

# **Trust in Local Ability of Disaster Reduction and its Influences on Public Flood Risk Perception: Based on the Investigation and Analysis**



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# Purpose

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discuss the relationship between the regional public trust in disaster reduction ability and flood risk perception

- help to reveal the risk factors of disaster awareness
- guide people to properly understand the limits of disaster reduction measures , technology and management ability
- raise disaster risk awareness.

# Study Area



# Data & Method

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## Questionnaires :

total 800 ; valid 635 ( confidence 95%; sampling error 4%)

Characteristic	N	%
<b>Sex</b>		
Male	306	49.7
Female	310	50.3
<b>Age</b>		
10-29	322	51.3
30-49	197	31.4
>49	109	17.3
<b>Residence</b>		
Urban areas	289	45.9
Rural areas	341	54.1
<b>Level of education</b>		
1-6	83	13.6
7-12	391	63.9
>12	138	22.5

**Table1 personal characteristics of the sample**

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Do you trust the prevention effect of the flood-control engineering?

approve very much=2,

approve =1,

disapprove =-1,

disapprove very much=-2

$$F = 1/n \sum W_i M_i$$

“F” is the total score of variable,

“i” represents every answer option serial number,

“W<sub>i</sub>” is the number of people choosing “i” option,

“M<sub>i</sub>” is the score of the option,

“n” is the total effective sample of each variable.

# Results

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**Table 2** public trust in local ability of disaster reduction<sup>a</sup>

	Engineering	Monitoring	Facility	Government	Mean
Effect	0.81	0.76	0.71	0.59	0.72
Level	0.22	0.42	0.34	0.32	0.33
Measure	0.25	0.50	0.33	0.33	0.35
Trust	0.43	0.56	0.46	0.41	0.47

Monitoring > Facility > Engineering > Government

**Fig.1 The differences of public trust in local ability of disasters reduction which are categorized based on the different factors ↵**

