

Research Article

Understanding Construction Contractors' Intention to Undertake Consummate Performance Behaviors in Construction Projects

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Contractors' consummate performance behavior (CPB) refers to that contractors perform within the spirit of the contract. This is important to improve project performance. However, few studies have investigated why contractors would undertake CPB. Drawing on the theory of planned behavior (TPB), this study aims to examine which factors influence the intention of CPB. To achieve this, a questionnaire survey was undertaken in China, with 195 valid questionnaires from project managers and contract managers being received. Data were analyzed through structural equation modeling and fuzzy set qualitative comparative analysis. The results show that the intention of CPB is mainly influenced by attitude toward benefit/cooperation/social value, subjective norm, and perceived behavioral control. Attitude toward social value has the greatest impact on the intention of CPB, whereas the subjective norm is least effective on the intention of CPB. In addition, three equifinal combinations result in the intention of CPB. Attitude toward cooperation and subjective norm are the core of the contractors' intention of CPB. These two factors cannot be replaced by other factors.

1. Introduction

Contractual behaviors often lead to adversarial relationships that might constrain high project performance because written agreements are often weak to adapt to the changes [1]. If the contractor performs the contract only according to the contract, it can only achieve the minimum performance required by the contract terms. However, if the contractor can perform his duties in accordance with the spirit of the contract and perform his duties well, such as actively internalizing risks, making up contract loopholes, and cooperating and assisting each other, the contractor can achieve perfect performance. Obviously, the concern of the owner should be that the contractor should do his best to fulfill the contract and achieve or even exceed the expected goal of the project. Because contracts are generally legal shields, written in a biased manner to protect the owner [1] and the weak status of contractors, contractors have little intention to exceed the expected goal of the project. In order

to improve project performance, it is important to motivate contractors to undertake efforts that are not written in formal contracts. For example, studies, grounded upon transaction cost theory (TCE), presented a complement role of informal governance in inhibiting opportunistic behaviors and nurturing cooperative behaviors [2–7]. A large group of studies examined how contractual governance and informal governance influence each other and how they jointly influence project performance (e.g., [8]).

In addition, some studies have examined the consummate performance behaviors (CPB). This concept is developed from the reference point theory. In this theory, a contract provides a reference point for the parties' trading relationship, i.e., their feelings of entitlement [9]. Parties might perform within the contract or in the spirit of contract based on their sense of entitlement. When parties perform in the spirit of the contract, we may call that parties adopt the consummate performance behaviors. As the consummate performance behavior is not mandatory, contractors have

the right to take it or not [10, 11]. Thus, it is important to understand what influences contractors' intention to undertake consummate performance behaviors.

This study is based on China's construction industry. As one of the largest emerging economies and the world construction center, China has witnessed rapid growth in the construction industry [12]. In 2018, China's construction industry reached RMB 6.2 trillion of value added, accounting for 6.9% of GDP (China Statistical Yearbook on Construction 2018). However, China's construction industry faces great challenges and a great opportunity remains to explore the research area [13]. China's construction industry provides convenience to understand CPB. For instance, the Chinese construction market is characterized by rapid development, dynamic structures, and high unpredictability [14]. The characters not only provide a proper context to investigate CPB but also match the emerging market. It is helpful for the conclusion to be extended to the emerging market.

This study aims to establish a framework of the factors influencing the contractors' CPB. The findings of this study enrich the knowledge of contractors' behavior and provide an insight into how to drive the intention of CPB.

The remainder of this paper is organized as follows. Section 2 introduces the literature review. Section 3 presents the conceptual framework and hypothesis development. Section 4 presents the method. Section 5 reports the results and discussion. It ends up with implications for theory and practice as well as concluding remarks.

