# ENGINEERING MANAGEMENT THEORIES AND METHODOLOGIES

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# An Empirical Study on the Generation Mechanism of NIMBY Conflicts of Construction Projects

Abstract In the highly overlapped contexts of urbanization and social transformation, and with the advent of the "Risk Society," the social issues, called "Not in My Back Yard (NIMBY)" conflicts, caused by the construction or operation of the NIMBY projects have become a serious problem in China. Hence, it is in urgent need to find out the influencing factors and discover the generation mechanism of the NIMBY conflicts. From the perspective of social conflict theory, the authors built a process model of the NIMBY conflicts on the basis of identifying stakeholders and analyzing their interest interaction. Thereafter, the authors conducted a questionnaire survey, followed by exploratory factor analysis (EFA) revealing the underlying influencing factors of the NIMBY conflicts. Finally, they performed the confirmatory analysis method of Structural Equation Modeling to test the preliminary research hypothesis of the model and its interaction path in AMOS 18.0, with the results showing that unequal exchange and consensus mobilization will contribute to the formation of common consciousness of the opposition party, the opposition party's common consciousness and action mobilization affects the generation of social conflicts. The process model reveals the generation mechanism of the NIMBY conflicts, and it facilitates further investigations in the governance of the NIMBY conflicts.

**Keywords:** NIMBY conflicts, social conflict, construction projects, mechanism, empirical study

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# 1 Introduction

In the past 30 years, especially since the 1990s, the urbanization of China has speed up evidently, with a rapid growth and an urbanization rate between 28.5% in 1994 to 54.7% in 2014. The Government declared that in the next 10 years China will continue to push forward the urbanization process (China Government, 2013). It is clear that the expansion of the cities and the realization of urban functions cannot be separated from the construction of comprehensive supporting facilities, which will lead to an increase in construction projects. In addition, with the government reform and open-up policy proceeding, the economic structure is in a continuous readjustment, the whole social structure is in a further polarization and social contradictions enter a peak period. In the highly overlapped contexts of urbanization and social transformation, construction and operations projects, such as coal-fired power plant, nuclear power plant, destructor plant and airports are public projects that often will have a strong negative effect on neighborhood residents. This usually results in fierce resistance and the "Not in My Back Yard" (NIMBY) effect (Kraft & Clary, 1991).

In recent years, the social conflicts caused by the NIMBY projects continued to rise year over year. This not only had a negative effect on the construction of foundation facilities, but also may harm the stability of the society. Therefore, this paper tries to figure out the following two research questions.

RQ1: What factor(s) will lead to the NIMBY conflicts? RQ2: What is the interaction of the influencing factor(s), and what is the generation mechanism of the NIMBY conflicts?

It is in urgent need to find out a feasible methodology to identify the factors and their interaction, so as to offer valuable information for governance. Based on the social conflict theory, this paper established a process model to analyze the inner generation mechanism of the NIMBY conflicts.

This paper continues with a literature review, from which a process model is derived. This is followed by sections for empirical testing and discussion of the results. The paper finishes with a conclusion section that answers the research questions.

# 2 Literature review

# 2.1 The "Not in My Back Yard" theory

Since 1977, the time O'hare (1977)>first proposed the concept "Not in My Back Yard" (NIMBY) in the article "'Not On My Block You Don't': Facilities Sitting and the Strategic Importance of Compensation," the relevant concept of the NIMBY projects and the NIMBY conflicts have drawn extensive attention of the academia and the media. "NIMBY project" is a kind of facilities which can be beneficial for the public but may inevitably exert negative externalities on public health and property value in the affected localities, which will lead to the so-called "Not in My Back Yard" impulse (Devine-Wright, 2005; Tan & Hu, 2013). Correspondingly, the "NIMBY conflicts" is a kind of resistance behavior done by the affected residents in order to resist the construction and operation of the NIMBY facilities.

