

Have the attitude toward nuclear power plants changed after the Fukushima nuclear accident?

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Background

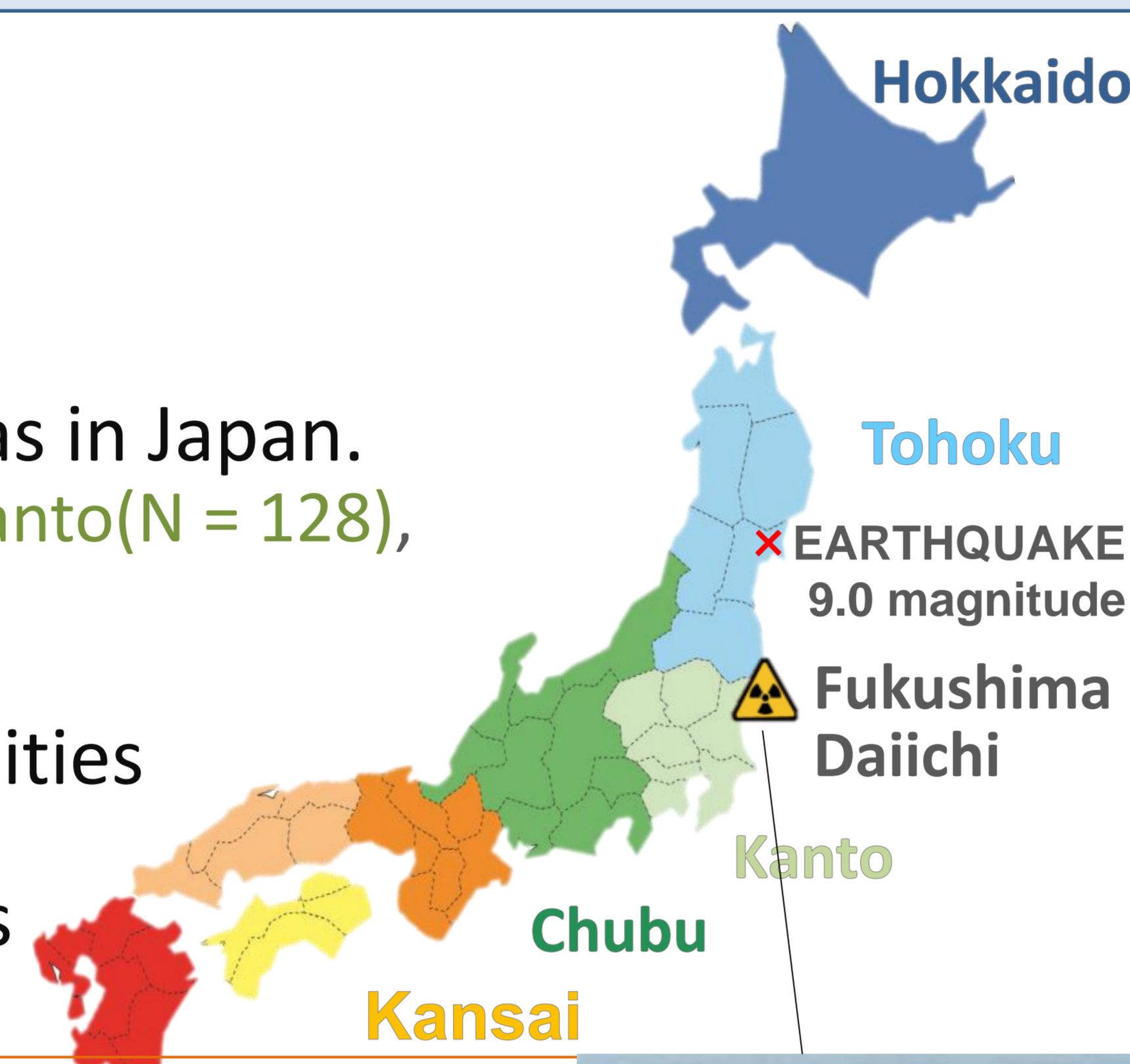
Severe nuclear accident in Fukushima nuclear power plant occurred in March 11th 2011 after the Great East Japan Earthquake. The accident raised numbers of discussions about the safety of the nuclear power plants in Japan.