2. Literature Review

2.1. Contractors' Consummate Performance Behavior. TCE is the mainstream theory to study interorganization transaction behavior. However, TCE theory regards the self-interested and "opportunistic" as the starting point of all economic behaviors. TCE emphasizes supervision and control. As a result, the cost of control will increase, and the creativity of agents will be depressed. Therefore, such behavior control mode must have its limitations and cannot achieve the expected effect of management fundamentally. Hart and Moore [9] draw lessons from behavioral economics for reference, assuming that people not only are self-interested "opportunists" but also have social preferences. Agents will choose different behaviors through the effect of the contract reference point. Contract reference point theory by Hart and Moore [9] is a supplement and amendment to self-interested and "opportunistic" hypothesis, which extends the researchers' focus from opportunistic behavior to CPB.

Consummate performance behavior is defined by the contract reference point theory [9]. In this theory, a contract provides a reference point for the parties' trading relationship through the feelings of entitlement [9]. A party's ex-post performance depends on whether the party gets what he is entitled to relative to the outcomes specified by the contract [9]. Hart and Moore [9] distinguished between perfunctory performance and consummate performance. Perfunctory performance can be judicially enforced and performs within the letter of the contract, whereas

consummate performance cannot judicially be enforced and performs within the spirit of the contract. The contractor would provide consummate performance if he feels that he is getting what he is entitled to but will withhold some part of consummate performance if he is shortchanged. An important assumption is that a party's sense of entitlement is determined by the contract he has written, which is referred to as a reference point.

Obviously, Hart and Moore [9] studied CPB mainly from the psychological, lacking comprehensive and systematic consideration. The theory of planned behavior (TPB), as a mature behavior study model, has provided us with inspiration for a comprehensive study of CPB. TPB includes not only psychological factors (attitude) but also external environment factors (subjective norms) and ability factors (perceptual behavior control).

2.2. Intention of Undertaking Consummate Performance Behavior. The existing research mainly focused on opportunistic behavior. Numerous studies investigate governance mechanisms for mitigating opportunism [2, 3]. However, empirical studies on consummate performance behaviors are still limited [12], except for Yan [12, 15]. We still know little about drivers of CPB in particular. An analysis of the intention of CPB is essential to understand the complex nature of CPB and gain insights into managing it.

TPB has been widely used to examine behavioral intentions [16–19]. The TPB shows that intention to perform a specific behavior is influenced by (1) the extent to which a person believes that performing the behavior is favorable (i.e., behavior attitudes), (2) that people would follow the viewpoints from others who are important to them (i.e., subjective norm), and (3) that they are able to perform the behavior (i.e., perceived behavioral control) [20]. Regarding contractors' behavior intention, scholars verified that it can be effectively predicted by the motivators of the TPB model [21–23]. Inspired by these studies, this study selects TPB to investigate the intention of consummate performance behavior.

2.3. The Incentive Factors of Intention for Consummate Performance Behavior. TPB argues that attitude toward the behavior, subjective norm, and perceived behavioral control would influence behavior intention [20] (see Table 1). First, three contractor's attitudes toward the behaviors are identifiable, based on the inspiration that contractors' behavioral intention is transformed from interest-driven to cooperation-driven and spiraled up to value-driven. These are the attitude toward benefit (ATB), attitude toward cooperation (ATC), and attitude toward social value (ATSV) [15]. Second, subjective norm refers to the effect of pressure from inside of enterprises and market competition on the contractors' behavioral intention. It reflects the impacts of important others or groups on the decision-maker [24]. Third, perceived behavioral control refers to the degree to which the party perceives it to be easy or difficult to execute a specific behavior. It reflects the contractors' perceived ability to perform the contract, which includes self-efficacy and resource availability.

TABLE 1: The incentive factors of intention for consummate performance behavior.

Categories	Definition	Subcategories	Examples
Attitude toward the behavior	Reflect the contractors' psychological evaluation of the degree of acceptance of CPB	Attitude towards benefit	Expected profit of the project, payment of contract price
		Attitude towards cooperation	Trust of owners, long-term cooperation opportunities
		Attitude towards social values	Social responsibility, enterprise vision
Subjective norm	The effect of pressure from both inside of enterprises and market competition on the contractors' behavioral intention	Subjective norm	Enterprise requirements, leadership advocacy, peer competition, owner evaluation, and project supervision
Perceived behavioral control	Perception of difficulty in performing CPB	Perceived behavioral control	Engineering and technical capability, project management capability, past experience, sufficient manpower, and material resources

3. Conceptual Framework and Hypothesis Development

We propose a conceptual model that includes attitude toward benefit (ATB), attitude toward cooperation (ATC), and attitude toward social value (ATSV), subjective norm, perceived behavioral control (PBC), and intention of CPB (see Figure 1).

