



DETERMINANTS OF PRO-ENVIRONMENTAL BEHAVIORS IN CHINA AND JAPAN: THE ROLE OF ESTIMATION OF OTHER'S BEHAVIORS



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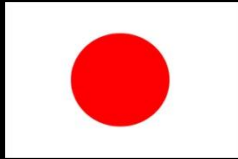
Estimation of others' behaviors



- Descriptive norm (Cialdini et al. ,1991)
 - Cognition of behaviors what most others do and the intention to confirm with it.

Others' behaviors in the country (Ando et al., 2007)

People in their country

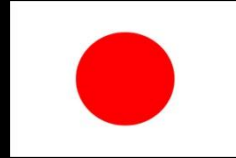


Own behavior



Effects from friends, or community?

Friends



Own behavior



People in their community





Hypotheses

- Estimation of others behaviors ->own behavior
 - ▣ Friends > People in the community

Method

- Survey study in universities
(N=131, undergraduate)
- Respondents
 - China: N=55 (Mean age= 18.9)
 - Japan: N=76 (Mean age= 19.6)
- Survey period
 - Dec. 2010 – May 2011



Behaviors measured in the survey

Energy saving



Avoid using heating or air conditioning too much

3R



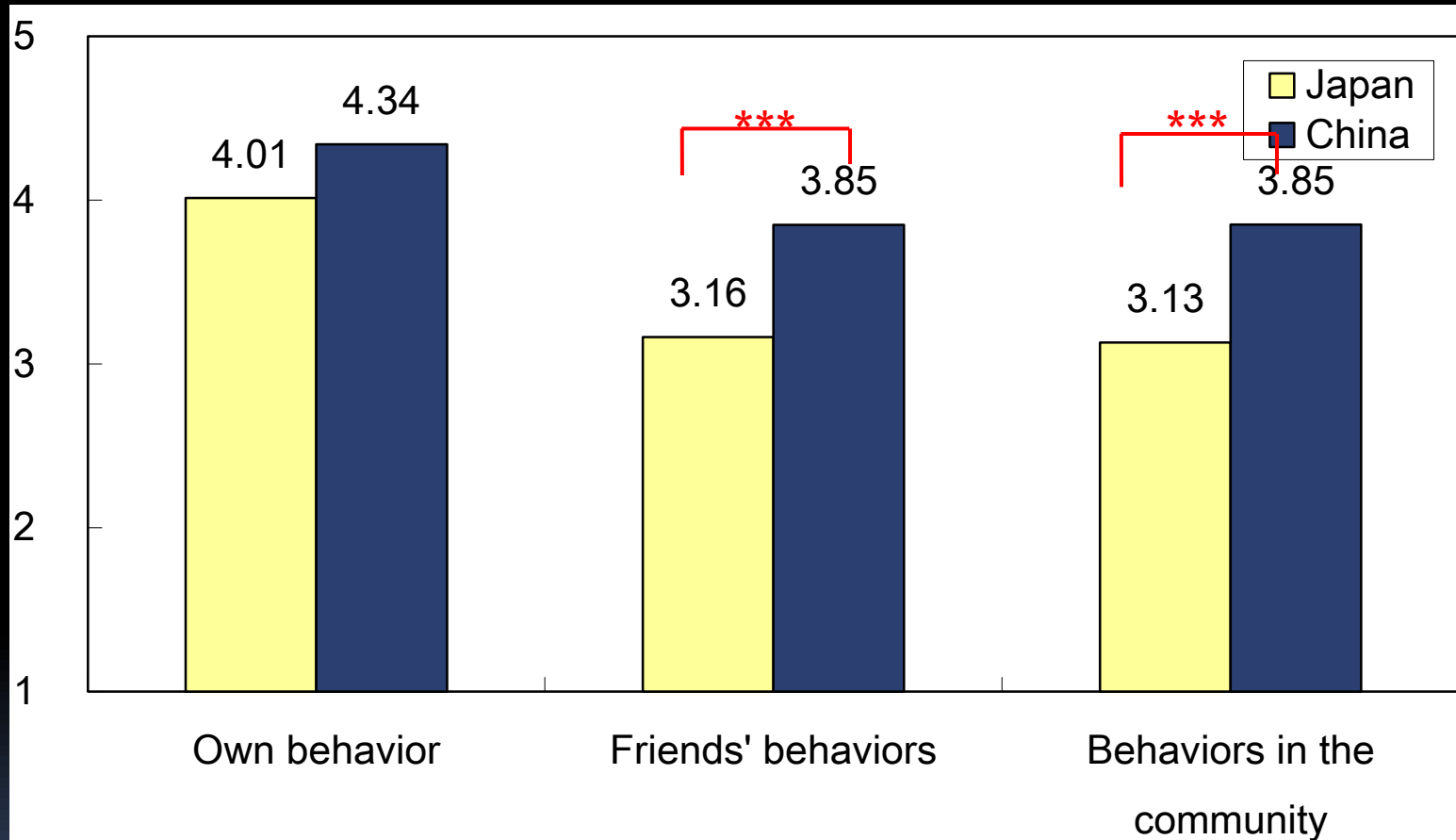
Avoid buying throwaway products

Participation in environmental activities



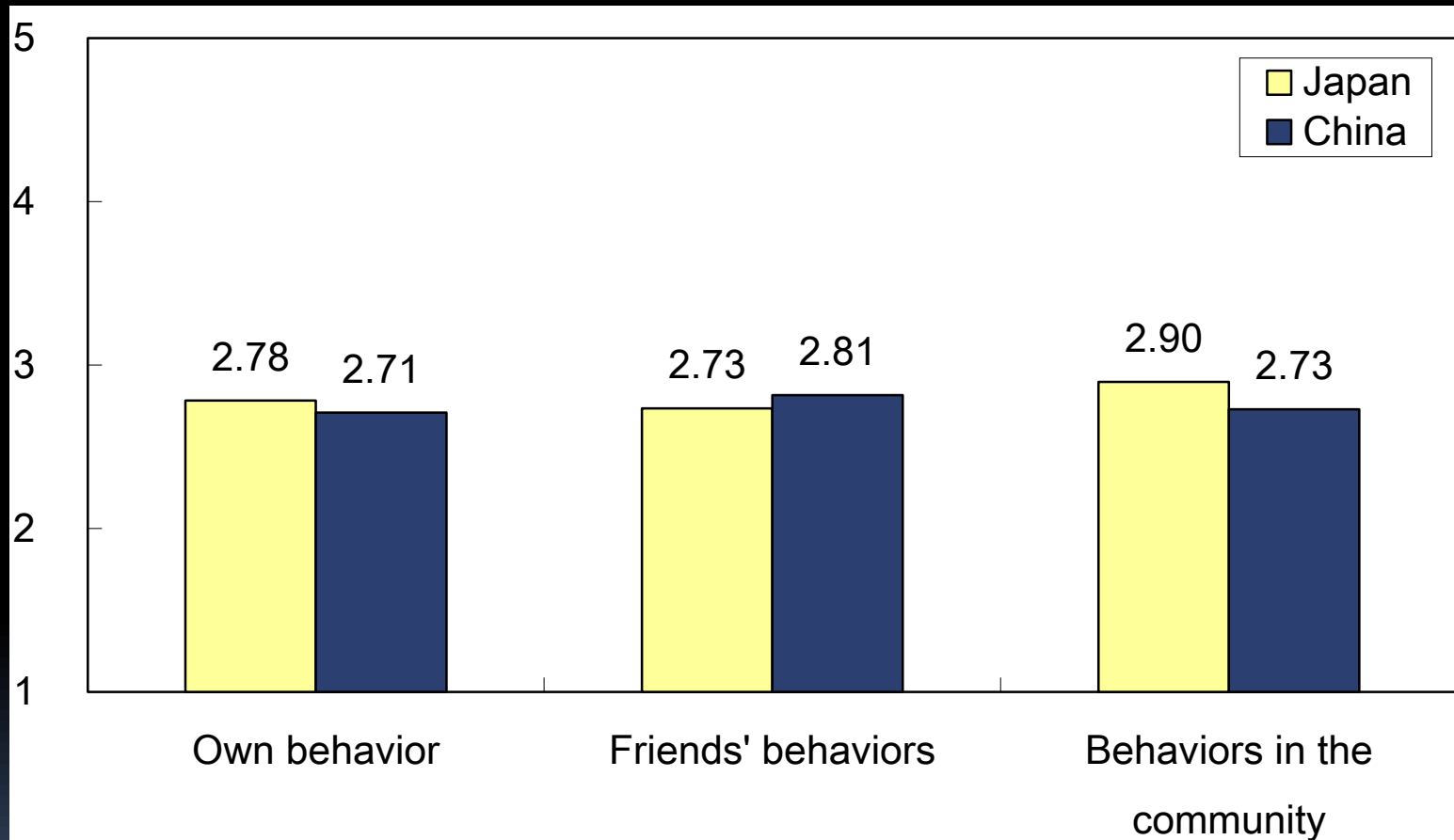
Take part in activities in the community