- The present study aims to investigate the attitudes toward nuclear power plants and the determinants of the attitudes after the earthquake among Japanese university students.
- Does students in Tohoku area, where damage by the earthquake was the severest, have more negative attitudes toward nuclear power plants?
- Does attitude toward nuclear power plants affect electricity saving behaviors?

Method

- Research period:** April-June 2012
- Procedures:** The study was conducted in 5 areas in Japan. Hokkaido(N = 121), Tohoku(N = 43), Kanto(N = 128), Chubu(N = 124) and Kansai(N = 194)
- Respondents:**
 - University students from 7 universities in 5 areas in Japan
 - The total number of the responses was 662 with 611 valid answers.

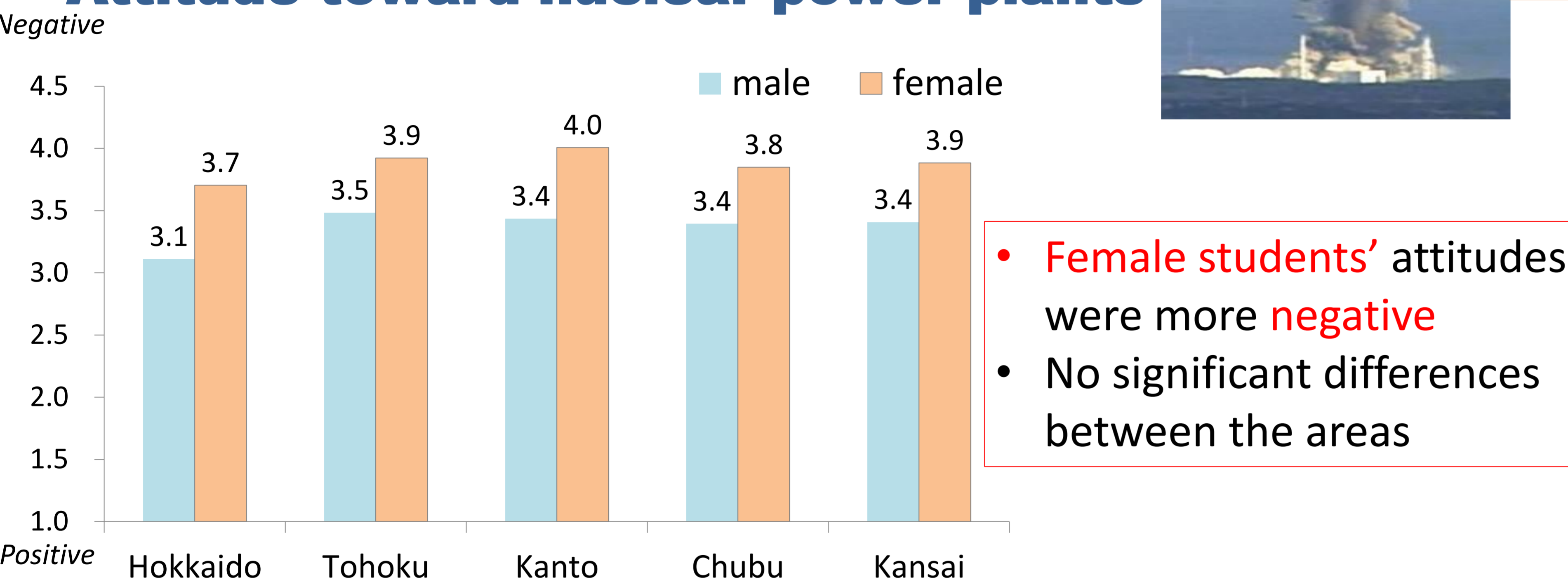


Discussion

- There was no differences between the areas. In Tohoku area, people may have both positive and negative attitudes toward nuclear power plants.
- Changes in one's worldview had larger impacts on attitudes than actual damage by the earthquake.
- Attitude toward nuclear power plants had little effects on electricity saving behaviors. Descriptive norm and collectivism affected the behaviors.