3.1. Attitude toward the Behavior and Intention of Consummate Performance Behavior. Attitude toward the contractors' CPB refers to the degree of positive or negative evaluation toward CPB. According to TPB, attitude toward the behavior is important to behavior intention [20, 25]. The traditional viewpoint believes that the contractor is self-interested and benefit perception is directly related to contractors' attitudes toward the behavior. Recent studies found that contractors not only pursue project profit but also pursue mutually cooperation with the owner and realization of enterprise value [26]. Therefore, the attitude towards contractors' CPB was divided into the attitude toward benefit, attitude toward cooperation, and attitude toward social value.

3.1.1. Attitude toward Benefit and Intention of Consummate Performance Behavior. Attitude toward benefit refers to the idea that the contractor will perform CPB due to benefit incentives. Zheng et al. [22] verified that attitude toward benefit is positively related to the intention of relational behavior in megaprojects. Timely payment affects contractors' enthusiasm to perform CPB [27] and contribute to improving project efficiency [28]. When contractors' perceived benefit is close to or higher than the positive psychological threshold, it is possible for the contractor to make extra efforts as a return to the owner because of the effect of reciprocity [29]. If contractors believe that CPB has a positive effect on timely payment and sharing of added value, they will perform CPB and drive the generation of the intention of CPB. Thus, we develop the following hypothesis:

H1a: contractors' attitude toward benefit is positively related to their intention of consummate performance behavior.

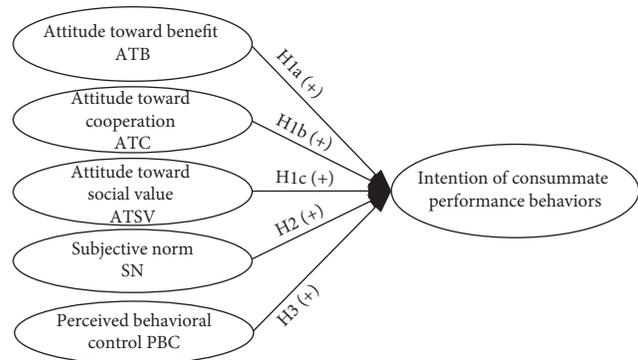


FIGURE 1: Conceptual model of the intention of consummate performance behavior.

3.1.2. Attitude toward Cooperation and Intention of Consummate Performance Behavior. Contractors not only focus on the benefits of the project but also consider the benefits brought by long-term cooperation. Contractors' attitude toward cooperation means that contractors are willing to perform well for long-term cooperation with the owner and friendly relations. The cooperative relationship not only is conducive to the smooth execution of the project but also benefits their long-term business [6, 30]. The cooperative relationship can also effectively reduce the contractors' confrontation during the contract execution and stimulate the contractors' enthusiasm to perform in the spirit of contract [7]. Therefore, if the contractor believes that performing the contract well can promote cooperation between the two parties, it is likely to engage CPB. Thus, we have the following hypothesis:

H1b: contractors' attitude toward cooperation is positively related to their intention of consummate performance behavior.

3.1.3. Attitude toward Social Value and Intention of Consummate Performance Behavior. Attitude towards social values refers to the perception of the enterprise's responsibility for the project and the mission to pursue value added. In the construction context, contractors not only complete the contract but also pursue extra value [21, 31]. In addition, contractors believe that being responsible for the project and

providing high-quality services can achieve the trust of the owner and enhance the reputation of the enterprise. In doing so, they can obtain expected rewards other than salaries, for example, social status and the sense of achievement. Thus, we develop the following hypothesis:

H1c: contractors' attitude towards social values is positively related to their intention of consummate performance behavior.

