

BRIEF REPORT

Youth Resilience Corps: An Innovative Model to Engage Youth in Building Disaster Resilience

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ABSTRACT

Objective: Despite the growing awareness that youth are not just passive victims of disaster but can contribute to a community's disaster resilience, there have been limited efforts to formally engage youth in strengthening community resilience. The purpose of this brief report was to describe the development of a Youth Resilience Corps, or YRC (ie, a set of tools to engage young people in youth-led community resilience activities) and the findings from a small-scale pilot test.

Methods: The YRC was developed with input from a range of government and nongovernmental stakeholders. We conducted a pilot test with youth in Washington, DC, during summer 2014. Semi-structured focus groups with staff and youth surveys were used to obtain feedback on the YRC tools and to assess what participants learned.

Results: Focus groups and youth surveys suggested that the youth understood resilience concepts, and that most youth enjoyed and learned from the components.

Conclusions: The YRC represent an important first step toward engaging youth in building disaster resilience, rather than just focusing on this group as a vulnerable population in need of special attention. (*Disaster Med Public Health Preparedness*. 2016;10:47-50)

Key words: disasters, disaster planning, emergency preparedness, emergency responders

Concerns about the risks and vulnerabilities that young people face after a disaster (eg, psychological distress, dissolution of sense of safety and security, compromised social relationships) have led to a discourse about a “youth at risk” that describes youth as passive victims of disaster.^{1,2} However, this commonly held perspective has been challenged as youth contribute to preparing for, responding to, and recovering from disaster, and ultimately to a community's overall resilience.^{3,4} Examples from recent disasters (eg, Christchurch earthquake, Victoria brush fires) suggest that, if empowered to act, youth can build community resilience to disasters through tangible tasks (eg, supporting medical professionals by setting up tents and cots, distributing food and other supplies) and activities (eg, connecting with neighbors) for which youth may be uniquely positioned.¹ Youth involvement may also incur positive mental health benefits.⁵⁻⁷ However, there have been limited efforts to formally engage youth in strengthening community resilience or to determine whether they can learn resilience concepts.

The RAND Corporation partnered with the District of Columbia Department of Health's Health Emergency Preparedness and Response Administration

(DOH) to develop Resilient DC, a collaboration of community-based and government organizations to identify and test strategies to improve disaster resilience in Washington, DC. Given the tremendous potential of youth, Resilient DC partners identified youth engagement as a priority for the city. A team of RAND researchers then developed the Youth Resilience Corps, or YRC, which is a set of tools to engage young people in youth-led community resilience activities. The purpose of the YRC was to educate and empower youth to (1) lead their own resilience activities (eg, improving social connections with neighbors, becoming involved in the local Medical Reserve Corps or other civic projects), and (2) partner with health professionals and leaders in public health, local government, and nongovernmental organizations (for-profit and nonprofit) to improve their communities' resilience to disaster. Development of the YRC was guided by RAND's model of community resilience, which is built on a foundation of resilience research the coauthors have conducted with disaster-affected communities across the United States.⁸⁻¹¹ (A full listing of related research [<http://www.rand.org/topics/community-resilience.html>] and implementation tools [<http://www.rand.org/multi/resilience-in-action.html>] can be found online.)

The tools developed included the following:

1. A youth-friendly introduction to community resilience on the fundamentals of resilience (eg, what it is, how it is built) with the use of examples of resilience, an interactive resilience game, and guidance on conducting a resilience-themed scavenger hunt, and
2. As asset mapping tool for youth to conduct outreach in local Washington, DC, neighborhoods and support neighborhood-level assessments of assets, hazards, and vulnerabilities related to resilience.

The purpose of this brief report is to describe the development of the YRC and the findings from a small-scale pilot test.

