The Role of Public Libraries in Disasters

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This paper addresses the role of libraries in building a more disaster-resilient society through community support and in fostering access to critical information and resources in the wake of disaster. The role of libraries in disasters, as well as our understanding of it, has evolved over time, particularly with reference to the space they can fill in community response. A large component of that space is helping those community members impacted by disasters to fill out E-government forms, either by rendering assistance or providing the computers, electricity, and Wi-Fi necessary to connect to online resources. Other roles include avenue for escape and source of information.

This paper surveys the existing literature on libraries' disaster response, identifying both strengths and gaps which require further academic research, and provides a brief overview of extant data that libraries can use to help develop disaster plans. Existing academic literature on this subject is analyzed using the strengths, weaknesses, opportunities, and threats (SWOT) framework. The paper finds that there is still a gap in scholarship persists with regards to the current and future role of libraries in disaster preparedness and response. Consequently, the need for a coherent framework aimed specifically at American libraries to help them develop disaster plans has been identified as one of the salient findings of the paper.

Introduction

In 2005, a representative of the Federal Emergency Management Agency (FEMA) in Cameron Parish, Louisiana went on record as saying that libraries were not an essential service. Over the next five years, the roles undertaken by libraries saw considerable expansion, as they started to provide numerous non-traditional services. In the 2010, this led to a revision of the Stafford Act, where libraries were officially recognized as an essential community organization by FEMA for the first time in history (National Library of Medicine, 2017). This reclassification made libraries eligible for FEMA aid, both in terms of monetary aid and in terms of relocation during the immediate aftermath of a disaster so that they could

continue to offer their services as best as possible. The attitude towards and understanding of the function of libraries has changed and continues to evolve as further studies are done on the role of public libraries in disasters (Williams, 2012). This paper applied a SWOT analysis, a well-recognized evaluation technique that in this paper will facilitate a systematic understanding of the current state of science with

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respect to the academic literature surrounding and pertaining to public libraries in disasters.

Strengths

The September 11 terrorist attacks spawned a frenzy within the disaster science field and gave rise to a new wave of research, particularly centered in North America, making organizations more distinctly conscious and self-reflective of their vulnerability to and roles in disasters (Matthews, Smith, & Knowles, 2016; Todaro, 2009). Prior to this unfortunate and deadly event, there had been little research centered on the study of libraries in disasters (Todaro, 2009). This swell in the volume of published literature is an important component of not only what makes up the current body of science, but also what laid the foundation for that science to be done to more fully explore how libraries function in disasters.

Libraries play an important role at the individual and community level by providing escapism and comfort during the everyday bustle (Begum, 2011). This could also be true during a disaster, when patrons could be expected to, quite possibly, seek more comfort. Libraries also provide access to electronic resources, from charging stations to computers and Wi-Fi. This public access to computers and the internet has been found to be "wholly unique and immeasurably important" (Jaeger, Langa, McClure, & Bertot, 2006, p. 206). During or in the aftermath of a disaster, this importance grows significantly – as libraries become the sole point of access to the outside world. This access is an indispensable service for disenfranchised communities who have little to no access to their own devices or Wi-Fi, and can rely on libraries, equipped with generators, to maintain essential communication during a power outage.

The importance of public libraries in providing access to the internet has yet not received the recognition it deserves. The 2010–2011 Public Library Funding and Technology Access Survey found that 64.5% of public libraries reported being the only providers of free public access to computers and the internet in their communities (Hoffman, Bertot, Davis, & Clark, 2011). In the 2011-2012 survey, which reiterated the questions of the previous year, the percentage of public libraries reporting as the only provider of free public access to computers and the internet in their communities had fallen to 62%, and no results were found indicating that an identical survey has been performed since (Hoffman, Bertot, & Davis, 2012). One can assume that number has dropped even further, particularly with some municipalities themselves offering free access to wireless networks (Tapia, Kvasny, & Ortiz, 2011). There are a greater number of public, free access points to the internet, but we have no data about the robustness of municipal wireless networks or whether public access to computers themselves has increased similarly. We are left with the idea that many libraries are likely to be among the few if not the only providers of free public access both to computers and the internet in their communities, and that this is an important service during regular operations as well as during a disaster. Escapism, electricity, and internet access are all regular rather than disaster-specific services, but as services whose relevance persists, they bear a mention.