Researchers have reached a basic consensus on the factors that cause the conflicts. In summary, regarding the uneven distribution of "cost – benefit" as the core factor, the influence factors gradually derived to non-economic aspects, such as the inaccessibility of participating in the decision-making mechanism, the lack of public participation mechanism and the mistrust of the government, enterprises even experts. This characteristic of inequality distribution is the direct cause of conflicts because the surrounding residents have to bear the economic and environmental costs while others gain benefit without any cost (Bosley, P. & Bosley, K., 1988; Wolsink, 1994). Khun and Ballard (1998) surveyed the Canada site selection of a sewage treatment project and found that the lack of decision making and public participation mechanism is one of the important factors affecting the NIMBY conflicts Research showed that the distrust in experts and technology, the suspicion of standards in enterprise operation and ability of government's public management were easy to trigger collective action (Anderson, 2013; Hunter & Leyden, 1995; Matheny & Williams, 1985).

Although researchers have made considerable achievements, most of the outcomes were concentrated on the scope definition, the interest analysis of stakeholders, and the identification of the influence factors of NIMBY projects. All of these embodied a static research method. Actually, the interaction of its influence factors is in a dynamic process rather than stay static state. So, a dynamic research perspective is needed to reveal the interactive relationship between various factors and their evolution path. In addition, the most frequent used theory in these research projects is the economics of utility theory, but the theory is too weak to explain the evolution path in such a dynamic environment, thus, it is essential to find a suitable

theory and method for this research. The authors identified the Social Conflict Theory as being an appropriate theoretical perspective, because it provides the required dynamics and interactions. Accordingly, this paper analyzes the influence factors of the NIMBY conflicts and their interactions from the perspective of the Social Conflict Theory.

#### 2.2 The social conflict theory

As the core issue of social conflict, the research of conflict generation mechanism is always the focus. From structuralism represented by Marx and psychologism represented by Le Bon (1897) to exchange theory represented by Blau (1964), then to resource mobilization theory represented by McCarthy and Zald (1977), each school tried to illustrates the generation mechanism from one aspect but none survived from the dilemma that solve one problem only to find another cropping up. While applying these theories to explain the social conflicts, something will always be found that cannot be explained. In consequence, on the basis of critical absorption of classical theory, a more scientific theory called constructivism theory was established. Constructivism held that social structure, common consciousness and individual rationality were important variables resulting in social conflicts, and the mobilization behavior was the key transformation process in the generation of social conflicts (Li, 2009). From the perspective of constructivism, the actors of conflict had three characteristics. First, they are social beings, they are one part of social structure and social environment rather than isolated in society. Second, they are rational and good at calculating costs and benefits. Third, they are emotional at the same time and will be influenced by emotional factors such as resentment and sense of deprivation (Zeng & Luo, 2006). Therefore, under a particular social structure, actors constantly perceive all kinds of information from the external environment, calculate rationally and evaluate emotionally, so as to construct and update their cognition. On this basis they choose the appropriate strategies in the generation of social conflicts.

Dahrendorf (1959) divided the generation process into four stages: authority relationship, potential conflict, explicit conflict, and conflict. Pondy (1967) emphasized the importance of conflict perception and adjusted the process to the following five stages: potential conflict, perceived conflict, felt conflict, explicit conflict, and conflict, with "authority relationship" incorporated into "potential conflict." Korsgaard, Jeong, Mahony, and Pitariu (2008) thought the boundaries of perceived conflict and felt conflict in Pondy's model was fuzzy. Therefore, these two stages were combined and collectively referred to as "conflict perception" so as to describe the process more concise and clear.

On the basis of absorbing western social conflicts theory and combining special social conditions of China, domestic study achievements of social conflict provided useful literatures for this research. Zhao (2005) combed the western social conflicts theory and summarized the generation mechanism as "hange, structure and discourse." Liu (2004) thought the possibility of social conflicts was a function and based on which established a model where the variables were "the production and interpretation of resentment," "activists and their ability of organization" and "rational choice of potential participants." This model could explain the generation of macro social movements and elaborate the reason why individual actors participate in collective action, but it failed to reveal the mobilization mechanism and the change of actors.

# 3 The generation mechanism of NIMBY conflicts

# 3.1 Stakeholder analysis

Stakeholder refers to a group, organization, member, or system that affects or can be affected by an organization's actions (Freeman, 2010). According to this definition, the stakeholders of NIMBY projects can be considered including government, developers, contractors, consultants, affected groups, service groups, the media and non-profit organizations, etc. Because of the differences of value orientation and interest demand, the stakeholders can be divided into two basic opposing parties (opponents and proponents) and a neutral party.