METHODS

Developing the Youth Resilience Corps Tools

The development of the YRC included input from a range of government (eg, Mayor's Office on Volunteerism, Office of Aging, Department of the Environment) and nongovernmental stakeholders (eg, faith-based organizations, volunteer programs) that focused on (1) developing drafts of each YRC component and planning for the pilot test, (2) assessing the implementation of each component, and (3) sharing the results of the pilot test with key decision-makers and planning for the sustainability of the YRC components. Regular stakeholder meetings provided a forum for input into the tool design and content. The YRC built on core components of resilience, including

- Careful resource management, particularly after a disaster when resources are scarce, is needed for a community to bounce back quickly after a disaster.
- Resilience is both strengths-based, pulling together the assets in a community that often go overlooked, and relationships-based, as many of the most critical assets are relationships.⁸
- Adaptability of communities to figure out alternative or makeshift solutions when traditional responses are impeded because of disaster damages is key to avoiding major disruptions during the recovery process.¹⁰

To establish a common understanding about disasters and opportunities for youth, the team developed a short youth-friendly introduction/primer on resilience (component 1) that described the fundamentals of resilience (eg, what it is, how it is built) by providing examples of resilience and an interactive resilience game about building resilience. The primer had the following components:

- *What is Resilience? Guide:* This section includes talking points for youth and a game entitled "What's your talent?" that helps orient youth to their unique skill sets (eg, cooking, first aid, shoveling snow, babysitting, speaking another language, helping people use a cell phone) and

discusses how these skills can be applied during a disaster. The disaster scenarios used for teaching include a hurricane, vandalism, snowstorm, heat wave, and environmental conservation.

- *Stories of Resilience:* These stories contain personal anecdotes of how individuals and communities in Washington, DC, have exhibited resilience with use of video and written formats.
- *Interactive Resilience Scavenger Hunt:* In this game, youth search for items that represent resilience, complete a challenge with each item that helps to illustrate the relationship between the item and resilience, and then reflect on what combination of assets or skills are needed to be able to strengthen these resilience elements in the day-to-day operations of a community. For example, one of the scavenger hunt items is a list of ingredients and a set of recipe cards. For the challenge, youth must select a combination of ingredients to make 2 recipes that can feed at least 6 people. This challenge is intended to teach youth about resource management. During a disaster, resources are often limited and decision-makers may have to carefully decide how to manage resources such as food, water, blankets, cleanup equipment, and emergency personnel and vehicles.

The purpose of component 2 is to engage youth in supporting ongoing neighborhood-level assessments of assets, hazards, and vulnerabilities that impede and contribute to resilience. Examples include the needs of vulnerable populations (eg, medication, functional limitations, durable medical equipment), environmental risks (eg, unsecured roofing) and assets (eg, open space), public health risks (eg, flood-prone areas), organizational assets (eg, medical professionals), and individual assets (eg, training in first aid). To support this component, our team developed the following materials:

- *A computer-based platform and accompanying mobile application for data entry:* The computer-based platform was developed in partnership with National Geographic's Fieldscope citizen mapping software developers. The computer-based platform and mobile app were used by youth to tag the geographic coordinates of assets so that their collected data were automatically uploaded into a central system and mapped.
- *Training on asset mapping for youth:* This training included a learning process for understanding what assets are and how to recognize them, why assets are important, and how to use the guide and data entry app.
- *Training on data uses and presentation of results:* A critical aspect of youth engagement and sustainability of the program is ensuring participants understand, and ultimately experience, the potential benefits of their work. This training was designed to help youth (1) learn how data on assets can be used by different stakeholders and for different purposes, (2) brainstorm their own ideas for data uses and promising follow-on projects, and (3) engage in mock

communication and presentation exercises to city decision-makers and other audiences to gain experience in translating data collection activities into actions.

Pilot Testing Tools with Youth

We conducted a pilot test of both of these components with youth in Washington, DC, during the summer of 2014. The Youth Preparedness Academy, a summer employment program run by Serve DC and DOH, offered the youth-friendly introductory training and the neighborhood-level mapping of assets, hazards, and vulnerabilities. We also provided the introductory training to youth associated with the Church of the Living God, a Latino church in Brookland, a DC neighborhood. Youth were asked to create their own talking points to reach out to other youth about resilience (ie, what it is, why it matters, and how to build it) and play the games outlined in the training. To determine how the activities were perceived by youth, we conducted focus groups with staff and youth to obtain feedback on the conduct of activities and on potential improvements to the materials, as well as what participants learned from each component. Focus groups were semi-structured, lasted 15 to 20 minutes, and were conducted immediately after each component.

