The Approaches from Rural Construction Land Consolidation to Sustainable Rural Land Resource Development

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Abstract. As an important property, rural construction land is related to the fundamental interests of farmers. Since rural construction land has not been efficiently used which affected the sustainable development of rural land resources, this study constructs a theoretical model of farmers’ rural construction land consolidation intention, and designs a questionnaire based on the model. Based on the data analysis, this study provides empirical test and puts forward suggestions for improving present rural construction land management policy system.

1. Introduction
Nowadays, with the acceleration of urbanization process, there are a large number of idle construction lands in rural areas, and land resources cannot be used effectively. This situation makes China facing the contradiction between the increase of idle rural construction land and the scarcity of cultivated land resources. In addition, the blind and disorderly expansion of rural construction land and the emergence of extensive and inefficient use of rural land resources, resulting in a "two-way squeeze of cultivated land". Therefore, in order to protect the cultivated land resources and promote the intensive and efficient use of the land, Chinese government has formulated the policy of rural construction land consolidation in order to convert the idle rural construction land into cultivated land or into urban construction land. However, during the four years of implementation process there exist many factors that interfering farmers’ intention of rural construction land consolidation. Therefore, in order to achieve the sustainable development of land resource, this study constructs a theoretical model which analyzes the influencing factors of rural construction land consolidation. After analysis, policy suggestions to achieve sustainable development of rural land resource are provided.

2. Methodology
In Policy Science, the main method to measure causal mechanism is to analyze it from the perspective of rational choice, in which causal mechanism is usually independent variable in logic model, path model, structural equation or regression equation. By designing the causal mechanism of emotional feedback, attribution cognition and resolution subject, this study links these three variables to simulate how the policy narrative interacts with public opinion and policy decisions at the micro level.
2.1. Theoretical model

On the basis of Theory of Perceived Responsibility and Social Motivation, this study analyzes the relationship between emotional feedback and subjects of dispute resolution. The related research of this theory mainly focuses on applied research, including behavior perception research, economic management and public policy-making. In the field of behavioral perception, Weiner (1993) analyzed the perceived controllability of the cause of failure, the corollaries of personal responsibility, and the emotional responses of empathy and anger, which mediate the causal and punitive responses of competence and effort. He explored the theory of perceived responsibility and social motivation, pointing out that this theory explains some of the responses to insults, as well as observations related to offer of help, peer rejection and aggression. In the field of public policy making, Niederdeppe, Porticella and Shapiro (2012) analyzed convenience sample data on political diversity for 500 adults in upstate New York, using the theory of perceived responsibility and social motivation. They examined the relationship between attributional beliefs and policy support to determine which types of scientific evidence and relevant information are most likely to generate public support for price-raising policies.

This model also based on Attribution-Emotion model to analyze the relationship between emotional feedback and attribution cognition. It was originally used to explain the behavior of people and the reason of the behavior, and applied effectively in the field of social psychology. With the development of society, this theory has been gradually adopted by management, education and social science, and has become an important method to study and understand the complex social behavior of human beings. Kim (2011) explored how to address the personal and social causes of obesity through the reader's approach, guided by the attribution-emotion model. Zhou, Wang and Hu (2018) focused on how public sentiment affects the practice of anti-corruption, and used attribution-emotion theory as a tool to systematically analyze the phenomenon of emotional expression of netizens.

In the context of rural construction land consolidation, previous study has proved that farmers may have different emotional feedback when they face different situation of rural construction land consolidation, and farmers may give feedback on different factors that promote or hinder their intention of rural construction land consolidation. Meanwhile, the demand of farmers needs different subjects of dispute resolution to work together to satisfy. Therefore, this study hypothesized that the participants will report different emotions through reading the description of rural construction land consolidation, and different emotions will cause the public to make different attributional cognitive judgments of the given narrative problem, and thus get the corresponding cognition of the subject who solves the problem. The hypotheses are established as follows:

Hypothesis 1: Emotional feedback is positively related to subjects of dispute resolution of promoting farmers' intention on rural construction consolidation.