In this particular field of NIMBY projects, whether government-invested projects or enterprise-invested projects, they can greatly promote the development of regional economy and improve the governance performance with their operation. Thus, government and developers often join together into a community. Contractors and consultants are employed by developers, to a large extent they depend on the developers' will and altogether set up the construction party (proponents). On the other hand, the affected groups refer to those nearby people who suffer most from the projects. As the main participants in the NIMBY conflicts, they constitute the opposition party (opponents). As for the service group, the media and nonprofit organizations, due to the little effects on their interests, combined with their own limitations, they are usually in a neutral role in the interaction. As a result, the government, developers and affected groups constitute the main stakeholders. This paper doesn't aim to analyze all the stakeholders, but will take the construction party and opposition party as the research object, mainly analyzing the interactions between the government, developers and affected groups in the generation of the NIMBY conflicts.

#### 3.2 The driving mechanism of the NIMBY conflicts

Based on the above analysis of the generation processes,

the concept of conflict was divided into four stages in this paper: potential conflict, conflict perception, explicit conflict, and conflict results. When conflict behavior took place, it always had its own development path and evolution rules rather than an accidental event. He (2009) concluded that the NIMBY conflicts were the result of both mobilizing capacity and anti-mobilizing capacity. Under the driving mechanism of the NIMBY conflicts, opponents and proponents kept on taking measures to struggle for their interests (*Figure 1*). There are two kinds of capacities; one is the mobilizing capacity driving by the opponents, aiming at promoting conflicts, and the other is the antimobilizing capacity driving by the proponents, trying to prevent acting.

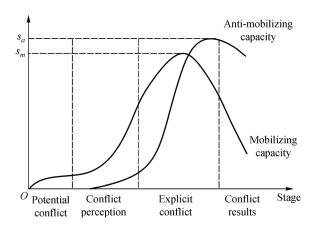


Figure 1. The driving mechanism of NIMBY conflicts. Adapted from the paper "The NIMBY conflicts in China: based on the analysis of events" by He (2009).

In the potential conflict stage, most of opponents are in a status of "ignorance," but a few grassroots activists highly concerning the NIMBY problem have awaken and begun to take individual petition or complaint action. On the other hand, the construction party ignores grassroots activists' protests, staying the same or blocking information. At this moment, the contradictions arise and conflict is sprouting.

The conflict perception stage is the most important phase to mobilize the affected groups. Under the mobilization of grassroots activists, small-scale groups are formed and common consciousness unceasingly strengthened with the "worry" and "dissatisfaction" gradually accumulated. The anti-mobilization mechanism is activated with the process of mobilization capacity. Proponents respond to opponents' demand, begin to intervene with the media and try to emphasize the positive effect of the projects through professional statement.

In explicit conflict stage, small-scale resistance has evolved into an open confrontation between opponents and proponents. As the conflict evolves, large-scale and well-organized conflict burst. Considering the social stability and under the pressure of the public, the determination of

supporting the project made by the government is changed and they are forced to reevaluate the project.

Finally, the conflicts generally end in the compromise of the construction party (with few exceptions), and all or part of the opponents' demands are met. Conflict behavior subsides, social order gradually returns to normal, and the media carries out the subsequent work.

Overall, opponents initiate the mobilization capacity, while the anti-mobilizing capacity emerges more as a passive response, subsequent to the mobilizing capacity. In potential conflict and conflict perception phases, it is most likely the best time to control the situation, because the mobilizing capacity is in its start-up. However, as long the mobilizing action has not reached the government's attention and triggered related action; it is difficult to attract enough attention, which tends to lead to missing the optimal timing of interventions.

#### 3.3 The process model of NIMBY conflicts

Based on the social conflict theory and review of conflict events in China (He, 2009; Sun, 2013; Zheng, 2011), the general generation pattern of NIMBY conflicts can be derived from that. The established process model is shown in *Figure 2*.

