

SOCIAL NETWORKS AND RISK IN NATURAL DISASTER

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In recent years, the important role of social networks in coping with risk of natural disaster is drawing attention of researchers and policy makers. Emerged as a social structural theory and methodology, social networks theory viewed relationships between people or organizations as constructing a network that framing individuals' action. Some empirical studies have shown that social networks could help disaster victims to get information, support and other resources in and after disaster, which increased their resilience towards the risk of disasters.

China has a tradition of emphasizing the value of personal relationship (*guanxi*) in social life. Moreover, China is now undergoing a rapid social transition. During the transition, the old formal disaster management system is not functioning well while the new system is not built up yet. Therefore the informal institution like social networks should play an even more important role in disaster. However, few empirical studies have been done on this topic. Even fewer studies have explored if the social networks have the same effect for different social groups, especially those more vulnerable groups, in natural disaster.

Based on a social survey of 44 000 households in China's western region, this paper intended to test these hypothesis. We selected 14 000 households who experienced serious natural disasters in the last year as the sample of study. Result of logistic and ordinal regression showed that peoples' social networks significantly influenced their probability of getting formal and informal support after disaster, and determined how well they recovered from the stroke of natural disaster. Further analysis showed that networks with smaller size, higher density, and lower heterogeneity could help people to get informal support. On the other hand, less dense and less heterogeneous networks are better for getting formal support and for economic recovery of the victims.

An interaction effect between network density and household income was found in our analysis, which indicated that the poor people are more dependent on their social networks in disaster. However, as the poor usually have smaller, denser and more homogenous networks, their social networks could not be very helpful for them to resist the risk of disaster. This result not only indicated the downsides of social networks, but also has policy implications.

Key words: social networks, natural disasters, risk