

# Community Adaptation To Earthquake Hazards: A Cross-cultural Comparison of Japan And New Zealand

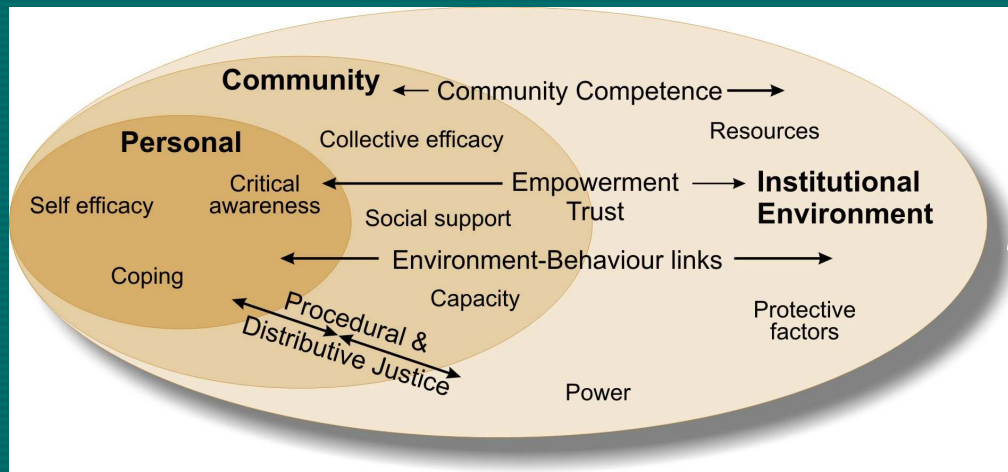
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Identified set of predictors of preparing...

## Resilience/adaptive capacity

- safeguard family/home/contents
- self-reliant & able to meet immediate needs for 3-5 days +
- ability to work with others to deal with emergent problems
  - neighbours/community members
  - emergency mgmt. agencies
  - relief agencies

Paton (2000)

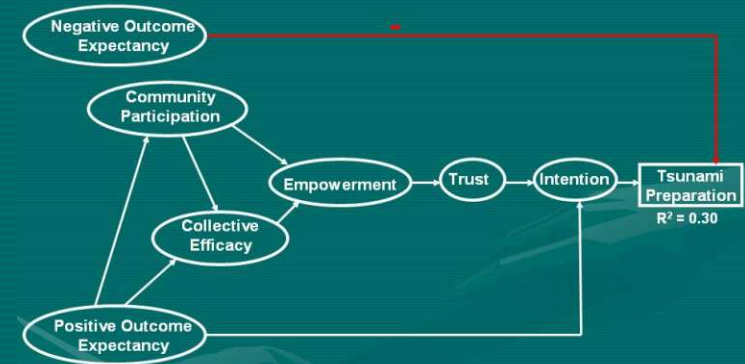
Paton (2006)

Paton et al. 2009

# Cultural issues & adaptive capacity

## Individualistic culture

- individual & community factors
- independent, act consistently across situations & pursue personal outcomes