Energy saving behavior



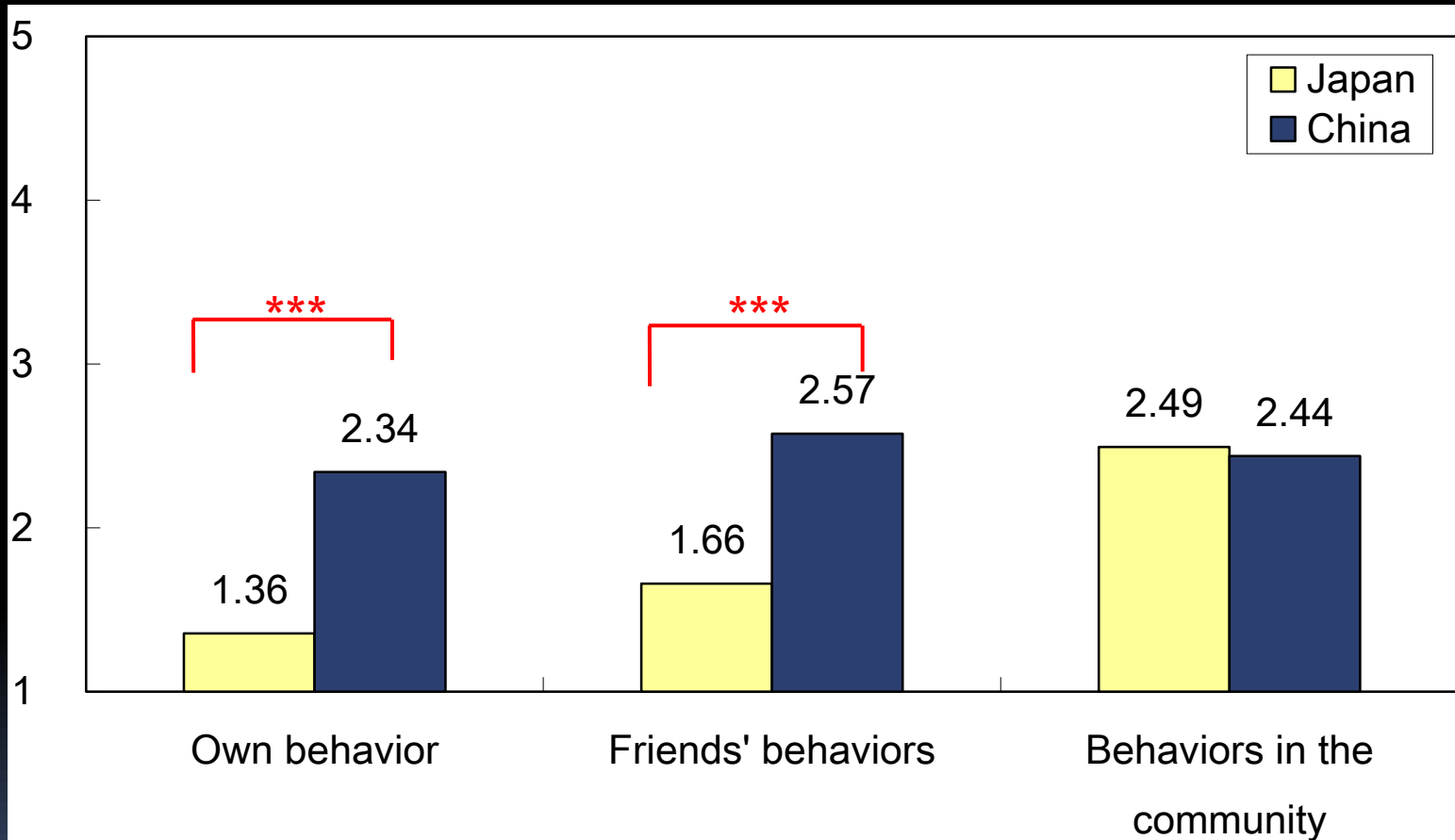
- The easiest behavior