(1) In the potential conflict stage, because of the inherent attribute of NIMBY projects that costs and benefits are separated, the affected group's interests will surely be influenced, along with the dominant proponents in the social structure pushing the construction of the projects through resources and power. This will inevitably cause a

fact of "unequal exchange."

- (2) In the conflict perception stage, a process of "common consciousness construction" is fermented, mainly including two critical transitional steps. The first step is from "unequal exchange" to "common consciousness," which is proceeded by the grassroots activists' mobilization and most of the affected residents can be conscious of its negative aspects, then forming the common consciousness of unfairness and dissatisfaction. The second step is through the process of resource mobilization, finishing the change from "common consciousness" to "conflict behavior." The former step is called "consensus mobilization" process, namely through public discourse level, persuasive communication level and consensus promotion level (Morris, 1992), producing a group of potential participants with a common consciousness, which means the grassroots activists win the support of discourse and ideology and the necessary conditions of conflict is possessed. The latter step corresponds to the process of "ction mobilization," through analyzing the possibility of successful conflict, the cost of participating and the benefit of conflict results, along with the stimulation of their social network, trying to activate the potential participants, making them become actors. At this moment, the sufficient condition of conflict is reached. The differentiation path of affected residents in the process of "common consciousness construction" is shown in Figure 3. On the other hand, the construction party is trying to prevent the conflict through various approaches of "anti-consensus mobilization" and "anti-action mobilization."
  - (3) When it comes to the stage of explicit conflict, the

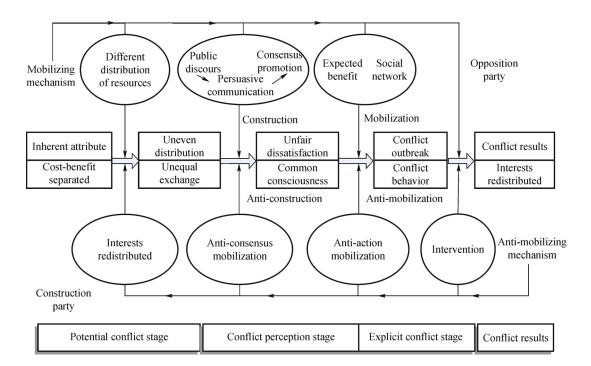


Figure 2. The process model of NIMBY conflicts.

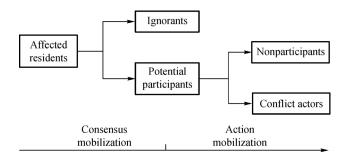


Figure 3. The differentiation path of affected residents in the process of "common consciousness construction."

NIMBY conflict breaks out entirety, the anti-mobilizing mechanism of the construction party is in full swing and competing directly and fiercely with opponents around the different interests.

(4) In the conflict results stage, with the senior government intervening, the interest is redistributed to satisfy the demands of opponents and the conflict is finally subsided.

# 4 Research design

The purpose of the research is to explore the generation factors of NIMBY conflict and their interrelation. Hence, the research is focused on analyzing the two phases of "potential conflict" and "conflict perception," rather than the other aspects, for example, conflicts intervention, disposition, etc.

#### 4.1 Research hypothesis

#### 4.1.1 Hypothesis

To improve the operability of empirical study, the research simplifies the process model of NIMBY conflicts while keeping the core factors. The four core hypotheses are extracted from the above model, and a simplified model is built as shown in *Figure 4*:

H1: The unequal exchange affects the formation of common consciousness of the opposition party;

- H2: The consensus mobilization affects the formation of common consciousness of the opposition party;
- H3: The common consciousness of the opposition party affects the generation of conflicts;
- H4: The action mobilization affects the conflict behaviors.

#### 4.1.2 Questionnaire design and sample selection

- (1) Questionnaire design. Based on the literature review and the simplified model, five core factors including "unequal exchange," "consensus mobilization," "common consciousness," "action mobilization" and "conflict behaviors" are selected and divided into two classes: "the state variables" and "the process variables." According to Sun (2005) and Liu's (2004), a questionnaire including 17 questions was designed to describe those variables as shown in Table 1, and Likert scale was used to mark, from 1 to 5 to represent "totally disagree," basically disagree," "uncertain," "basically agree" and "totally agree." The interviewees were acquired to answer those questions according to the facts.
- (2) Sample selection. This test gave out 174 questionnaires altogether, and 76.2% (132) of them was retrieved, respondents came from various social roles, government staff, engineers, ordinary citizens, students, media and nonprofit organizations. The feedback showed a high level of educational background and most of the respondents had known or even participant in the NIMBY conflicts. Descriptive statistics about the respondents are summarized in Table 2.