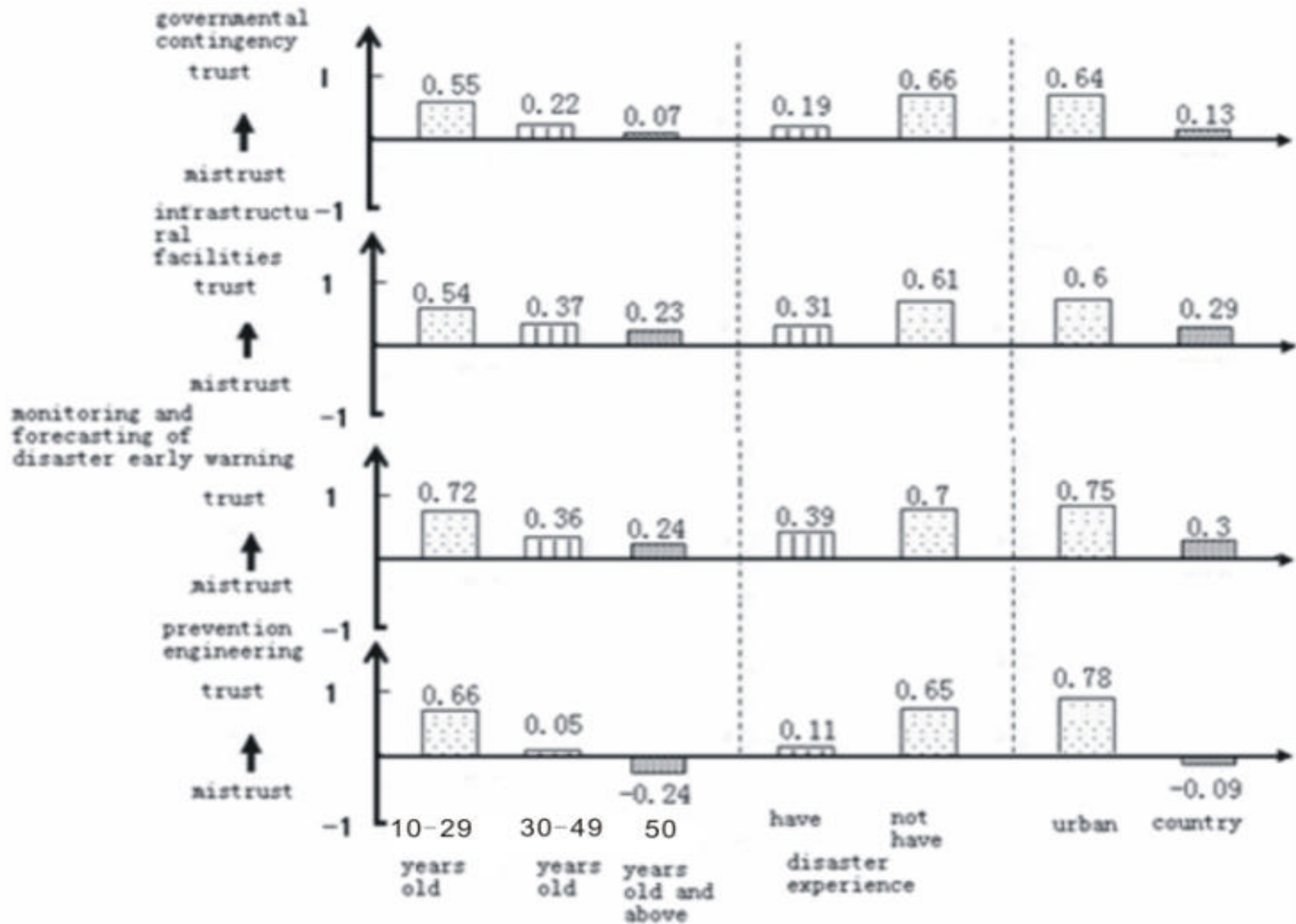
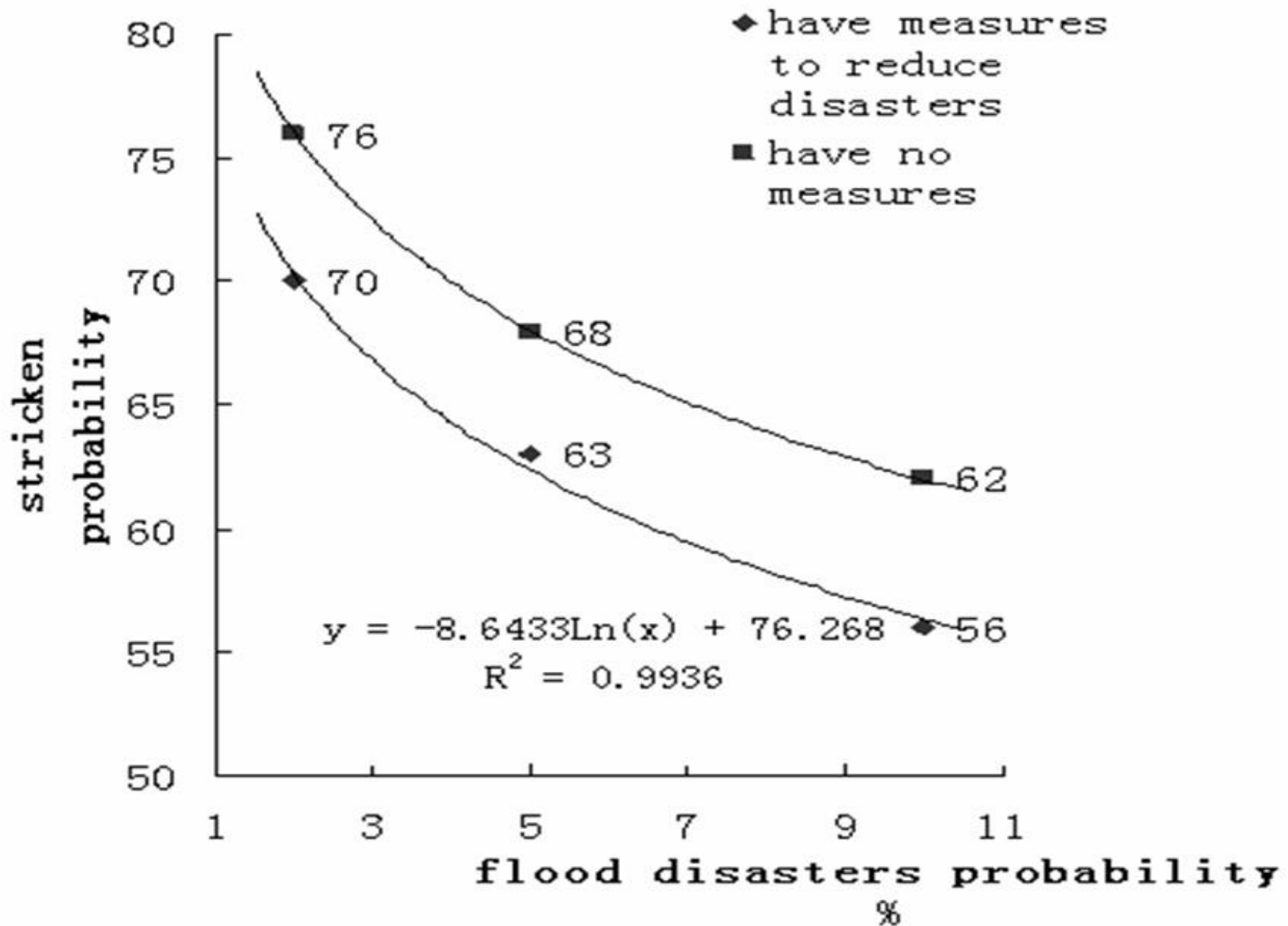




Fig.2 The probability of people suffered from flood disasters with disaster reduction measures or not