Hypothesis 2: Emotional feedback is positively related to attribution cognition of promoting farmers' intention on rural construction consolidation.

Hypothesis 3: Attribution cognition is positively related to subjects of dispute resolution of promoting farmers' intention on rural construction consolidation.

Hypothesis 4: Attribution cognition mediates the emotional feedback- subjects of dispute resolution relationship of promoting farmers' intention on rural construction consolidation.

2.2. Questionnaire Design

In the questionnaire, unless otherwise indicated, response options ranged from 1, “strongly disagree” or “strongly dissatisfy” to 7, “strongly agree” or “strongly satisfy”. The questionnaire uses four parts to measure three concepts and the potential correlations between them. Firstly, participants were asked for a brief personal background in order to ensure the representativeness of the sample and the rationality of the structure. The variables include age, gender, educational background, income and status of household registration. The second part aims to investigate whether emotional feedback is captured by participants. Questions includes whether you have sympathy or dissatisfaction feelings towards the behavior of rural construction land consolidation. The third part was designed to identify
the personal and social attribution cognition on rural construction land consolidation. Questions related to personal attribution cognition consisting of lack of compensation, resettlement after consolidation, the influence of traditional notion, and decisions of other members from the same villages. Questions related to social attribution cognition consisting of channels of communicating and broadcasting consolidation policies, alternative compensation methods, policy refinement and improvement, and policies are not effectively implemented. The final part was proposed to identify the level of following subjects of disputing resolution, including the owner of rural construction land, village committee, government staff, and other members from the same village.

2.3. Data Collection
The questionnaire was distributed through online questionnaire research website and offline field survey, and 300 copies were distributed. Considering the comprehensiveness and scientificity of the sample, the participants of this study include graduate students, teachers, researchers and workers in related fields, and rural construction land owners. The distribution ratio is about 3:1:2, a total of 300 questionnaires were issued, 295 of which were recovered, 3 of which were invalid, including incomplete information and irregular answers, and 292 of which were valid.

In all 292 valid questionnaires, the surveyed population has a good representation, in which the gender ratio of men and women is 1:1.24, the ratio is appropriate, indicating that there is no gender bias in the surveyed population. The educational structure is 34.9% of high school, 36.3% of junior college, undergraduate is 22.9%, and 5.5% is above master's degree, which indicate that the education structure is reasonable. In the status of household registration structure of the surveyed population, the rural household registration accounted for 26.7% and the urban household registration was 72.9%. This was because the distribution group included some respondents who settled in the city but did not withdraw from the rural construction land. Therefore, there are more respondents with urban household registration. Among the income levels, except for high-income groups, which account for 8.9% of the monthly income of more than 10,000 yuan, the middle-income group are the main body, which owns monthly income of 3,000-5,000 yuan and 5,000-10,000 yuan. The results indicate that the income structure is relatively reasonable.

3. Data Analysis
In order to explore the relationship among emotional feedback, attribution cognition and subjects of dispute resolution, this study constructed a theoretical model of structural equations (see Figure1). There are three latent variables and 14 significant variables in the model. AMOS 24.0 is used to conduct confirmatory factor analysis.
3.1. Confirmatory factor analysis

Based on the initial theoretical model, the structural equation is constructed through continuous debugging, and the rationality of the model is determined according to its fitting index. After adjusting the confirmatory factor model, the fitting indicators are shown in the following table.