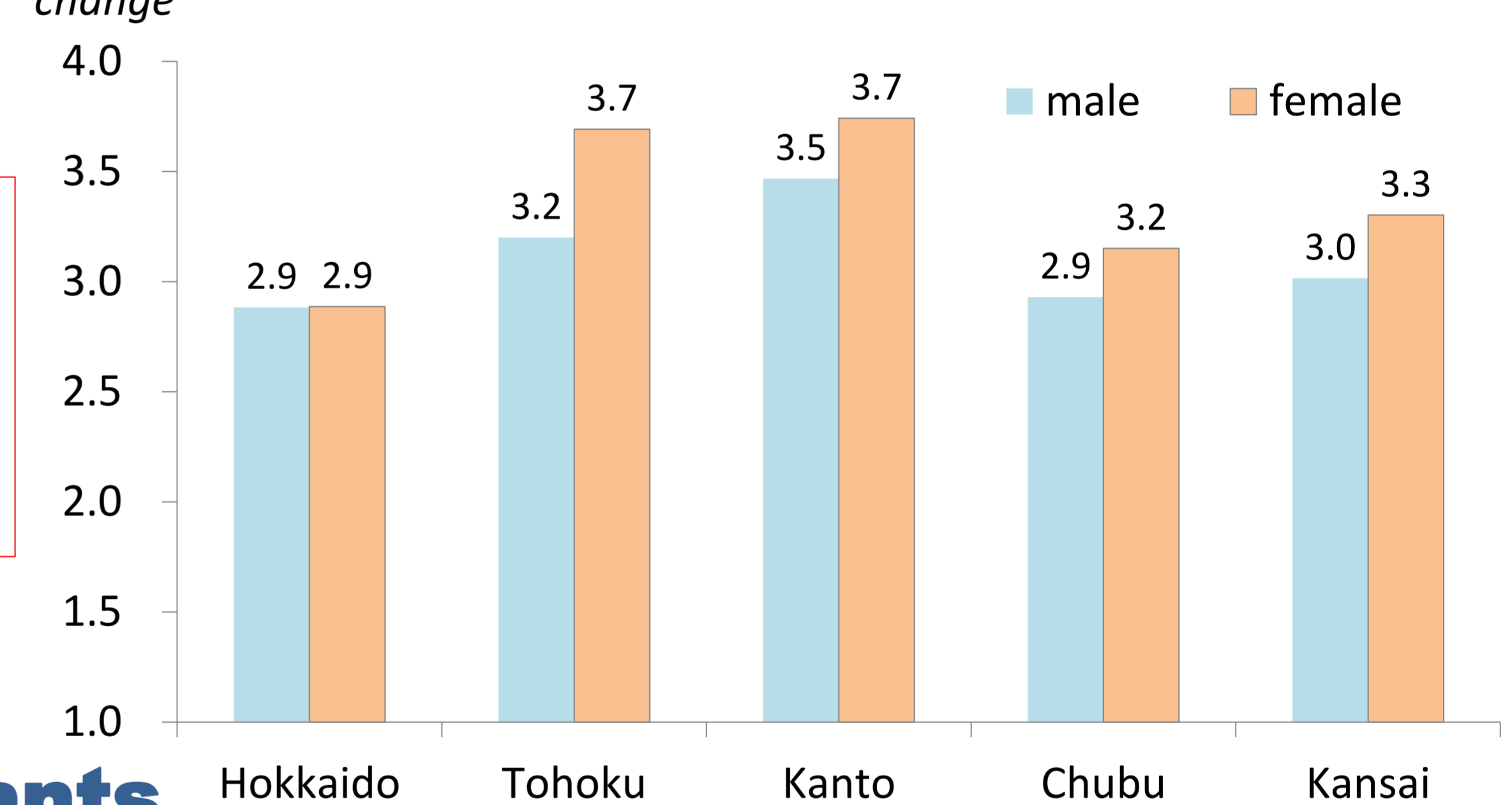
Results

Attitude toward nuclear power plants



- Female students' attitudes were more negative
- No significant differences between the areas