# 4.2 Empirical research

#### 4.2.1 Factor analysis

The purpose of factor analysis is to extract factor structure from a multitude of indicators, including reliability analysis, Eligibility analysis and factor extraction. The search results show that there is no plenty of literature and mature questionnaire of the generation mechanism of NIMBY conflicts. Hence, this paper chooses the exploratory factor analysis (EFA) to do the research as EFA can be performed to explore the underlying factors when lacking

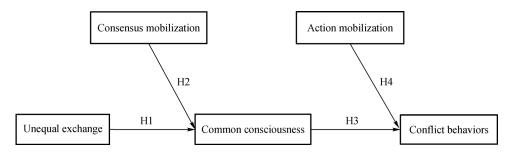


Figure 4. The simplified model of the generation mechanism of NIMBY conflicts.

**Table 1** *The Structure of the Scale* 

Variable types	Key variables	Index code	Index names
		U1	Negative effects of NIMBY
		U2	Positive effects of NIMBY
	Unequal exchange	U3	Interests Compensation
	U	U4	Degree of public participation
		U5	Legitimacy of decision process
State variables		U6	Definition of public interest
	Common consciousness C Conflict behaviors B	C1	Anger
		C2	Collective identity
		C3	Internal solidarity
		B1	Participation in conflict actions
		B2	Organization conflict actions
		M1	Public discourse
Process variables	Consensus mobilization M	M2	Persuasive communication
		M3	Consensus promotion
		A1	Political opportunity structure
	Action mobilization A	A2	Expected benefit of action
		A3	Social networks

 Table 2

 Descriptive Statistics about the Respondents

	Number of respondents	Percentage (%)
Social roles		
Government staff	17	12.88
Engineers	36	27.27
Ordinary citizens	46	34.85
Students	25	18.94
Media and Non-profit organizations	8	6.06
Educational background		
Doctor	4	3.03
Master	16	12.12
Undergraduate	34	25.76
Junior college	47	35.61
Below junior college	31	23.48
Cognition of NIMBY conflicts		
Personal involvement	3	2.27
Family involvement	6	4.55
Friends involvement	17	12.88
Never involvement but heard	73	55.30
Never heard	33	25.00

robust theoretical foundation (Fernandes, Ward, & Araújo, 2014).

- (1) Reliability analysis. Nunnally, Bernstein, and Berge (1967) Cronbach's Alpha threshold of 0.5 was used. Table 3 shows the Cronbach 's Alpha coefficient for each constrict as greater than 0.5, which indicates that there are good consistency between these items, namely, this questionnaire has an acceptable reliability.
- (2) Eligibility analysis. Kaiser-Meyer Olkin test (KMO) >0.500, and Bartlett's test of less than 0.05, are indicators for eligibility of the data for factor analysis (Hair, Black, Babin, Anderson, & Tatham, 2006). Table 4 show that these thresholds are met with an overall KMO of 0.842, and a Bartlett's test of 0.000.
- (3) Factor extraction. Principal component analysis with Varimax rotation was used to extract factors. The rotated component matrix is shown in Table 5. Table 6 shows that

the extracted three factors can explain the 69% of the total variance, meet the minimum requirement of 50% (Hair, Black, Babin, Anderson, & Tatham, 2006).

From the rotated component matrix of state variables, it can be seen that the extracted three factors are identical with the theoretical structure of the scale. A similar conclusion can be found in the rotated component matrix of process variables (Table 7).

