

# Citizens' Awareness of Transmitting Information about Earthquake Experiences in the Areas Affected by the Great East Japan Earthquake: A Focus on the Use of Earthquake Ruins

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## 1. Background

Ten years have passed since the Great East Japan Earthquake. One of the important projects for recovery after the earthquake is to transmit the lessons learned from the experience. Buildings and structures damaged by the earthquake and tsunami are being preserved by municipalities as earthquake ruins. The municipalities have preserved these as public facilities in anticipation of their use in transmitting lessons learned from the disaster and as a means of disaster prevention education. Some people have opposed the ruins' preservation because it reminds people of the horror of the earthquake, or on account of preservation efforts' costs. However, after much consideration, it has been decided more than 30 locations will be preserved in the Iwate, Miyagi, and Fukushima prefectures.

## 2. Purpose

To transmit the lessons learned from the earthquake, affected citizens' participation is important. Therefore, this study first aims to grasp citizens' awareness of the importance of transmitting the lessons from the earthquakes and what messages they want to transmit. In addition, the earthquake ruins are expected to play a role in communicating about the disaster. This is one of the desirable methods for using them to transmit citizens' experiences of the earthquake. Therefore, the second purpose is to clarify how close the citizens feel to the earthquake ruins and citizens' awareness of their use.

## 3. Method

A web survey was conducted from March 10–22, 2020 for citizens living in the nine municipalities where the earthquake ruins are preserved. Participants were asked about the importance of communicating the experience of the disaster to others, about their awareness of the earthquake ruins, and so on.

## 4. Results

### 4-1. Respondents

Responses were received from a total of 1,080 people from the nine target municipalities. The genders of the respondents were 566 males (52.4%) and 514 females (47.6%), with an average age of 49.4.

### 4-2. Awareness of and participation in the transmission of the earthquake experience

In all, 89.2% of respondents said, "It is important to transmit information about the disaster," 62.0% said, "I have told other people about the disaster," and 8.8% answered, "I have participated in activities to transmit information about the disaster."

### 4-3. Contents of knowledge transmission

Of those surveyed, 39.3% responded, "I want to tell how our homes and towns were destroyed by the disaster," and 47.9% responded, "I want to tell about what was lost in the disaster (human life, daily life, and culture)." More than half (54.5%) responded, "I want to tell about our efforts to recover from the disaster."

### 4-4. Recognition of the earthquake ruins

Almost half (42.3%) of the respondents answered, "I knew whether earthquake ruins would be preserved

in my city," and 39.2% said, "I often see and talk about the earthquake ruins."

#### 4-5. Willingness to use the earthquake ruins

About one quarter (24.6%) of respondents said, "I want to participate if there is a ceremony or event," while 23.7% answered, "I want to visit on a daily basis," and 18.9% replied, "I want to be involved in the ruins' management and use."

#### 4-6. Awareness of earthquake ruins

Most respondents (61.9%) said the ruins were "a symbol of the disaster," and 49.9% answered, "They are a symbol of recovery." Although the earthquake ruins are comprised of buildings and structures damaged by the disaster, they also have a positive image as symbols of recovery.

### 5. Discussion

Citizens in the disaster areas are very conscious of the importance of transmitting their experiences, but it seems difficult to engage them in actual activities related to the ruins. The high level of awareness of the need to transmit information about lessons learned is noteworthy, but in the future, it may be necessary to take measures to support the shift of awareness from transmission to action.

We found that the earthquake ruins are recognized as symbols both of the disaster and the recovery, and they have a positive image. By contrast, about 40% knew that ruins would be preserved in their town, and about 40% see and talk about them on a daily basis, but only 20% intend to use them, so the ruins, by and large, are not familiar facilities. Before supporting the use of the earthquake ruins by the citizens, it is first necessary to inform them of their existence.

Future studies should examine how earthquake ruins can be devoted to the activities of transmitting information about the citizens' experiences of the earthquake.

Keywords: earthquake ruins, Great East Japan Earthquake, transmitting earthquake experiences