Table 1. Fitting results of the structural equation model

| Fitting statistics | Statistics value | Judgment basis |
|--------------------|------------------|----------------|
| Chi-square value $\chi^2$ | 72.901 | Statistical threshold |
| Degrees of freedom | 58 | -- |
| Adjoint probability ($P$) | 0.090 | $\geq 0.05$ |
| CMIN/DF | 1.257 | $3 \geq$ CMIN/DF $\geq 1$ |
| GFI | 0.966** | $\geq 0.9$ |
| AGFI | 0.938** | $\geq 0.8$ |
| NFI | 0.964** | $\geq 0.9$ |
| PNFI | 0.615** | $\geq 0.5$ |
| PCFI | 0.633** | $\geq 0.5$ |

The model fitting results are shown as follows. (1) The absolute goodness of model fitting is derived from the theoretical model matrix and the actual data matrix. Through this type of index, the degree of fitting between the theoretical model and the data matrix can be determined. As can be seen from the above table, these indicators are significant, indicating that the theoretical model can be better explained by actual data. Although the chi-square value is sensitive and susceptible to the influence of variables, parameters and sample size, which makes the test insignificant, in this group of data, the accompanying probability of the chi-square value is greater than 0.05. Moreover, according to the chi-square, the degree of freedom is between 1 and 3, indicating that the model has a good absolute fitting. (2) The value-added fitting index contrasts the hypothetical model with the independent model. It can be seen from the above table that the value-added fitting index is also significant, indicating that the relationship between the latent variables in the model is generally significant. (3) The comprehensive fitting index considers the number of variables into the model fitting. It can be used to compare the fitting of different hypothesis models. As can be seen from the table above, the simple fitting goodness indexes all exceed the recommended values.
3.2. Results
Based on the above equations, the relevant assumptions in the previous chapter can be verified. The results of confirmatory factor analysis are shown in table 2. The results indicate that the standardized path coefficient of emotional feedback and attribution cognition is 0.639, the corresponding critical ratio is 4.11, and the probability of significance is much less than 0.05, which shows that the relationship between the two variables has a significant statistical correlation and proves hypothesis 2. Under the condition of confidence of 0.1, attribution cognition also has a significant statistical correlation with subjects of dispute resolution, and proves hypothesis 3. Therefore, it can be seen that in the process from the emotional feedback to the solution subject, due to the intermediary variable, Hypothesis 4 passed the test. However, the direct influence of emotional feedback on the solution subject is still not significant under the condition of the confidence level of 0.1. Hypothesis 1 fails to pass the verification.

| Way                      | Standardized estimate | S.E. | C.R. | P       |
|--------------------------|-----------------------|------|------|---------|
| Attribution <--- Emotional feedback | 0.639 | 0.145 | 4.11 | ***     |
| Solution <--- Emotional feedback | 0.195 | 0.037 | 1.366 | 0.172   |
| Solution <--- Attribution | 0.221 | 0.037 | 1.656 | 0.098*  |

4. Conclusions and policy suggestions
This study focuses on the relationship among emotional feedback, attribution cognition and subjects of dispute resolution in the situation of rural construction land consolidation. The results show that the positive effects between emotional feedback of participants and attribution cognition, attribution cognition and subjects of dispute solution have been proved. This verifies the attribution-emotion model, which proves that since there may have different reasons for farmers not willing to conduct rural construction land consolidation, people’s feeling towards their behavior may affect their attribution cognition towards this policy. Moreover, the mediating effect of attribution cognition reveals that both personal and social attributions may influence rural construction land consolidation. Meanwhile, through these cognition, people’s emotional feedback may affect their choice of the subjects of dispute resolution. Therefore, in order to achieve rural construction land consolidation and rural land resource sustainable development, policies should focus on the attributions which hold back the consolidation behavior, and integrate rural construction land owners, village committee, government staff and other members from the same village together to promote the intention of rural construction land consolidation.

Therefore, based on the above conclusions, policy suggestions can be put forward to achieve the approaches from rural construction land consolidation to sustainable land resource development. For the land owners who have different needs, government should explore the attributions that hold back their intention of rural construction land consolidation, meanwhile take these as the basis to formulate "one person one policy" as the corresponding policy. For example, for those who deeply affected by traditional notion and have the desire to live in the city, policies should be focused on in areas such as publicity channels and indicators for returning land use in rural areas. For those who have social needs, policy support should be provided in the areas of standardizing the approval process, reforming the approval system, and providing resettlement and security measures.

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