### 4.2.2 Path analysis

#### (1) Path analysis model

Confirmatory Factor Analysis was done using Structural Equation Modeling (SEM). This combines factor analysis and regression analysis, to test the relationship between the observed variables, latent variables and error variables (Wu, 2010). Based on the outcome of the factor analysis,

**Table 3** *Reliability Statistics* 

Factor codes	Factors	Index	Cronbach' α	Items
U	Unequal exchange	U1, U2, U3, U4, U5, U6	0.860	6
M	Consensus mobilization	M1、M2、M3	0.716	3
С	Common consciousness	C1, C2, C3	0.762	3
A	Action mobilization	A1, A2, A3	0.667	3
В	Conflict behavior	B1、B2	0.717	2

**Table 4** *Eligibility Statistics* 

Kaiser-Meyer-Olkin		Bartlett's test	
Kaisei-Weyei-Oikiii	Approximate χ <sup>2</sup> distribution	Df	Sig.
0.842	988.470	136	0.000

**Table 5**The Rotated Component Matrix of State Variables

Factor	I. J		Component		
Factor	Index	1	2	3	
	Negative effects of NIMBY (U1)	0.652	0.317	0.218	
	Positive effects of NIMBY (U2)	0.700	0.287	0.257	
11 1 1 (11)	Interests compensation (U3)	0.662	0.552	0.127	
Unequal exchange(U)	Degree of public participation (U4)	0.749	0.276	-0.030	
	Legitimacy of decision process (U5)	0.755	0.191	0.158	
	Definition of public interest (U6)	0.768	-0.092	0.075	
Common consciousness (C)	Anger (C1)	0.411	0.575	0.484	
	Collective identity (C2)	0.318	0.712	0.302	
	Internal solidarity (C3)	0.082	0.865	-0.045	
C (1: (1 1 : (D)	Participation in conflict actions (B1)	0.030	0.164	0.867	
Conflict behavior(B)	Organization conflict actions (B2)	0.205	0.009	0.836	

the initial PA-LV model (path analysis with latent variables) was established in AMOS 18.0. According to the opinion of Chi and Adams (2002), the most effective way to improve model goodness of fit is stepwise

refinement method. After testing the parameters and the overall goodness of fit, the model was adjusted and optimized shown in *Figure 5*. The unequal exchange and consensus mobilization influenced the formation of

**Table 6**The Extent of Variance Explanation of State Variables

Component		Initial eigenvalue			The rotated eigenvalue		
Component –	Sum	% of variance	Accumulation %	Sum	% of variance	Accumulation %	
1	5.074	46.129	46.129	3.393	30.843	30.843	
2	1.390	12.640	58.769	2.222	20.196	51.038	
3	1.089	9.904	68.673	1.940	17.635	68.673	

**Table 7**The Rotated Component Matrix of Process Variables

Factor	Index _		ponent
ractor			2
	Public discourse (M1)	0.810	0.223
Consensus mobilization (M)	Persuasive communication (M2)	0.794	0.794
()	Consensus promotion (M3)	0.763	0.019
	Political opportunity structure (A1)	0.174	0.710
Action mobilization (A)	Expected benefit of action (A2)	-0.051	
	Social networks (A3)	0.173	0.789

Note: The extracted two factors can explain the 62.840% of the total variance.

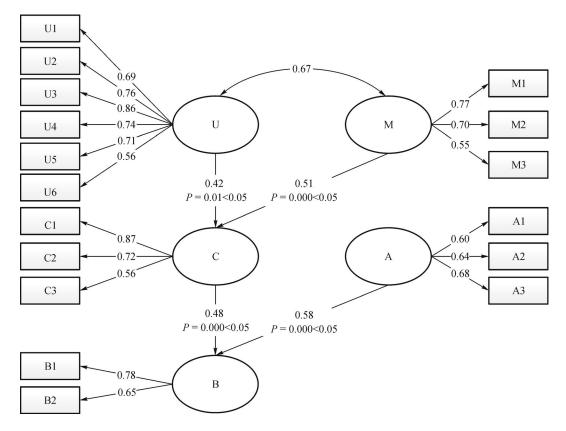


Figure 5. Path analysis model of the generation of NIMBY conflicts.