3R behavior



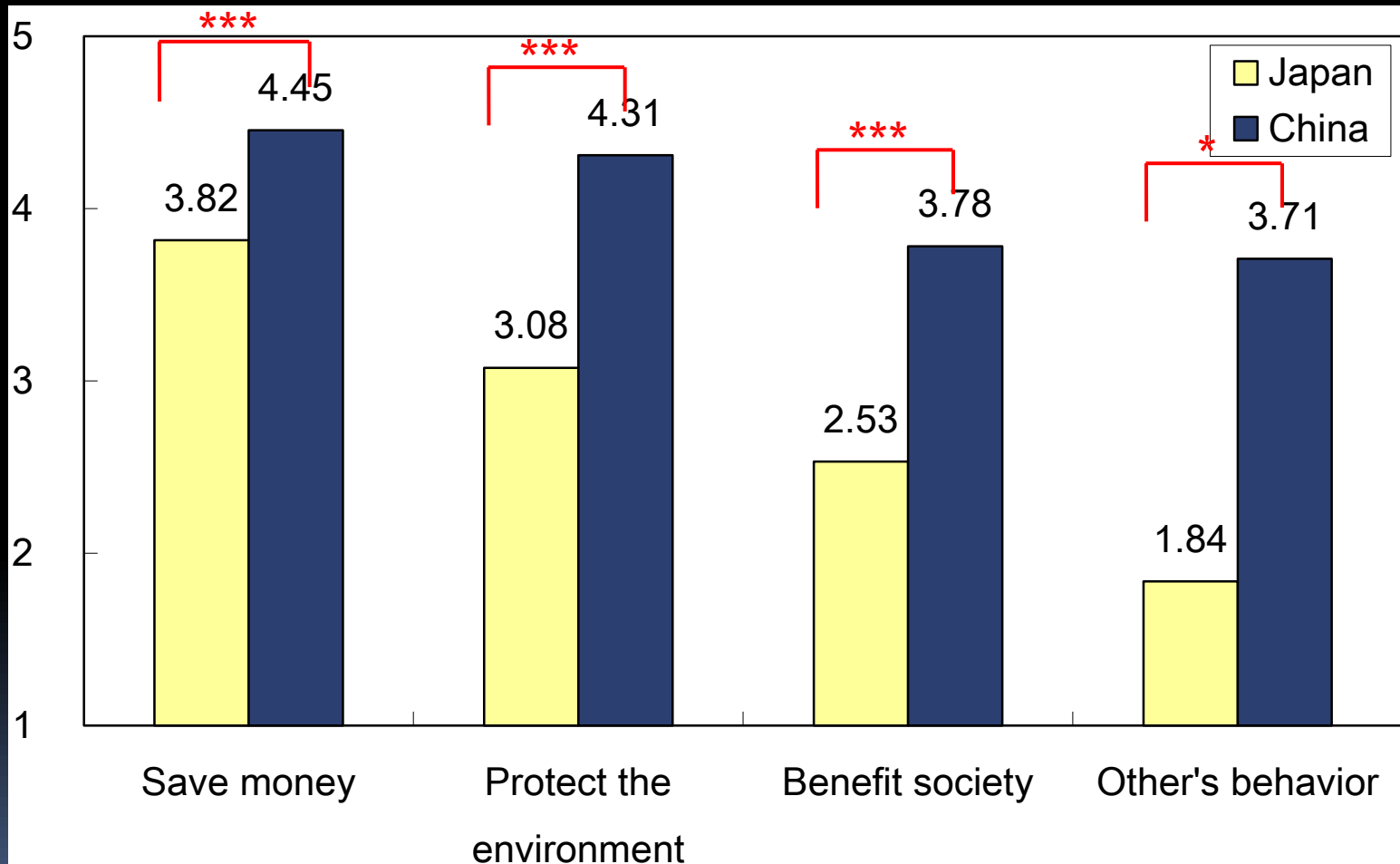
- No difference between own and others' behavior