An important step in understanding the role of libraries in disasters is understanding what role librarians see themselves as fulfilling or being obligated to fulfill, since that impacts prioritization as well as which services will be reported most frequently. A disaster-relevant study was conducted by Lisl Zach, who took a national survey of librarians and their priorities in the context of disaster. The librarians interviewed articulated a set of 8 common priorities, the most frequently cited of which were collection, preservation or patron service (Zach, 2011). This survey however, included medical libraries and private collections, and the role of libraries in responding to public need during a disaster must, by necessity, be focused on public libraries. Librarians associated with private collections have no mandate for public service, and therefore, no responsibilities related to disaster preparedness. In contrast, a separate study looking exclusively at public libraries who had had relevant recent experiences yielded more relevant and qualitative results, but with a

significantly smaller sample size due to the narrow parameters at work (Veil & Bishop, 2014). This study was based on interviewes with 22 librarians and community members, from areas that had been hit by tornadoes recently, and subsequently had public libraries active in recovery. Part of Veil and Bishop's (2014) conclusions were that libraries were in part well-equipped to help in the aftermath of disasters because of the preparations that were frequently in place to deal with non-disaster emergencies, such as power outages. Libraries that planned ahead were better able to do both, collection preservation and patron service, during a disaster.

Librarians also contribute specific services: 91.8 percent of libraries reported in 2011 that they helped patrons understand and use e-government websites (Hoffman et al., 2011). E-government is considered any part of interaction with government bureaucracy that can be accomplished through official online channels, from the official petitions on the White House website to electronically filing taxes. Since many FEMA documents are available exclusively online, this becomes extremely relevant during. The public not only requires physical access to electronic resources in order to access FEMA aid, they require the expertise to navigate the websites and forms they encounter. If a library patron does not possess that expertise on an individual level, librarians can help bridge that gap.

Weaknesses

Libraries possess considerable untapped potential to serve their communities in disasters, which could be effectively utilized with additional integration into community disaster planning. A recent study however, found that libraries could also overstretch their resources and capacity to help, and become FEMA command centers during emergencies – a task they are not necessarily well-prepared to undertake (Veil & Bishop, 2014). Serving as command centers may further interfere with the function of libraries as community centers and

derail efforts to provide unfettered public access to electronic resources.

Existing literature on the role of libraries in disasters is ambiguous, not only because of a dearth of research on the matter but also because this role may vary based on the composition and layout of the communities they serve. Some communities for example, may have a library that can serve as the best possible staging ground for a FEMA command center, even if it detracts from other purposes. On the other hand, a community may be better served by utilizing a more resourceful community center or school – depending on the range of resources available in these alternate facilities.

The role of libraries in disaster preparedness and response also differs across communities due to the perceptions and knowledge of the community members. This is because the communities within which they operate may differ in the degree to which they recognize libraries as key preparedness locations (Zach, 2011). They are also not consistently considered or acknowledged as part of a community's disaster response assets. As Bishop and Veil (2013) note; "[a]fter spending several hours in one community interviewing librarians and users about all the library's disaster-response activities, the research team interviewed the local fire chief who stated that he had no idea that the library had been involved in the recovery effort" (p. 39). This community dynamic is particularly worth examining in light of the role libraries play as a safe, comfortable and familiar space, with librarians providing a sympathetic ear. This may have a long-term community wide mental health benefits that could aid in community resilience - but that are difficult to quantify and easy to overlook in the presence of more immediately life-threatening hazards (Zach & McKnight, 2010).

Opportunities

As noted earlier, despite the exact role allocated to public libraries during disasters, their presence provides patrons and community members with a range of benefits that are directly or indirectly tied to disaster response and

recovery. The acknowledgement of this role of libraries has been increasingly recognized in research. For instance, the potential of public libraries in emergency preparedness was a key focus of discussion in a 2009 conference on conservation and collaboration in Salzburg, Austria - attended by conservation professionals from 32 countries. The conference attendees acknowledged the fact that library priorities revolved around staff safety, collection preservation, and resumption of normal services (Stoner, 2010). Roundtable discussions and working groups further developed recommendations for more effective conservation techniques during, and in the aftermath of, disasters (Stoner, 2010). The discussions also touched on community stakeholders - a distinct facet of disasters for libraries which also offers opportunities for further integration into a community disaster response plan (Stoner, 2010).

Libraries are major sources of information during disasters, one of the specific services that many public libraries already offer. However, untimely or incomplete information can cause additional confusion and chaos during an emergency. Libraries, given a significant degree of role confusion, and a lack of monitoring and oversight mechanisms, have been found to mismanage information dissemination. For example, a study of library websites during the H1N1 flu epidemic specifically assessed the internet-based information dissemination of libraries in the 50 largest US cities as ranked by population (Zach, 2011). The CDC released a widget with links to information about H1N1 which included several listservs. One such listserv was maintained by the National Library of Medicine, which was able to contact additional libraries. Over a period of approximately two weeks, only 15 of the libraries surveyed featured either the widget or links to the CDC or similar disease-related resources on their websites, and only 10 featured those links on the front page. Multiple libraries also took down that information before the H1N1 warning was officially lifted. This mismanagement of information is at odds with the public service

mandate of libraries as well as their expanding role as community resource centers during disaster recovery.