3.2. The Subjective Norm and Intention of Consummate Performance Behavior. The subjective norm for the contractor to perform CPB refers to the normative pressure from inside and outside the enterprise. The research confirmed the significant correlation between subjective norm and behavioral intentions [21]. One source of the contractors' subjective norm is the mandatory norm that is originated from the requirements of the enterprise. It is a kind of enterprise culture, affecting contractors' behavioral intention [32]. Another source is the demonstration norm that was represented by pressure and demonstration effect brought to the contractor by fellow enterprises, including peer competition, evaluation from client, and project supervision [33]. This might also influence contractors' behaviors. Thus, we have the following hypothesis:

H2: the subjective norm is positively related to the contractors' intention of consummate performance behavior.

3.3. The Perceived Behavioral Control and Intention of Consummate Performance Behavior. Perceived behavioral control refers to the degree of difficulty in perceiving the execution of specific behavior [34]. The more efforts needed for the implementation, the greater difficulties to implement the behaviors [35]. The stronger the perceived ability of control, the greater the likelihood of taking action. When the contractor is at a high level of capability and can allocate the manpower and material resources, the contractor is likely to take the initiative to do more. Zheng et al. [22] confirmed that relational behavior intention is motivated by perceived behavioral control in megaprojects. Thus, the hypothesis is set out as follows:

H3: the perceived behavioral control is positively related to contractors' intention of consummate performance behavior.

4. Methods

4.1. Sampling and Procedure. The respondents are project managers or contract managers from construction enterprises. Snowball sampling was adopted in this study. The initial participants included 37 project managers or contract managers from different construction projects in Beijing, Shanghai, and Tianjin. Then the initial participants were asked to recommend other potential participants who worked in construction contractors and were familiar with the construction management. The reason for sending out

the questionnaire in Beijing, Shanghai, and Tianjin is that these cities can represent the Chinese construction industry. 20% of the top 500 Chinese construction companies were located in these cities (Chinese Construction Enterprises Management Association, 2018). Beijing is the capital city of China, Shanghai is the financial center of China, and Tianjin is one of the four direct-controlled municipalities of China.

A total of 247 questionnaires were distributed between November 2018 and May 2019. 195 valid questionnaires were received, with an effective response rate of 78.9%. The characteristics of respondents and their projects are shown in Table 2.

4.2. Questionnaire Design. We adopted a questionnaire survey to test the hypothesis. The questionnaire survey was used to collect data for this study. First, based on the theoretical and empirical literature, initial measurements were developed. Then we discussed with seven experts to further refine the measurement items. According to the feedback, we revised the initial measurement to improve the readability and validity of the questionnaire. All the measurement items were measured with a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). The measurement items are shown in Table 3.

4.3. Common Method Bias. Because participants answered questions related to both independent and dependent variables in the questionnaire, it is necessary to control the common method bias. The control of common method bias includes two methods: ex-ante control and ex-post control. In ex ante control, the participants were told that the research is only for academic research. The answers are kept strictly confidential. Second, in postexecution control, Harman's single-factor test and confirmatory factor analysis were used. First, this paper used exploratory factor analysis to extract common factors from all items (KMO = 0.910; Bartlett spherical test is significant at the level of 0.001). Six factors were obtained. The variance accounted for by the first factor before rotation is less than 40%. Then, the confirmatory factor analysis was used to load all the items on a common factor. The results showed that the fit index of the model is worse than that of the measurement model. Therefore, it can be concluded that there is no serious common method bias in this research.

4.4. Construct Reliability and Validity. First, confirmatory factor analysis was conducted on the measurement model to test its reliability and validity. PLS-SEM was used to perform the model test. The results showed that the loading of each factor is greater than 0.5, representing that further analysis can be carried out.

The values of composite reliability and Cronbach's alpha are over 0.70 (see Table 3). This indicates an acceptable reliability [40]. Results in Table 3 indicate that the AVE values are in the range of 0.715–0.891, exceeding the satisfactory level of 0.50 [41]. In addition, as shown in Table 4, the factor loadings of each item on its respective construct

TABLE 2: Characteristics of respondents and their projects.