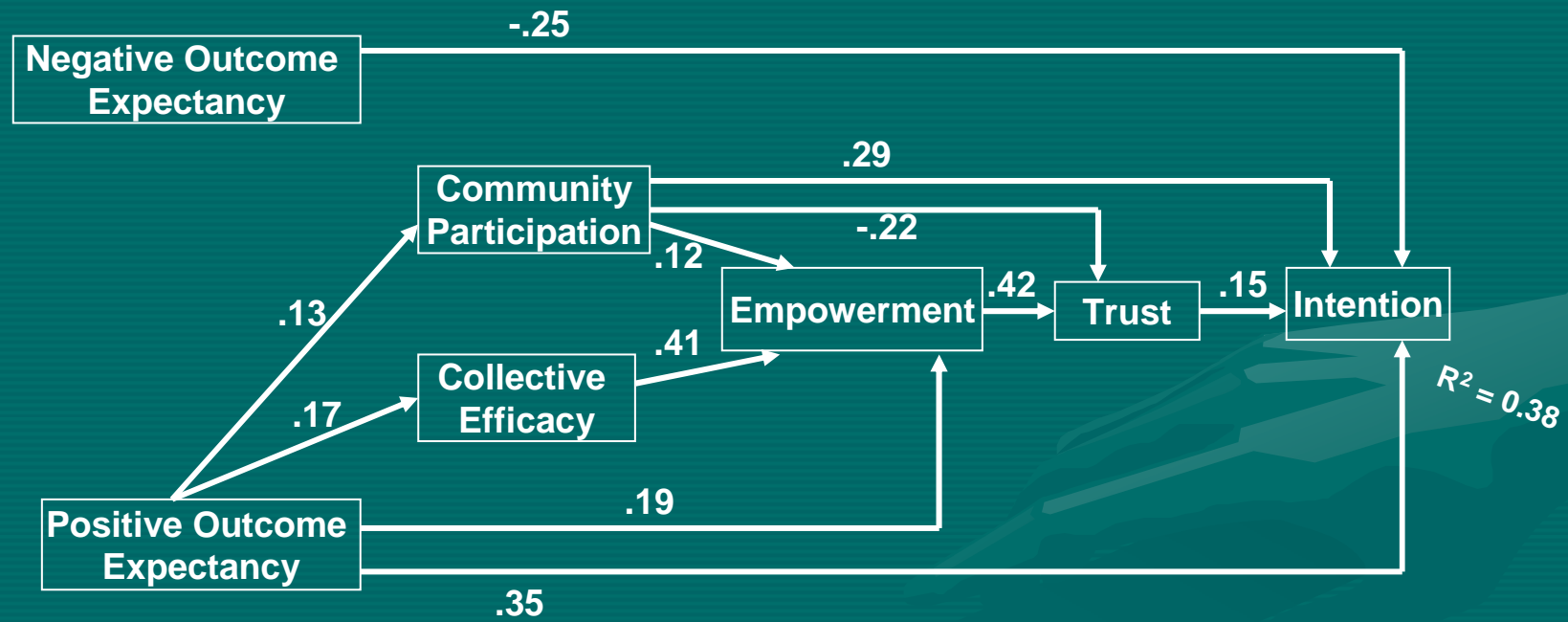
## Collectivist culture

- align with social norms, pursue collective goals, & assess well-being in terms of relationships

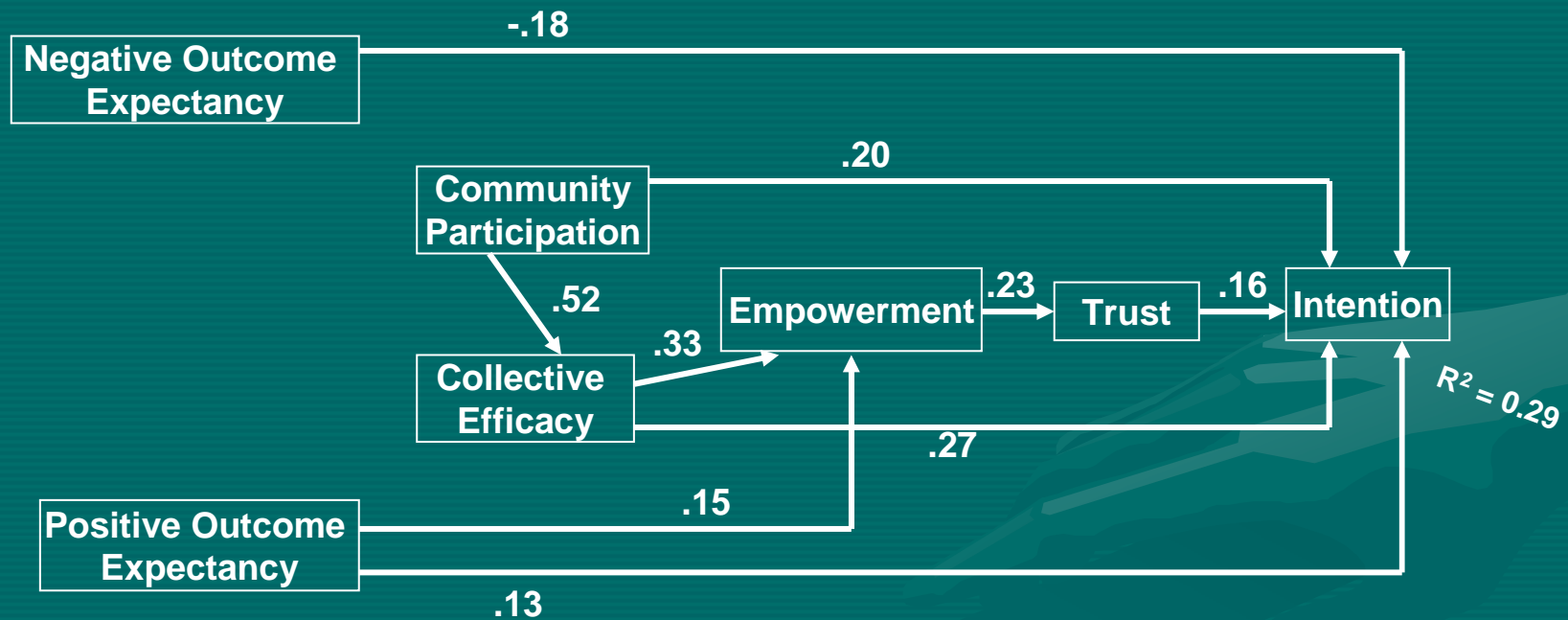
Can the model apply across cultures?



