Libraries and telecenters, as public Internet-access points, play an important role in disaster management and prevention. In the aftermath of the 2010 earthquake in Chile, they spontaneously provided crucial services. Governments should incorporate these types of venues into emergency planning and response efforts.

Background

How important are libraries and telecenters in disaster management and prevention?

This study explores that broad question, focusing on three main areas: (1) post-disaster communication needs; (2) coordination with citizen groups and government agencies; and (3) success factors in providing emergency communications.

In February 2010, Chile experienced an 8.8 earthquake (Richter scale) followed by a tsunami — a disaster that devastated coastal and inland regions and caused significant loss of life and massive destruction. The earthquake severed energy, water, and communication networks (Internet, television, and in some instances radio). The resulting isolation compounded the psychological impact of the disaster.

Various emergency communication initiatives were implemented in the aftermath through public Internet-access points — schools, libraries, telecenters, and mobile laboratories. These initiatives were largely decentralized, emerging spontaneously from the efforts of businesses, government agencies, and non-governmental organizations.

Research design

This study examines two types of public Internet-access points — libraries and telecenters — as they functioned in Chile to assist in disaster awareness, management, and prevention. The project examined the experience of five libraries and seven telecenters (including one mobile telecenter) in two areas most affected by the earthquake (Region VII and Region VIII) as well as in the metropolitan region of Santiago. Researchers conducted semi-structured interviews targeting three groups: staff members of libraries and telecenters, government representatives, and focus groups of users of public Internet access.

The research was designed to examine five issues: (1) the specific communication services offered, and the time required to establish services; (2) factors that contributed to successful outcomes; (3) the communication needs of people in the affected areas; (4) gaps in emergency communication that were not successfully remedied by libraries and telecenters; and (5) strategies that might improve future post-disaster communication services.

Findings

The post-emergency response of library and telecenter staff was based on improvisation and local initiative. There was no immediate institutional response, either from the government or from the umbrella organizations that operate the individual venues. Indeed, government agencies had little awareness of the potential role of these organizations in emergency response — even a year after the earthquake.

The ability of the libraries and telecenters to mount an effective post-disaster response depended on infrastructure, individual initiative, and community relationships. In the case of the 2010 Chile earthquake, three factors emerged as determinants of a center’s ability to respond to post-disaster community needs: (1) the level of damage to the infrastructure (building, connectivity, electricity, etc.); (2) staff initiative and leadership; and (3) the strength of the center’s network, including links with other institutions, neighborhood committees, and community stakeholders.
Libraries and telecenters provided communication and information access that fulfilled crucial emergency functions. In the immediate aftermath (in locations where connectivity and infrastructure remained intact) staff helped individuals contact families and friends. They also researched general information, government assistance resources, and the availability of basic services (food, shelter, clothing) — subsequently posting what they learned in public locations, such as shops and churches. In the weeks following the disaster, libraries and telecenters also helped people gather the documentation required to apply for government subsidies to rebuild their homes.

In addition to providing communications access, many libraries and telecenters served as relief stations, offering space for people needing refuge and providing other emergency assistance. One space became a temporary shelter for over 40 families; others collected food and clothing and coordinated volunteers for distribution to homes or other locations; and some provided space to emergency response agencies. The functions of the centers and libraries evolved in the months following the disaster.

Emergency communications were established even in some locations where library and telecenter infrastructure was damaged. To provide emergency communications services, libraries and telecenters that suffered severe structural damage relocated equipment to unused buildings or emergency tents, or even to staffers’ homes. For example, a mobile telecenter provided by the Committee to Democratize Information Technology (CDI) brought access to needed information — and created a sense of “normalcy” for children and teens, who could use the computers and Internet for brief periods to socialize and play games.

Social media — Facebook and Twitter — were essential communication tools for staff. Facebook and Twitter enabled library and telecenter staff to connect with their networks, coordinate efforts, and share experiences and learning. Social media was also used to help individuals locate family and friends in distant areas, as well as to find essential information and resources.

The services provided by libraries and telecenters in the aftermath of the 2010 Chilean earthquake shifted people’s perceptions of these venues from “places where kids go to do homework” to “invaluable community assets”. Libraries and telecenters were valued prior to the 2010 disaster, but more as places where children could go to do their homework, get on Facebook, or play computer games. No one imagined them as key actors in emergency situations. Their post-disaster initiative and actions, however, were so valuable that people’s perceptions shifted — they are now understood to be invaluable community assets.

Recommendations

Governments at all levels should incorporate libraries and telecenters into emergency planning and response efforts. The Chilean experience shows that libraries and telecenters play an important role in disaster management and prevention. They are already physically and socially embedded in communities, and well-positioned in terms of infrastructure and expertise to fulfill the information and communication needs of various actors in an emergency — households, emergency teams, public agencies, and humanitarian organizations. Governments at all levels should include them in the design and delivery of their emergency planning and response efforts.

Create tools and provide training to make it easier to organize and communicate in emergency situations. Governments and library, telecenter, and community representatives should work together to develop basic tools and training programs that improve emergency preparedness and response. These might include staff workshops, content that can be added to existing communication materials, online games targeting youth, or platforms that use social media and mobile devices to crowdsource and make sense of crisis information.

Library and telecenter networks should coordinate response plans, as well as advocate to be included in government planning processes. Our research found that library and telecenter responses to the 2010 disaster were largely siloed by venue; they communicated within their own networks, rarely making links between the two types of organizations. To better respond to crises, efforts should be made to create alliances and coordinate activities and information flows. Similarly, the library and telecenter communities should work together to advocate for inclusion in the development and delivery of government emergency preparedness and response programs.

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