Background characteristics	Frequency	Percentage
Enterprise type		
State-owned enterprise	79	40.5
Private enterprise	101	51.8
Others	15	7.7
Education		
Bachelor degree	114	58.5
Master degree or above	43	22.1
Others	38	19.4
Work experience		
<3 years	34	17.4
3–5 years	113	57.9
6–10 years	27	13.8
>10 years	21	10.8
Job position		
Manager of the headquarters	38	19.5
Project/department manager	58	29.7
General management/technical personnel	99	50.8
Project type		
Parallel contracting	95	48.7
Engineering procurement construction	79	40.5
Public-private partnership	21	10.8

are all greater than the 0.7 threshold and no cross-loading problem exists [40]. These results represent acceptable convergent validity.

As shown in Table 5, the average variance extracted (AVE) of each variable is higher than the highest squared correlation (HSC), indicating acceptable discriminant validity.

4.5. Test of the Structural Model and Hypotheses.

According to the calculation formula of the GoF index ($GOF = \sqrt{\text{communality} \times R^2}$) proposed by Amato et al. [42], the fit index of the model was tested. The GoF of this study was 0.583, which is greater than the maximum standard value of 0.36, indicating that the model has a good fit index.

The SmartPLS 3.0 software was used to calculate the path coefficients and test their significance. The number of bootstrap samples is 5,000, recommended by Hair et al. [40]. The results of testing are shown in Table 6, indicating that the hypotheses (H1a to H3) are supported.

4.6. fsQCA in Configurational Analysis. We also adopt a configurational analysis to complement the PLS-SEM results. The purpose of the configurational analysis is to find the combination of factors that drive contractors' intention to adopt CPB. The traditional regression analysis paradigm mainly answers whether a certain factor has a significant influence on the contractors' behavior but cannot answer which factors are needed.

Different from the PLS-SEM, the configurational analysis focuses on the combination of variables. Configurational analysis can help to understand three problems in causal inference: (1) equivalence that different combinations of

various conditions can lead to the same result; (2) nonlinear problem that the effect of one factor may change due to the existence or nonexistence of other factors; and (3) asymmetry, that is, the existence of a certain condition associated with a given result does not necessarily mean that the absence of the condition cannot lead to the result. The focus of this study is which combination of factors can influence contractors' intention of CPB. Therefore, configurational analysis is competent to accomplish this objective.

fsQCA is one of the most popular techniques in configuration analysis [43, 44]. fsQCA is based on Set-Theoretic, focusing on the relationship between attributes according to the relationship between sets [44]. This is different from multivariate linear regression examining the correlation between independent variables and dependent variables [45]. The reasons why fsQCA was selected in this study are as follows. First, fsQCA can investigate the necessity and sufficiency of combinations of factors affecting the contractors' intention of CPB [44, 46]. Necessity refers to the fact that a factor must exist for an outcome; and sufficiency means that a factor can produce an outcome [44]. Second, fsQCA provides equifinality results and generates multiple equally valid paths [47].

4.6.1. Calibration. The requirement of fsQCA for processing data is a continuous set of 0~1, which is called the membership score. Therefore, it is necessary to convert data into the degree index of full membership, full nonmembership, and half crossover point. We first calculated the average value of all items. Second, variables were calibrated into set memberships in terms of three thresholds. Different threshold values correspond to three membership degrees of 0.95, 0.5, and 0.05, respectively [48]. Since the Likert scale of 5 points was used in this research, with "5" representing the highest degree and "1" representing the lowest degree, the critical values of 0.95 and 0.05 were, respectively, selected as "5" and "1." We referred to the practices of Loughran and Ritter [49] and Bell et al. [50], taking the average value as the critical value of the membership degree of 0.5.

4.6.2. Necessary Conditions. fsQCA 3.0 software was used to identify the antecedent configurations that determine the contractors' intention of CPB. First, the necessity of attitude toward benefit, attitude toward cooperation, attitude toward social values, subjective norm, and perceived behavioral control was analyzed. As shown in Table 7, the necessity of each antecedent condition does not exceed the consensus threshold of 0.9, indicating that each antecedent condition does not constitute the necessary condition [48].