**Study Areas**



# New Zealand - Earthquake Preparedness (Napier)



## Japan - Earthquake Preparedness (Kyoto)

## Similarities

- all components represented in model
- some support for universal (cross-cultural) structure



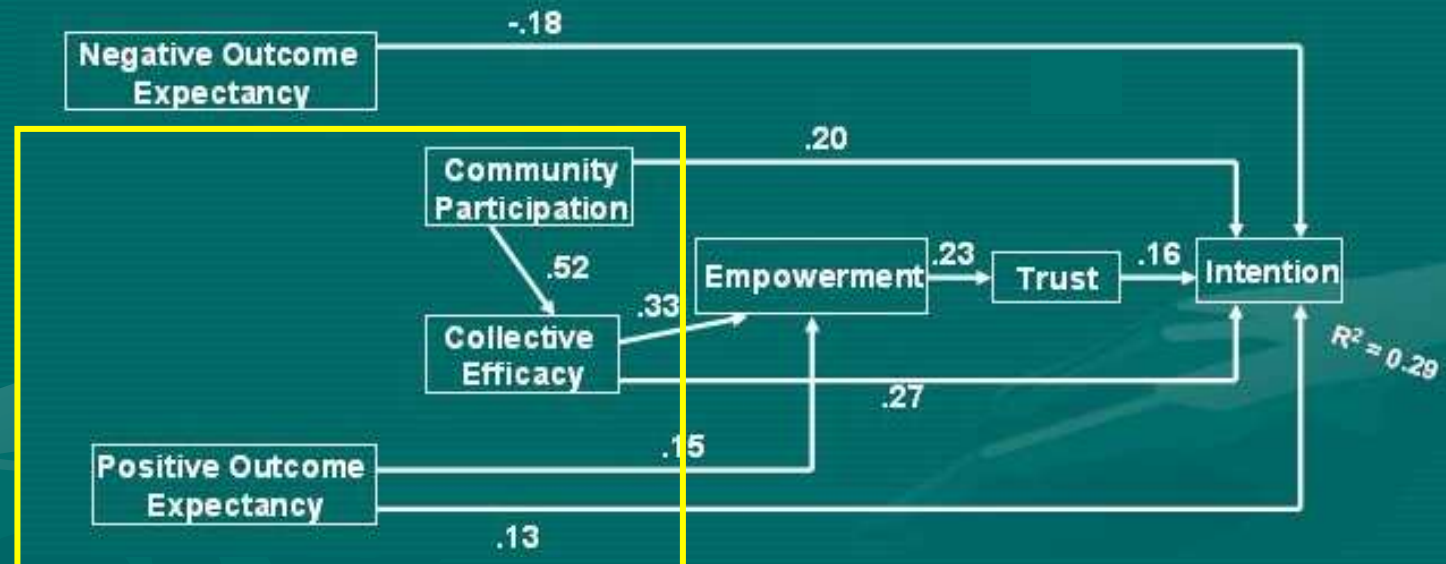
However, several differences noted...

