gender difference in the distribution and average size for network members of social support networks among concentrated residents.

At the level of dyads, regardless of instrumental support, emotional support or social contact support, the percentage of mutual relations among rural-urban migrants is the highest in the networks of XYX, and the percentage of mutual relations of CZ is significantly greater than that of HM.

At the level of triads, the relation structures of triads census of XYX is significantly greater than HM and CZ in terms of instrumental support, emotional support and social contact support. The percentage of triad relationships of CZ is

significantly greater than that of HM.

At the level of whole network, the density of instrumental support, emotional support and social contact support of XYX is greatest among the three survey sites, with CZ next, HM the lowest. Outdegree centralization of the three social support networks of XYX is greatest, followed by HM and CZ. Indegree centralization of the instrumental support network of XYX is slightly greater than that of CZ. However, indegree centralization of the emotional support network of CZ is the greatest, XYX is next, and HM is the lowest.

In short, this study shows that there are significant gender differences in the structure of relationships among rural-urban migrants at the level of individuals, dyads, triads, and the whole network.