4.6.3. Sufficiency Conditions. In the last step, the sufficiency test was carried out. A truth table was initially built, listing all possible configurations for explaining the contractors' intention of CPB. In this study, a truth table of 2^5 rows was produced (five denotes the number of conditions). Each row presents a possible configuration. In order to make sure the sample's frequency of configuration matches the frequency

TABLE 3: Items of measurement and reliability and validity analysis.

Variable	Code	Measurement items	References	CR	Cronbach's α	AVE
Attitude toward benefit (ATB)	ATB1	The relevant agreements on price adjustment and payment in the contract are fair	Yan [36]	0.907	0.848	0.766
	ATB2	The owner can pay according to the contract (e.g., actively pay amounts certified, contract compensation, etc.)				
	ATB3	The contractor wants to reduce the cost of rework and maintenance				
Attitude toward cooperation (ATC)	ATC1	The contractor hopes to establish a good relationship with the owner	Glagola and Sheedy [37] Ling [38]	0.904	0.840	0.758
	ATC2	The contractor hopes that disputes can be reduced				
	ATC3	The contractor considers the later cooperation with the owner				
Attitude toward social value (ATSV)	ATSV1	The contractor believes that they have the responsibility and mission to perform CPB	Dubois gadde [39]	0.920	0.870	0.794
	ATSV2	The contractor believes that they should pay attention to the sense of achievement and honor				
	ATSV3	The contractor believes that they should pay attention to the improvement of project management level				
Subjective norm (SN)	SN1	The contractor believes that they have been influenced by enterprise requirements	Zheng [22]	0.883	0.803	0.715
	SN2	Other enterprises adopt CPB				
	SN3	The contractor believes that they have been affected by the government and policies				
Perceived behavioral control (PBC)	PBC1	The contractor has sufficient technical capability	Ajzen [20] Zheng [22]	0.938	0.913	0.792
	PBC2	The contractor has sufficient management capability				
	PBC3	The contractor has sufficient resources				
	PBC4	The contractor has enough experience				
Intention of consummate performance behavior (ICPB)	ICPB1	The contractor wishes to perform CPB now	Ajzen [20] Zheng [22]	0.961	0.939	0.891
	ICPB2	The contractor wishes to perform CPB in the future				
	ICPB3	The contractor always wishes to perform CPB				

TABLE 4: Cross-loadings for measurement items.

	ATB	ATC	ATSV	ICPB	SN	PBC
ATB1	0.264	0.236	0.913	0.413	0.165	0.232
ATB2	0.200	0.17	0.834	0.306	0.22	0.24
ATB3	0.256	0.171	0.877	0.33	0.191	0.254
ATC1	0.836	0.356	0.221	0.417	0.279	0.185
ATC2	0.887	0.395	0.207	0.448	0.347	0.243
ATC3	0.888	0.417	0.288	0.497	0.37	0.368
ATSV1	0.403	0.873	0.255	0.481	0.281	0.265
ATSV2	0.476	0.913	0.152	0.558	0.308	0.335
ATSV3	0.306	0.886	0.197	0.456	0.285	0.189
SN1	0.335	0.342	0.183	0.409	0.851	0.231
SN2	0.293	0.22	0.166	0.306	0.854	0.133
SN3	0.341	0.25	0.196	0.333	0.831	0.274
PBC1	0.32	0.285	0.261	0.456	0.271	0.888
PBC2	0.294	0.29	0.203	0.365	0.183	0.855
PBC3	0.21	0.199	0.245	0.35	0.204	0.887
PBC4	0.271	0.288	0.262	0.409	0.239	0.929
ICPB1	0.487	0.564	0.417	0.94	0.378	0.382
ICPB2	0.534	0.498	0.383	0.941	0.413	0.455
ICPB3	0.461	0.532	0.347	0.951	0.398	0.433

Note. Bold values represent standardized factor loadings of the items on their respective constructs.

TABLE 5: Correlation matrix and the square root of AVE of factors.