- consistent with role of cultural characteristics in each country

# Differences

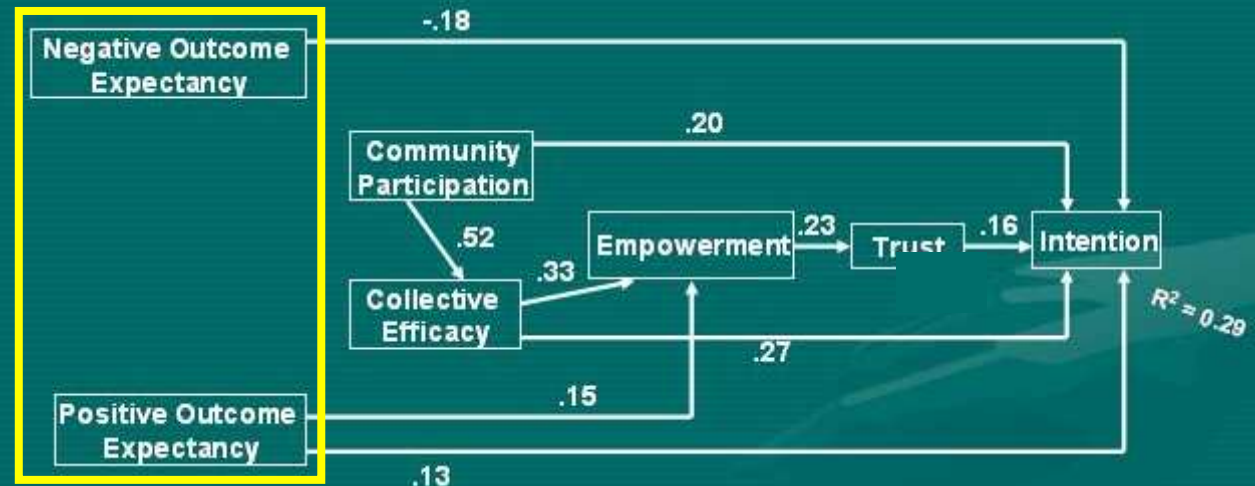
## Paths missing in Japan

- link between POE and community factors





But



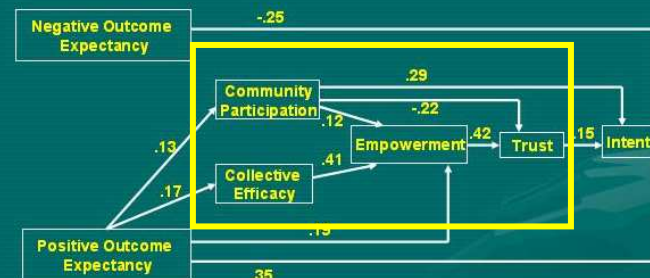
- evidence for individual beliefs influencing actions
  - they do not (as yet) influence collective choices
- emerging role for NOE (similar to NZ)  
Why?  
Recent experience (e.g., Kobe)

Childs (2008)

## Japan

Community Participation-Trust relationship is not present

NZ - greater distinction between people, community & agency



NZ

Japan - more integrated community-agency relationships (e.g., Chonakai, Jishubo)



Japan

# Implications for public education/risk management

## In Japan



- cannot assume that community mechanisms represent the only route to preparedness
- consider how people interpret their circumstances individually and collectively

## In New Zealand

- need to target individual, community & civic factors collectively



**In both countries, risk management strategies should include:**

- **information provision**
  - new approaches required in both countries
- **community relationships & competencies**
- **community empowerment & engagement**
  - delivered in ways consistent with prevailing cultural practices (e.g., Jishubo in Japan)
  - new approaches required in NZ

## NZ & Japan

- data reflects day-to-day experiences of confronting community issues...that
- influence prevailing levels of:
  - community participation
  - problem solving/collective efficacy
  - empowerment

## Differences in underlying cultural processes influence degree to which:

- resilience mechanisms are implicit within a culture
- mechanisms have to be developed/sustained

## Emphasises importance of

- integrating risk management and community development

## Strategies based on community capacity building

- immediate benefits,
- sustained potential,
- utilise implicit cultural competencies
- accommodate community diversity



Collaborative research will provide valuable insights into how culture enhances a capacity to co-exist with a hazardous environment

- important contribution to understanding resilience in western populations
  - insights into the components of resilience
  - identify cultural mechanisms & structures

