



DRH workshop

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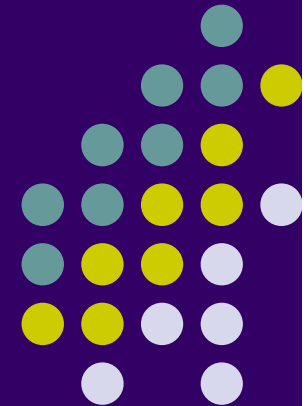
Social Capital and Natural Disasters:

A sociological study of disaster

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Social Capital: the missing link?

- Disaster is not only a natural phenomenon, but a **SOCIAL** one
 - *It disrupt the normal functioning of society and its sub-units*
 - *Social amplification of disasters/risks*
- Important resources to cope with disasters
 - *Physical capital*
 - *Financial capital*
 - *Human capital*
 - *Social capital*

What is Social Capital?

Social Capital: A social structural resource

- **Micro-level social capital**
 - *Resources embedded in personal network, which enables actors to get more external social resources*
 - *It helps people to obtain information, knowledge and social support, thus is helpful for people to achieve higher social-economic status*
- **Macro-level social capital**
 - *Features of social organization, such as networks, norms, and trust, that facilitate coordination and cooperation for mutual benefit*
 - *It plays a indispensable role in promoting economic performance, making democracy work, alleviating poverty and ensuring sustainable development*

Roles of Social Capital in Disaster

- **Micro-level social capital (social networks)**
 - *Provide warning/information to the victims before and during the disaster*
 - *Provide timely rescue and other support to the victims during disaster*
 - *Provide resources and help during the recovery period, which helped the victims to recover quicker and better*
 - *Provide mental support, which buffered the negative effects of disaster on victims' mental health*
- **Macro-level social capital (trust, norm and participation)**
 - *Communities with good tradition of social participation and self-organizing could react more efficiently to the disaster*
 - *Communities with more trust recover quicker and better from disaster*

An example in Western China

- Based on empirical data, my study intends to explore.....
 - *What is the role of social capital in recovery from disasters?*
 - *How does it work?*
 - *The “institutional vacuum” in China during the period of social transition and the related problems in disaster governance*

Data



- This paper use a subset of the data: only people who lived in sample communities that had natural disaster in the last year

- Monitoring the Social and Economic Development of Western China
- Conducted by NRCSTD and Fafo
- The survey covers:
 - *11 provinces in western China*
 - *2,772 communities*
 - *44,000 households*
 - *167,000 person*
- Multi- modules

• <i>Demography</i>	<i>Education</i>
• <i>Labor force and migration</i>	<i>Health</i>
• <i>Housing and Infrastructure</i>	<i>Agriculture</i>
• <i>Household economy</i>	
• <i>Social network and social capital</i>	
• <i>Information about the community</i>	

Research variables

- **Dependent variables**
 - *Formal support (from government, NGO, etc)*
 - *Informal support (from relatives, friends)*
 - *Self-estimation of household economic status*
 - *Change of economic situation in the last year*
- **Independent variables**
 - *Micro-level social capital*
 - Network size*
 - Network density*
 - Embedded resource in network*
 - *Macro-level social capital*
 - Trust*
 - Public participation*
- **Control variables**
 - *Economic situation of household, education, rural-urban, location*

Profiles

47.3% of sampled households live in communities that experienced natural disasters last year

5% of victims received formal support, and 17% informal support

25% of sampled individuals have serious mental problems

77% of victim households seem to recover well from the disasters, while one third of households define themselves as “poor” now

The mean size of network is around 26 persons, the mean density (proportion of relatives) is 0.69

Higher trust in familiar people, and low rate of public participation

Results

	Formal support	Informal support	Self-rated status	Self-rated changes	Self-rated changes
<i>Micro social capital</i>					
Network size	0.001	-0.019 ^{***}	0.006 ^{***}	0.003 ^{***}	0.003 [*]
Network composition	-0.257 ⁺	0.357 ^{**}	-0.092 ⁺	-0.102 [*]	0.553 ⁺
Network heterogeneity	0.075 ⁺	0.057 [*]	0.062 ^{***}	-0.005	-0.004
Resource score	0.004 ⁺	0.019 ^{***}	0.010 ^{***}	0.002 [*]	0.002 ⁺
<i>Macro social capital</i>					
Trust on institutions	0.001	0.006 [*]	0.005 ^{**}	0.001 ⁺	0.001 ⁺
Trust on strangers	0.001	0.001	0.003 ⁺	0.010 ^{***}	0.010 ^{***}
Trust on familars	0.001	0.002	-0.008 ^{**}	0.003	0.003
General social participation	-0.003	0.008 [*]	0.003	-0.008 ^{***}	-0.008 ^{***}
Political participation	-0.036 [*]	0.020 ⁺	-0.011 ^{**}	-0.014 ^{***}	-0.014 ^{***}
<i>Control variables</i>					
Average HH income (logged)	-0.042	0.365 ^{***}	0.456 ^{***}	0.226 ^{***}	0.299 ^{***}
Highest education of HH member	-0.056 ^{***}	-0.100 ^{***}	0.052 ^{***}	0.016 ^{***}	0.016 ^{***}
Live in city (yes=1)	-0.203	-0.156	0.365 ^{***}	0.330 ^{***}	0.335 ^{***}
Dependent ratio	0.335 ^{**}	1.168 ^{***}	0.107 [*]	0.017	0.017
Have disabled HH member(yes=1)	0.729 ^{***}	0.439 ^{***}	0.533 ^{***}	0.137 [*]	0.137 [*]
<i>Geographic position</i>					
Plain (yes=1)	0.035	-0.173 ^{**}	-0.074 ^{**}	-0.005	-0.005
Hilly (yes=1)	-0.353 ^{***}	0.446 ^{***}	0.047	-0.029	-0.030
Distance to city	0.001 [*]	0.000	0.001	0.000	0.000
Population of community	0.001 ^{**}	0.001 ^{**}	0.001	0.003 [*]	0.001 [*]
Income*network composition	—	—	—	—	-0.087 ⁺
.....					

Notices that network composition have opposite influence on formal and informal support, and also have different impact on recovery

Resource score has a consistent positive impact

Trust has little influence on getting support, but have positive impact on recovery. Trust on familars not helpful.

Participation is positive for getting support, however, they are negatively correlated with recovery

Interaction of strong ties and income has a negative impact, showing that for lower income earner, strong ties are more important

Main Findings

- Positive impact of social capital on recovery from disaster
 - *Especially the network size and imbedded resources*
- Impact of network structure depended on different types of action
 - *Core networks with smaller size, higher similarity, more strong ties are better for getting informal support*
 - *Networks with bigger size, lower similarity, more weak ties are better for getting formal support and recovery*
- Limits of Social Capital
 - *Interaction analysis showed that people in lower social status had worse network resources, and benefited less from their network*

Main Findings

- Trust and Recovery
 - *Community level of trust had no impact on getting in/formal support, but had significant impact on economic recovery of disaster victims, especially institutional trust and trust on strangers*
 - *Which indicated that trust do not help people get more resources, but rather help them to cooperate and make better use of existing resources*
- Social Participation and Recovery
 - *Level of participation is positively related to getting support, but is negatively related to economic recovery*
 - *A possible explanation: Worse recovery led to more active political participation*

Policy Suggestions

Social capital is an important uninstitutional resource that could complement governmental plan in disaster recovery

But it has its limit. It need long-term investment.

Social capital could be generated through active policies

The investment on social capital should become a stable policy, instead of temporary emergent measures



Thanks

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