After the neighborhood-level mapping activity, we collected youth asset mapping data and conducted a survey to assess knowledge of resilience assets and overall impressions of the activities. We also collected feedback from implementation partners about barriers and facilitators to implementation, any components that might be missing, and suggested strategies to sustain the YRC.

RESULTS

Overall, staff and youth provided overwhelmingly positive feedback about the 2 components, stating that youth had fun, learned about resilience, and were engaged in the activities. Youth presentations of the neighborhood-level asset, hazard, and vulnerability mapping data suggested that they understood why mapping is important for community resilience. Examples that youth understood included these statements: “So you know where you’re located and also the items you need,” “In case nobody can help fast enough,” and “Because we can be aware of our surroundings if a disaster happens and it can help tourists that come to our community.”

Youth also demonstrated an understanding of the mapping process, describing the process as going “to different sites to document important information,” to “identify people who had specific skills,” and to see if people “were ready for an emergency.” Youth survey data on changes in knowledge and perceptions of the mapping component also suggested that youth learned about what assets, hazards, and vulnerabilities are and enjoyed and learned from the mapping component (Table 1).

TABLE 1

Youth Survey Data	
Question	Percent of Youth, % (n = 15)
Correctly identified a resilience asset	76
Correctly identified a hazard or vulnerability	53
Enjoyed the mapping some or a lot	64
Felt like they learned some or a lot from the mapping	58

The youth coordinator at the Church of the Living God commented that the youth were engaged and understood the materials very well. This understanding was communicated by youth during the talking points exercise and the “What’s Your Talent” scenario discussions. When asked to develop talking points in their own language, youth clearly identified key messages about *what resilience is* such as “Helps strengthen your neighborhood against unexpected catastrophe” and “Recovery is swift.” Talking points about the *importance of resilience* included points such as “Use your daily skills as tools to establish recovery responsiveness.” When asked to create talking points on how to be resilient, youth crafted action steps such as “Create a list of things that you find most valuable so you know what you’ll need in a disaster” and “Take advantage of personal skill sets.”

In terms of YRC facilitators, implementation partners suggested that the biggest facilitator to implementing YRC in their organization was that the modular components could be integrated into existing clubs, after-school programs, and youth volunteer training programs. Continued offering of the YRC in modular components was suggested as a sustainability strategy. Implementation partners also suggested developing 2 additional components for future pilot testing: (1) a psychological first aid training to train youth to provide psychological support to those affected by disaster or other traumatic events (eg, student suicide, community shooting), and (2) a career bridge program to professionals in a range of resilience-related fields to expose youth to professions that can help contribute to the resilience of a community (eg, emergency management, health, and local government), thus helping to further develop the health professional workforce.

DISCUSSION

The introductory training to resilience and asset mapping activities were piloted with youth in the Youth Preparedness Academy and the Church of the Living God. Staff in charge of the participating youth remarked about the pilot test’s success and provided overwhelmingly positive feedback.

Our feedback from youth and facilitators, as well our knowledge survey after the asset mapping activity, revealed that youth understood resilience concepts and that most youth enjoyed and learned from the components.

Feedback from our implementation partners revealed that there is no one-size-fits-all approach to implementing the YRC. The goal of implementing the YRC is to maximize its sustainability through strategies such as

- Placing “how to” guides for each component on a public website
- Integration into community service offerings
- A youth resilience summit for youth and teachers
- A larger pilot test with more schools

CONCLUSIONS

The small-scale pilot test of the YRC suggests that these components improved the knowledge of the youth who participated and were well received by participating staff. Additional work testing the effects of these components on youth knowledge, skills, and performance during a disaster, with a larger and more representative sample, and over a longer time period (eg, over several months before and after an actual disaster) is needed to determine the true potential of this approach. However, these YRC components represent an important first step towards engaging youth in building disaster resilience, rather than just focusing on this group as a vulnerable population in need of special attention.

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