Participation in environmental activities



- The most difficult behavior
- Japanese < China

Perceived reasons for taking pro-environmental behaviors



Correlation between own behaviors and cognitive variables

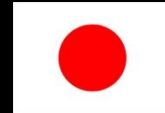
	Own behaviors					
	Energy saving		3 R		Participation in environmental activities	
	Japan	China	Japan	China	Japan	China
Friends' behaviors	.28*	.43**	.30**	.45**	.47***	.46**
Behaviors in the community	.16	.47**	.21	.36*	.20	.38*
Perceived behavioral control	.37**	.60***	.47***	.66***	.17	.46**
Identification with the community	.15	.10	.08	.12	.16	.14
Personal norm	.11	-.11	.31**	.29*	-.01	.33*
Subjective norm	.09	.22	.11	.36**	.16	.39**

*** $p < .001$, ** $p < .01$, * $p < .05$

- Friends' behaviors had significant correlation in all behaviors
- Behaviors in the community was significant only in China.

Discussion

Friends



Own behavior



Stronger effect

People in their community



Hypothesis was supported

Thank you for your
attention!

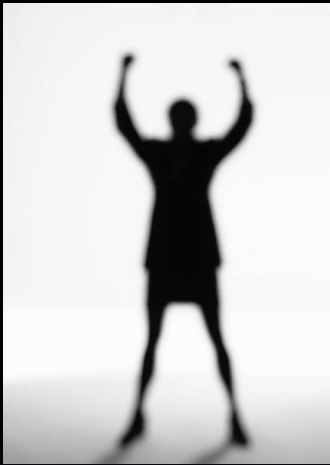




Key concepts

- Estimation of others' behaviors
- Identification with the community
- Compare Japan and China

Identification with the community



- Social identity theory (e.g. Tajfel 1978)