Changes in one's worldview

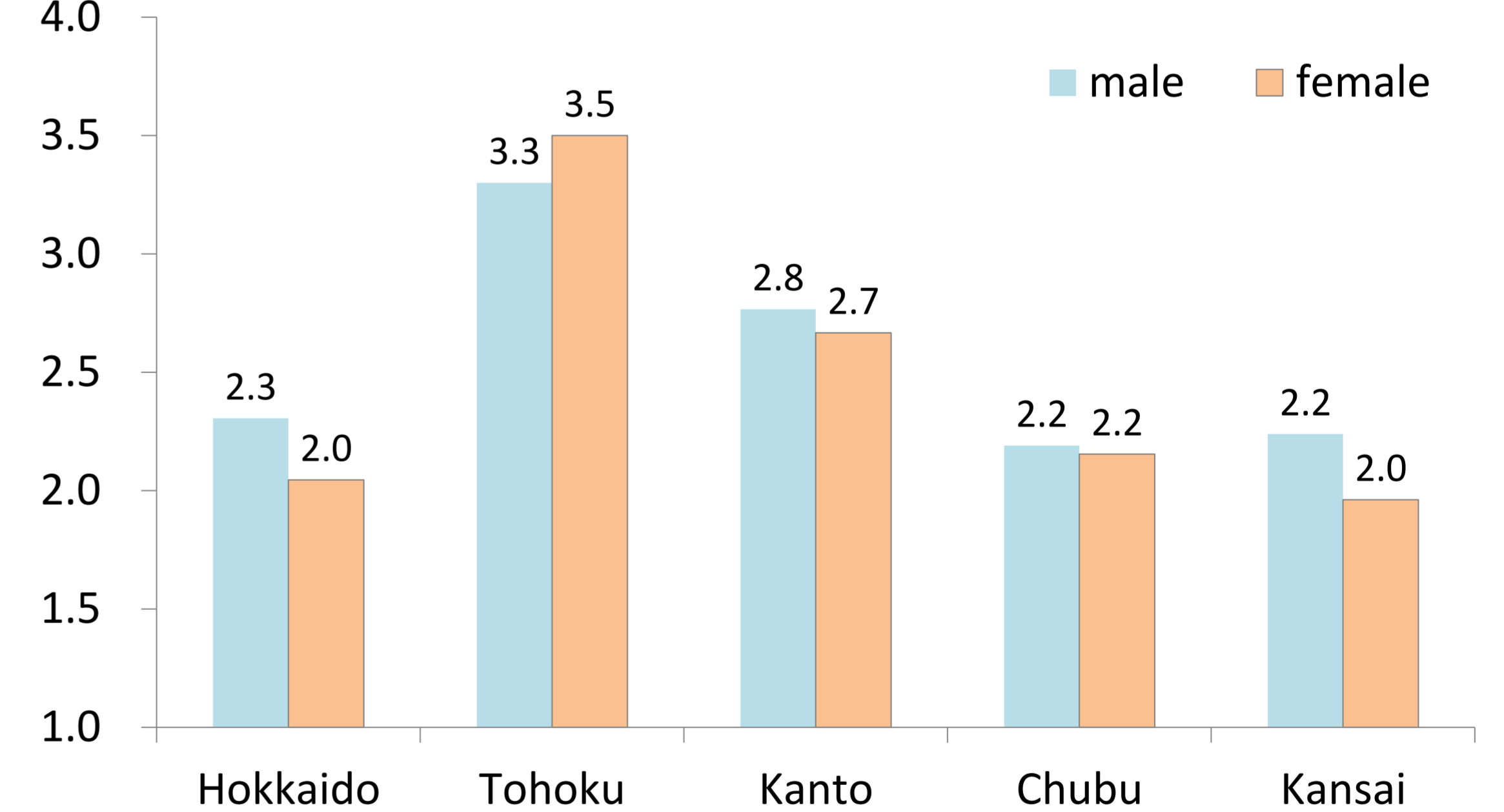


Determinants of the attitude toward nuclear power plants

	β
Cognition of the shortage of power supply	.079 *
Damage by the earthquake	-.078 *
Changes in one's worldview	.220 ***
Collectivism	.111 **
Grade	.038
Sex	-.192 ***
<i>F Value</i>	17.05
<i>R</i> ²	.146

- Changes in one's worldview and sex affected the attitudes toward nuclear power plants.