Items	ATB	ATC	ATSV	SN	PBC	ICPB
ATB	0.875					
ATC	0.277	0.871				
ATSV	0.223	0.449	0.891			
SN	0.215	0.384	0.328	0.846		
PBC	0.275	0.311	0.301	0.255	0.890	
ICPB	0.405	0.524	0.563	0.42	0.448	0.944

Note. Bold values on the diagonal represent the square root of AVE.

threshold of 80% [44], we set the sample frequency threshold to 10. The consistency threshold was 0.85 because configurations with consistency values greater than 0.85 are considered sufficient to produce results [51]. The fsQCA analysis generates three possible solutions, namely, the complex, intermediate, and parsimonious solutions. The intermediate solution is the most reported [52]. As shown in Table 8, the intermediate solution results show that three configurations were obtained, namely, ATB*ATSV*SN*PBC (configuration 1), ATC*ATB*SN*PBC (configuration 2), and ATC*ATB*ATSV*SN (configuration 3). The coverage values of the three configurations range from 0.557 to 0.626, and the overall coverage rate is 0.730. The consistency values range from 0.974 to 0.985, and the consistency of the overall scheme is 0.965, which is higher than the critical value of 0.85 [51]. These results together indicate that these three configurations are sufficient to lead to the formation of the contractors' intention of CPB.

5. Results and Discussion

5.1. Three Behavioral Attitudes' Impact on Intention of CPB. The results show that attitude toward social value has the greatest impact on the intention of CPB (H1c). This is in line with prior studies (e.g., [7]) demonstrating that if the contractor can perceive the value brought by the CPB, the enthusiasm for CPB will be enhanced. It can be seen that the realization of enterprise value and social reputation are the important forces to trigger contractors' intention to CPB. For example, some construction enterprises choose to shut down in winter to protect the environment in Tianjin, China. This reflected the social responsibility of enterprises.

Consistent with prior studies (e.g., [28]), the results reinforced that attitude toward benefit is positively associated with the intention of CPB (H1a). Contractors with a strong perception of benefits are willing to cooperate with clients because the benefit from projects such as project payment is a basic premise for the contractor to perform CPB. Although attitude toward benefit has a significant effect on behavioral intention, the degree of impact is not strong. This result also confirms the results of Xu et al. [30] who found that economic incentives have limited impacts on meeting the needs of contractors.

The study found that attitude toward cooperation is positively associated with the intention of CPB (H1b). This is in agreement with Julin [53]: when an organization has a strong perception of cooperation, it can perceive the long-

term benefits gained through cooperation. Prior studies also supported that if the relationship between the contractor and the owner is amicable, their intention to perform CPB will be enhanced [21, 22]. In practice, many owners choose strategic cooperation to promote the contractor's CPB through long-term cooperation (e.g., Wanda Group).

5.2. Positive Impact of Subjective Norm on the Intention of CPB. The results show that subjective norm has an impact on the intention of CPB (H2). The finding is consistent with the prior studies [54]: pressure from internal enterprises, peer competitors, and policies would encourage the contractor to form the intention of providing extra efforts. The results also show that the effect of subjective norm on the intention of CPB is not strong. This is inconsistent with the results of Liu et al. [12] who found that subjective norm is the strongest driver of contractors' behaviors. This might be because of the lack of industrial policies from the government to guide the contractor to perform CPB and the negligence of the owner in promoting the demonstration effect of such behaviors. These factors together constrained the impact of subjective norms. In addition, due to an overall lack of trust of one another, clients often use contracts in an attempt to shed unbearable risk to contractors. This might damage the atmosphere of CPB. Therefore, the impact of subjective norm on the intention of CPB is relatively low.

5.3. Driving Role of Perceived Behavior in the Intention of CPB. The results indicate that perceived behavioral control is positively associated with the intention of CPB (H3), which supports the results of Zheng et al. [22] who demonstrated that perceived behavioral control facilitates behavioral intention. This can be explained by the studies of Cheung et al. [55] and Bandura and Wood [56] who stated that competence and the judgment of abilities are positively related to performance behaviors. The stronger the sense of self-efficacy is, the stronger their efforts will be. As can be seen in reality, the more powerful the company is, the more willing they are to take on additional work.