# Positive:

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- 45.9% of the sample are willing to invest more money to improve the local ability of disaster reduction
- 29.7% of the sample think that they have not relied on the government rescue as before
- 66.8% of the public have more enthusiasm to participate in the recovery work in the period of post-disaster

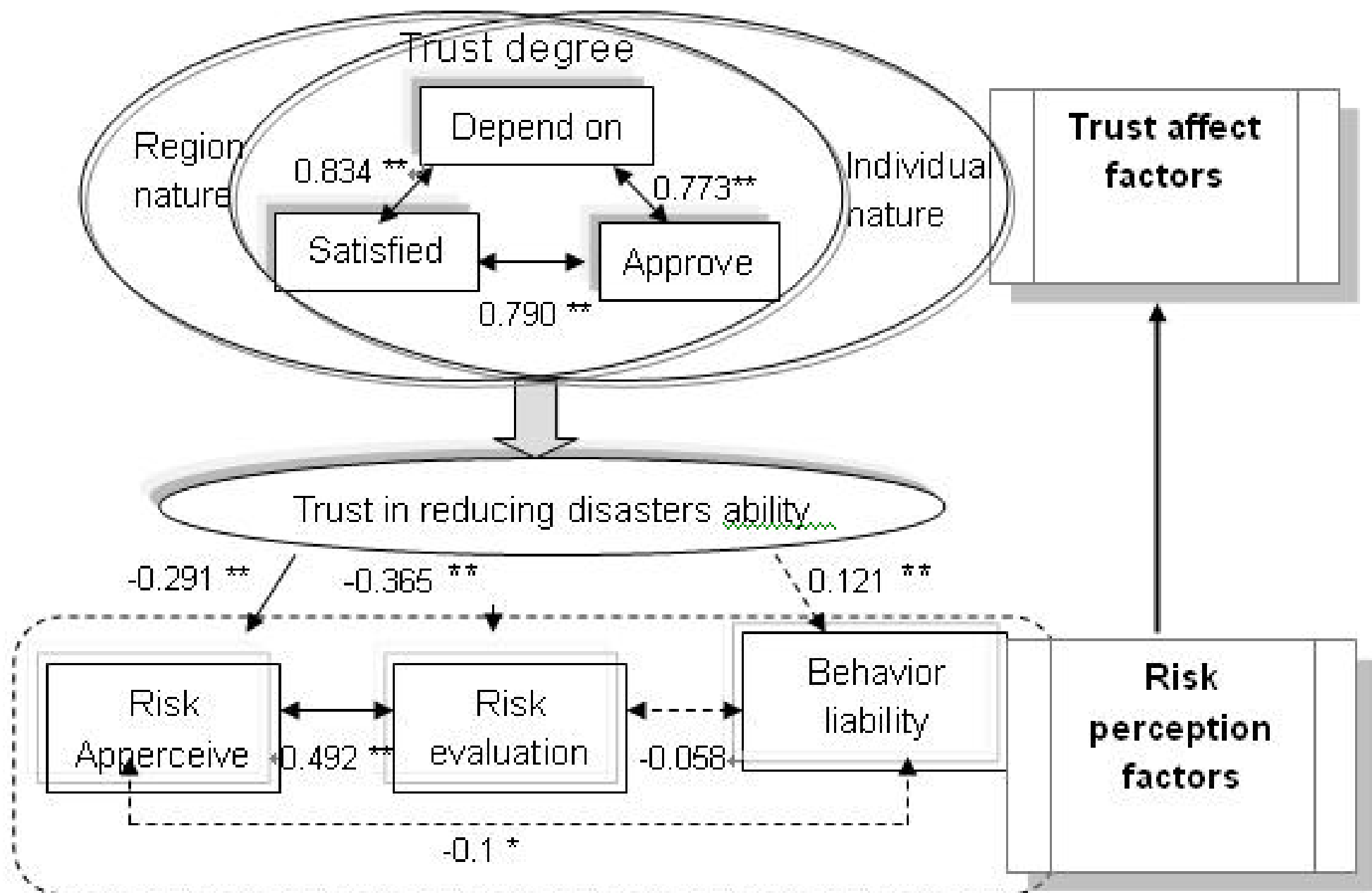
# Negative:

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- 40.5% of the sample think the high disaster risk areas can be used as production and living areas because of the protection of the disaster prevention measures

This kind of behavior which is seemingly rational may imply new risk . Because people may ignore disaster reduction measures failure or greater disaster risk.

**Fig.3 Relations of trusting in local ability of reducing disasters and public flood risk perception**



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Trust capability of risk reduction is leading to “deviation or distortion in the consciousness of disaster prevention” of the public.

However, disaster reduction and prevention calls for the development of science and technology and the capacity of disaster reduction .

Therefore, only by the right guidance of the disaster reduction culture, the public can understand the limitation of the disaster reduction objectively, don't trust blindly and develop the awareness of disaster prevention and responsibility

So we must construct the social atmosphere of disaster prevention in order to make everyone feel its impact .Ultimately , we can achieves the result of "cultural consciousness"



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**Thank you!**