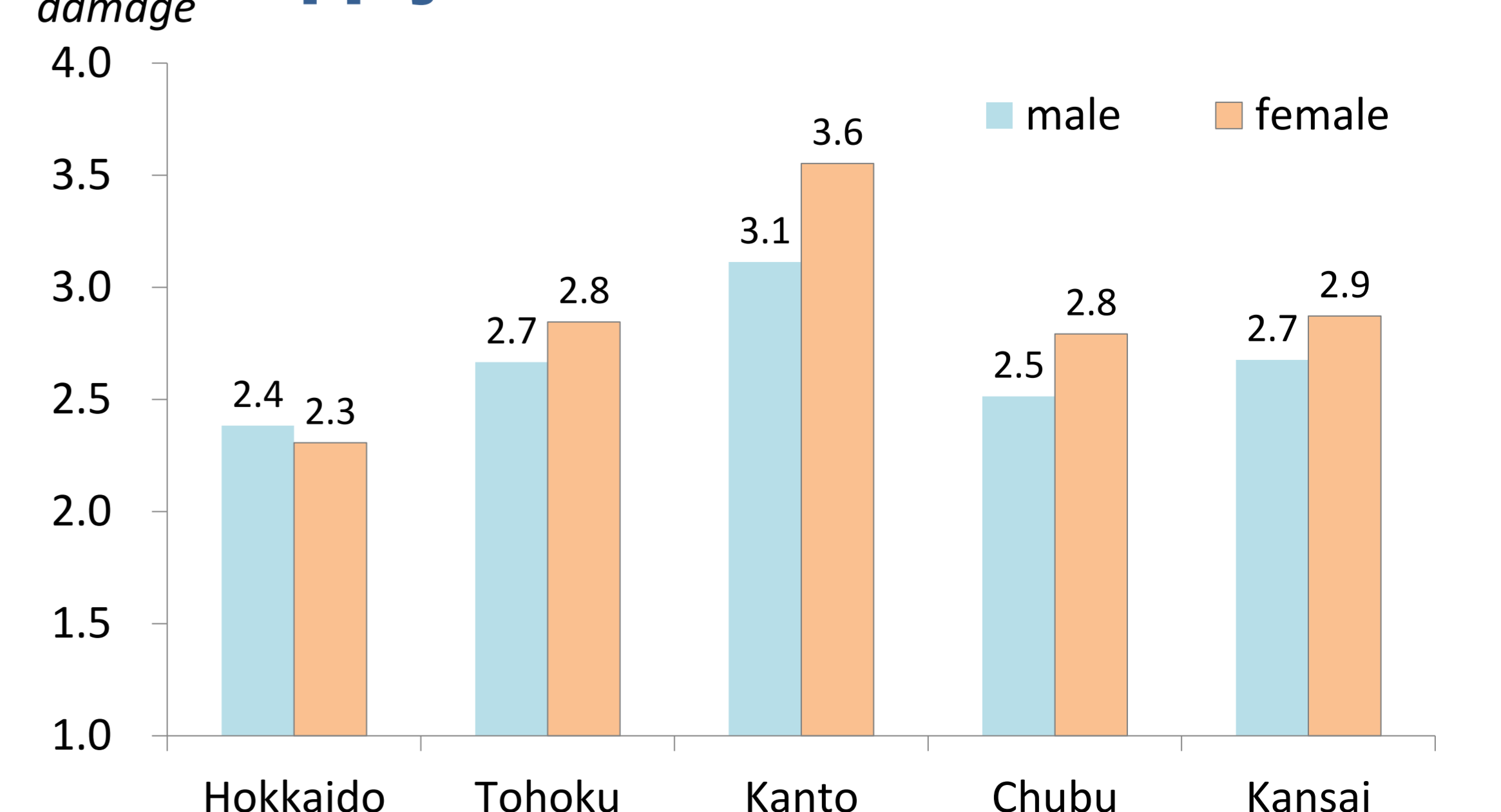
Damage by the earthquake



Determinants of the Electricity saving behaviours

	β
Cognition of the shortage of power supply	.126 ***
Cognition of the electricity saving in public spac	.164 ***
Damage by the earthquake	.096 **
Personal communication	.179 ***
Communication via media	.074
Attitude toward nuclear power plants	.070 *
Changes in one's worldview	.157 ***
Collectivism	.244 ***
Estimation of others' behaviours	.287 ***
Grade	.014
Sex	.059
<i>F Value</i>	27.53 ***
<i>R</i> ²	.34

Cognition of the shortage of power supply



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