Threats

The American Library Association (ALA), recognized mold as a potential disaster for libraries (RUSA, 2010). It is one of the most significant threats to any library collection, since it can extensively and expensively damage printed materials. The risk for mold not only increases during and in the aftermath of a disaster, it may go unnoticed or unaddressed if the library's personnel and resources are being overstretched to complete tasks related to disaster preparedness, response and recovery (Skinner, 2006). The vulnerability of all physical systems and library resources is a concern, particularly during a disaster. This is because the management of library assets may determine the ability of community members to communicate with the outside world, to take refuge in the space provided by the library, access to resources such as generators, and the long-term well-being of the community Finally, "money is the major connecting tissue for all library activities" (Holt & Holt, 2016, p. 7). Funding and in particular budget cuts continue to be a persistent threat to public libraries and their ability to deliver services. A library is ill-equipped to provide any of their services, particularly during an emergency, if they themselves do not have power, personnel or resources.

State of Practice and Policy

A facilitating factor in the study of libraries is that they are inclined to produce extensive self-documentation, which serves as the baseline for exploring the state of practice and policy. The set of policy guidelines defined by the ALA are publicly available and clearly laid out. Disaster-related policy, a small section of the ALA's official policy states:

> When a disaster occurs that affects one or more libraries, the staff or friends of those libraries are encouraged to contact the ALA for assistance. Such assistance shall include, at a minimum: (1) the

provision of information to the public about the disaster, its effect on the library, and where contributions can be made and (2) information to the library on dealing with disasters. (ALA, 2013a, p. 38)

The role of libraries as trusted sources of information is tacitly acknowledged, but guidance for preparedness or a more structured reaction is minimal. After-the-fact reaction is presented as the expectation as opposed to mitigation or preparedness action. Furthermore, the ALA has neglected to develop any recommendations that advise individual libraries to develop their own local disaster readiness plans. However, Reference and User Services Association (RUSA), a division of the ALA, has developed a strategy for resource-sharing after disasters, focused primarily on libraries that will be helping other libraries in need (RUSA, 2010). The section on preparedness further includes the recommendation to develop a disaster plan – linked to the disaster preparedness page on the main ALA website. These resources however, are not as readily as they could be, and include no additional materials - such as books or academic literature – that could help libraries develop or implement disaster preparedness plans.

The ALA website has significantly more accessible and extensive resources in the disaster preparedness section dedicated to e-Government, an area where libraries can materially and substantively contribute to disaster response. The knowledge of this possible contribution is also reflected in Section B of the ALA Policy Manual, wherein the ALA neglects to define e-government but does urge "governments at all levels to acknowledge and support the essential role local libraries play in providing e-government and emergency response/recovery services" (ALA, 2013b, p. 38).

The role of libraries in disasters is also sign--ificantly impacted by the lack of clear definitions in official policy. Skinner (2006), based in the library of Xavier University, in the wake of Hurricane Katrina, documented feeling like individual librarians could do nothing to help with recovery because only specifically trained and hazmat-equipped professionals were helping with the preservation of the collection and prevention of mold. This meant that a library in a closed university campus, was not accessible to the public during a storm. This highlights the issue of the lack of clear guidelines on how responses to internal library disasters (such as mold) should be different from community wide-disasters. Therefore, there is no policy-based difference between recommended response for these two scenarios.

The practical role of libraries in response to community disasters is still evolving, even as policy races to catch up - having started in a place where library roles in disasters were unacknowledged. For most public libraries, their roles in disasters are perceived as inchoate extensions of normal services. In order to document the discrepancy between practice and policy, Featherstone et al. (2008) conducted a series of semi-structured interviews with librarians who had been active in disaster response settings. The results of this study were also expected to shed light on the degree to which librarians had played an active role in disaster response prior to FEMA's acknowledgement of libraries as an essential service in 2010 (Featherstone et al., 2008). Interviews with 23 North American librarians who had responded to terrorist attacks, epidemics, and natural disasters were transcribed and quantified, and researchers identified eight categories of library roles: institutional supporters, collection managers, information disseminators, internal planners, community supporters, government partners, educators and trainers, and information community builders (Featherstone et al., 2008). Researchers concluded that librarians made significant contributions to preparedness activities for and recovery after disasters, and that in practice libraries were active in their communities beyond what had been delineated in policy (Featherstone et al., 2008).