Identification with
the group



Group norms
more important

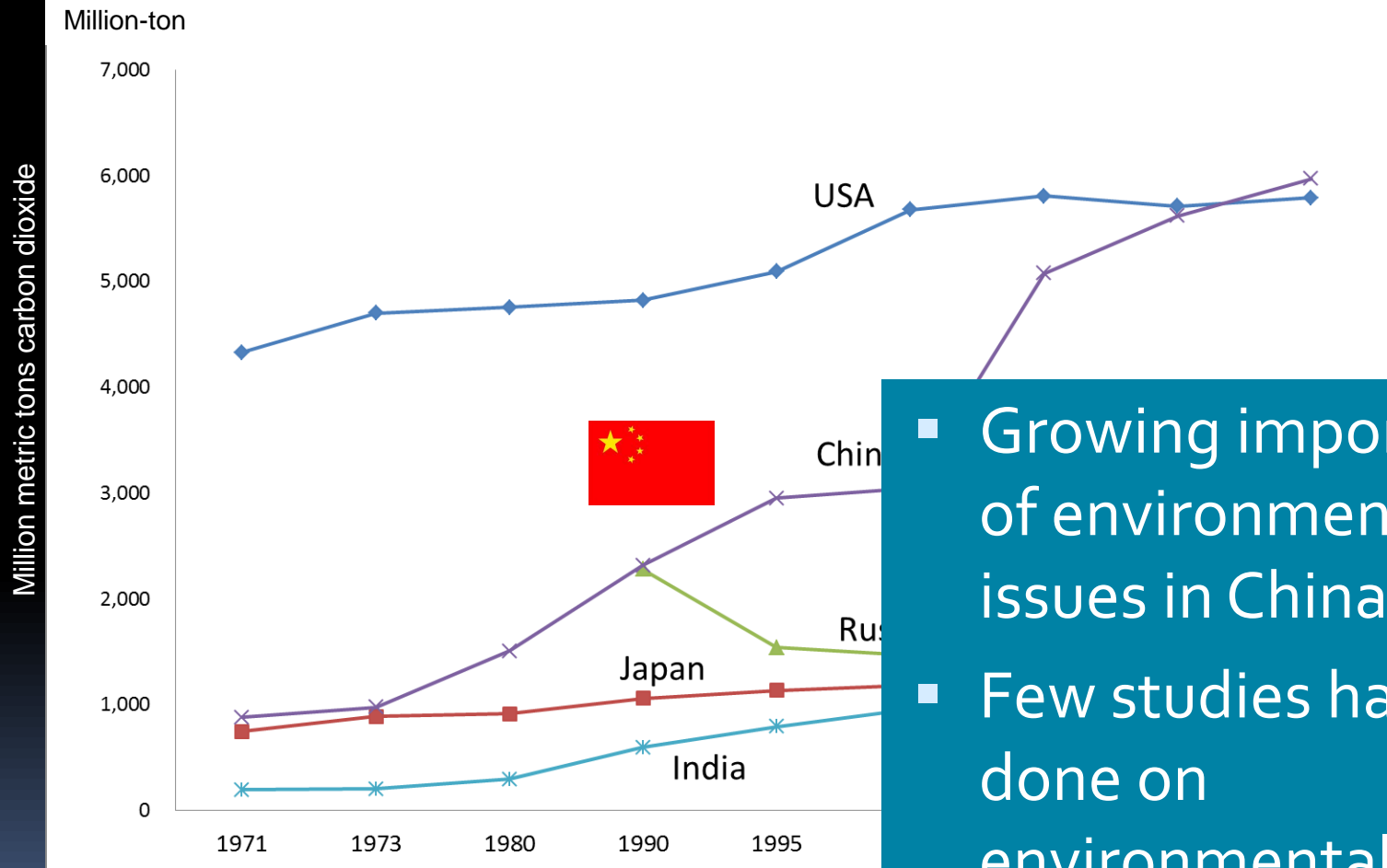
The mediating role of identification

Correlation between the behaviors in the community and participation

Identification	Japan	China
High	.17	.59**
Low	.20	.10

Environmental behaviors in China

CO2 emissions by country 1971-2007

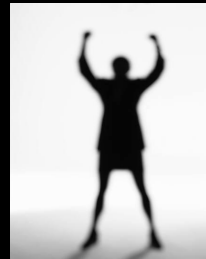


- Growing importance of environmental issues in China
- Few studies have done on environmental behaviors in China