Table 8
The Match Degree of Model

Statistic	Standard	Modified model	Judgment
Absolute index			
$\chi^2$	P>0.05 (miss)	$112.364 \ (P = 0.207 > 0.05)$	Pass
RMSEA	< 0.08 (if < 0.05, good)	0.029	Good
GFI	>0.90	0.915	Pass
ncremental index			
CFI	>0.90	0.987	Pass
FI	>0.90	0.988	Pass
LI	>0.90	0.983	Pass
Contracted index			
PNFI	>0.50	0.662	Pass
PCFI	>0.50	0.733	Pass
$C^2/df$	< 2.00	1.113	Pass
AIC	Theoretical < Independent & < Saturation	216.364 < 232.931 216.364 < 1074.076	Pass
CAIC	Theoretical < Independent & < Saturation	418.270 < 900.069 418.270 < 1140.084	Pass

common consciousness and the path coefficient were 0.42 and 0.51. The common consciousness and action mobilization influenced the generation of social conflicts behavior and the path coefficient were 0.48 and 0.58.

#### (2) Model testing

Model testing mainly includes two aspects of tests, one is parameter test and the other is goodness of fit test. In PALV model, path coefficient refers to the regression coefficient of latent variables, and loading coefficient refers to the regression coefficient between latent variables and index variable. The main purpose of parameter test is testing the significance of path coefficient and loading coefficient. The results of parameter test is shown in *Figure 5*, the significant probability p is lower than 0.05, which indicates that all the coefficients have a very high significance.

After passing parameter test, the overall test of goodness of fit is needed in order to evaluate the match degree of theoretical model and measured data. The testing results show that  $\chi^2$  is 112.364 and significant probability P is 0.207>0.05, thus theoretical model and actual data can fit well (Table 8), therefore the matching of model and data are good.

#### 4.3 Additional finding

As a result of the above analysis, all of the four core assumptions had been proved in empirical study, and the correctness of the process model of NIMBY conflicts was proved further. The model not only validated the key role "unequal exchange" played in the generation of NIMBY projects, but also proved that "consensus mobilization" and "action mobilization" had important transition effect on the

process

In addition, in the process of revising the path model, the authors found that the co-variant parameter between "unequal exchange" and "consensus mobilization" reached 0.67, which also showed high significance. This fairly strong interactive relationship is unexpected. This maybe because the greater the degree of inequality, the demands and the emotion of the opposition party will be more intense and the construction party will tend to control the negative information and emphasize the positive effect, which will influence the way of consensus mobilization. On the other hand, the way chosen to establish the common consciousness will lead to the asymmetric information between the two parties and the degree of "unequal exchange" will be aggravated. To some extent, this additional finding reflected that the generation of social conflict not only relied in the mechanism of evolution but also because of the interaction of key variables.

# 5 Conclusions and further study

In the paper, the stakeholders of the NIMBY projects were mainly divided into two opposing parties, and then the characteristics and mobilizing mechanism of the two parties around different interests in the four stages of the lifecycle of NIMBY conflicts was discussed. Based on the theory of social constructivism, along with specific social background of China, a process model was established that shows the evolution path of conflicts from potential conflict, conflict perception, and explicit conflict to conflict results. Furthermore, the empirical study indicated the inherent characteristics of the NIMBY projects, social

structure, common consciousness and mobilization process were the critical factors of causing conflicts. The PA-LV model run in AMOS 18.0 showed that the unequal exchange and consensus mobilization influenced the formation of common consciousness, the common consciousness and action mobilization influenced the generation of social conflicts behavior, and all of them have a high significance (P < 0.05).

In the paper, the authors combined the NIMBY conflicts with social structure, under the domain of engineering sociology, elaborated the transition way from unequal exchange to conflicts behavior. Taking a dynamic analysis method, the interaction relationship of factors can be demonstrated clearly, especially the consensus mobilization process and action mobilization process, which provide a new way of studying NIMBY conflicts. Though the authors took several aspects of sociology, such as the social structure, psychology, mobilization process, etc. into consideration when studied the generation mechanism, there is still a long way to go so as to get a comprehensive model because of the very complicated social environment.

The paper reveals the generation mechanism of NIMBY conflicts, it can provide some reference for the governance of the NIMBY conflicts in China. The process model and implied conflict theory can provide the construction party with a more reasonable and justified way of accessing the project and take appropriate measures to communicate with the affected group.

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