A significant gap between policy guidelines and practice with respect to the role of libraries pertains to the lack of a clear distinction between

normal service and disaster response – as they relates to helping patrons with government forms and other paperwork. While this service is more prominently highlighted in relation to FEMA guidelines, helping patrons with government paperwork in general is both a normal service and an emergency response, and the delineation between the two is a matter of scale and primary focus.

The timeline and severity of a disaster also significantly impact which services are given precedence by libraries. According to one study, libraries prioritize staff safety and collection preservation during the disaster, and the resumption of normal service, in its aftermath Zach (2011). The study also found that many librarians deal with questions related to services, pressing issues and addressing patron needs locally rather than in consultation with a library board (Zach, 2011). This implies that future disaster preparedness cannot be implemented as a top-down approach in a library setting because of the variation in local context.

Existing literature has recognized the potential of public libraries as Disaster Recovery Centers, defined as disaster-specific information dissemination points (U.S. Department of Homeland Security, 2018). A significant barrier to libraries realizing this potential is the lack of disaster readiness and response training available to library staff (Todaro, 2009). Where disaster response is recognized as a role for public libraries, seminars on disaster preparedness tend to focus on the larger community, as opposed to highlighting the role of the library (Muller, 2013). The discordant notes between ALA policy and practice echo the overall differences between the state of academic literature and policy, as they relate to the role of public libraries in disasters.

Analysis and Conclusions

Disaster response in the United States is not a singular, discrete unit of policy actors. It is comprised of smaller and purpose-driven units that can be assembled as needed when disaster strikes. Disaster response units, like Voluntary Organizations Active in Disasters and National Guard units and FEMA teams are the building

blocks that form collaborative networks of essential and timely response strategies. Libraries are not inherently different from other disaster response units in that respect: each public library comprises of individuals with a variety of attitudes and abilities, has different resources and facilities, and must operate within its unique community context. As with disaster preparedness plans, libraries could benefit from broad guidelines that leave room for adaptation. Disaster science literature is saturated with conversations about preparedness which reflect the understanding that holistic planning, conversation, and critical thinking are more effective than piecemeal standards and fantasy documents (National Library of Medicine, 2017; Soehner, Godfrey, & Bigler, 2017; Stoner, 2010). The development of guidelines customized for public libraries, to enable them to write their own disaster preparedness plans, is an area where academia can contribute by working together with practitioners, particularly the ALA. Organizations that have the ability to disseminate higher-level guidelines and recommend their implementation must be engaged to utilize the full potential of libraries in disaster planning. Blending academia and practice offers ways forward that would result in improved disaster management protocols and ultimately reduce the loss of life and property caused by mismanaged emergency responses.

Librarians should also be included in the community disaster planning processes- at the very least - to provide them with a platform to communicate the nature and scope of services their libraries will be able to provide (Veil & Bishop, 2014). Training opportunities should also be made available to librarians to help them better understand the disaster-specific tools available to them and their communities and to provide impetus to develop in-house disaster preparedness plans with greater understanding of the nature of the hazards and appropriate response strategies (Todaro 2009). One opportunity to do so could be the incorporation of a seminar on disasters into library sciences programs. This could be incorporated into a public library's continuous role as an information

hub, in that training brought in for the working librarians could also be open to the community, enhancing community-wide resilience. Libraries are invaluable information hubs during a disaster, but that value may diminish, disproportionately so in disadvantaged communities, if infrastructure is damaged or absent (Straubhaar, Spence, & Tufekci, 2012; Zach, 2011).

Libraries have become important communal spaces that serve as access points for technology and modern methods of communication, particularly for disadvantaged populations. In light of their growing significance in community planning, disaster readiness and response, the recently proposed budget cuts stand to cause long term harm to communities (Albanese, 2017). Budget expansions paired with the systematic roll out of training initiatives and policy driven change to introduce strategic planning guidelines could reinforce the network of community partnerships that serve as cohesive units for organized disaster response and recovery. For this to happen, it is imperative that libraries be acknowledged as key stakeholders to be considered in academic examinations of disaster response (Bishop & Veil, 2013; Todaro, 2009). In this regard, the changing scope of services provided by libraries has necessitated an increased focus on their role in disaster response by revisiting and revising old scholarship as well as introducing new literature (Hoffman et al., 2011; Hoffman et al., 2012). This means that attention should also be paid to the increasing role of social media in disaster response and the potential for libraries to maintain a presence on these platforms as a means to reach their communities (Zach, 2011). Lastly, by facilitating equitable access to the internet for disadvantaged communities, libraries can also help bridge the digital divide. This means that as key players in the planning and implementation of community disaster readiness plans, libraries can help ensure that vulnerable groups have the skills and infrastructure to gather essential information - such as evacuation plans – during an emergency.

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