Role of identification with the community



Identification with the community



People in their community

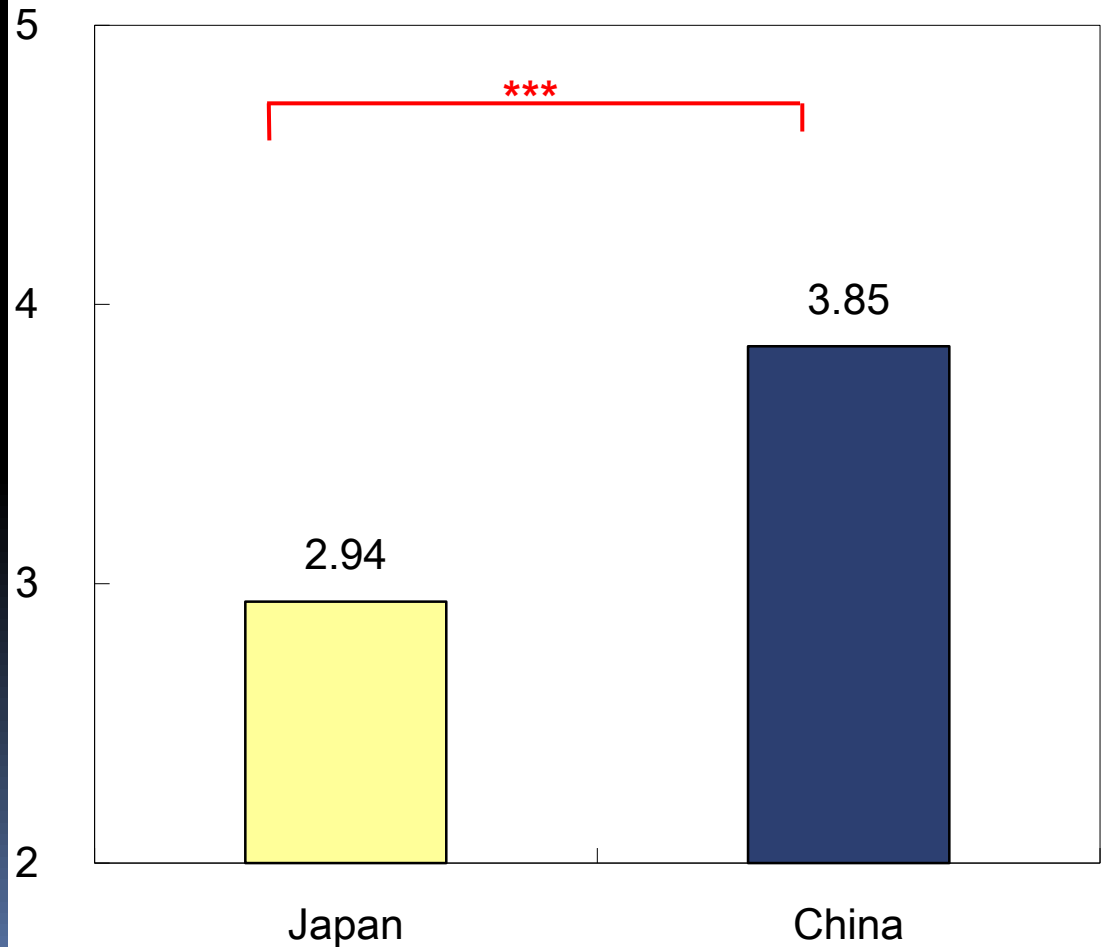


Own behavior



Hypothesis 2 was partly supported

Identification with the community





Future issues

- False consensus
 - tendency to overestimate of others' behavior
- Take account of social environmental differences

Thank you for
your attention!



References

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Questionnaires

- Behavioral measures
 - Energy saving:
 - Avoid using heating or air conditioning too much.
 - 3R:
 - Avoid buying throwaway products.
 - Participation in environmental activities:
 - Take part in meeting and activities which aim to preserve the environment in the community (e.g. recycling, beautification, transportation).
- Estimation of others' behaviors
 - We used same behavioral measures about friends' and community behaviors

Questionnaires

- Cognitive variables
 - Personal norm(2 items)
 - Using heating or air conditioning too much would be against my personal values to protect the environment.
 - Subjective norm(2 items)
 - My family expect me to avoid using heating or air conditioning too much.
 - Seriousness(2 items)
 - If many people wouldn't observe temperature setting, this will affect the global warming.
 - Efficacy(2 items)
 - If I try not to use heating or air conditioning too much, it contributes to solve global warming problems.
 - Perceived behavioral control(1 item)
 - Avoiding using heating or air conditioning too much would be easy/difficult for me.

Questionnaires

- Identification with the community (4 items)
 - I feel attachments to this community.
- Reason of doing pro-environmental behavior (each 1 item)
 - Using less energy saves money
 - Protecting the environment
 - Being benefits society
 - Lots of other people are trying to conserve energy
- Environmental communication
 - Environmental problems (4 items)
 - I talk with my family and/or friends about global warming issues.
 - Behaviors
 - We asked about energy saving, 3R and activities in the community.
 - Media (2 items)
 - I often see information about global warming problems on TV or newspapers.