5.4. Effect of Configurations on the Intention of CPB. The results show that the combination of attitude toward cooperation, subjective norm, attitude toward social value, and perceived behavioral control (configuration 1), the combination of attitude toward cooperation, subjective norm, attitude toward benefit, and perceived behavioral control (configuration 2), and the combination of attitude toward cooperation, subjective norm, attitude toward benefit, and attitude toward social value (configuration 3) trigger contractors' intention to perform CPB. It can be seen that attitude toward cooperation and subjective norm are indispensable for the three configurations. These two factors are the core of the formation of the intention of CPB. This indicates that contractors' expectations of future cooperation and the creation of conditions for encouraging CPB are the basis for inducing contractors' CPB.

TABLE 6: Results of hypotheses testing.

Hypothesis	Path	Standard path coefficient	<i>P</i> value	<i>T</i> -statistics	Inference
H1a	ATB: intention of CPB	0.190	0.002**	3.18	Supported
H1b	ATC: intention of CPB	0.211	0.000***	3.572	Supported
H1c	ATSV: intention of CPB	0.319	0.000***	4.549	Supported
H2	SN: intention of CPB	0.143	0.04*	2.064	Supported
H3	PBC: intention of CPB	0.198	0.000***	3.404	Supported

Note. ATB, attitude toward benefit; ATC, attitude toward cooperation; ATSV, attitude toward social value; SN, subjective norm; PBC, perceived behavioral control; CPB, consummate performance behaviors.

TABLE 7: Analysis of necessary conditions.

	Consistency	Coverage
ATB	0.753	0.890
ATC	0.822	0.892
ATSV	0.803	0.898
SN	0.882	0.855
PBC	0.898	0.873

Note. ATB, attitude toward benefit; ATC, attitude toward cooperation; ATSV, attitude toward social value; SN, subjective norm; PBC, perceived behavioral control; CPB, consummate performance behaviors.

TABLE 8: Combinations of sufficiency conditions.

Configuration	Raw coverage	Unique coverage	Consistency
1 ATC*ATSV*SN*PBC	0.626	0.109	0.985
2 ATC*ATB*SN*PBC	0.581	0.064	0.974
3 ATC*ATB*ATSV*SN	0.557	0.041	0.975
Solution coverage	0.730		
Solution consistency	0.965		

Note. * denotes the logical "and"; ATC, attitude toward cooperation; ATSV, attitude toward social value; SN, subjective norm; PBC, perceived behavioral control; ATB, attitude toward benefit.

However, the results of the fsQCA analysis show that attitude toward cooperation and subjective norm are not enough to trigger contractors' intention of CPB. It is necessary to add attitude toward social value and perceived behavioral control or add attitude toward the benefit and perceived behavioral control or add attitude toward social value and attitude toward benefit. This means that when the contractor has a strong perception of attitude toward cooperation and subjective norm, they have to possess an attitude toward social value or attitude toward benefit meanwhile. Alternatively, it should be assessed whether the contractor perceives a high level of behavioral control.

Comparing configuration 1 and configuration 2, we can find that the difference between them lies in the attitude toward social value and the attitude toward benefit, which indicates that the attitude toward social value and the attitude toward benefit are substitutive for each other in the configuration of the intention of CPB. The difference between configuration 2 and configuration 3 lies in attitude toward the benefit and perceived behavioral control. Therefore, attitude toward benefit can be replaced by perceived behavioral control in the configuration of the intention of CPB. To sum up, attitude toward benefit, perceived behavioral control, and attitude toward social

value are substitutive to each other. In practice, when lacking one of the three factors, the remaining two can be used instead. This is also the reason why there are three equivalent paths for the formation of contractors' intention of CPB.

An interesting finding is that the results of PLS-SEM show that the attitude toward social value has the greatest influence on contractors' intention of CPB among the behavioral attitudes. However, the results of fsQCA show that attitude toward cooperation is the most important among the three behavioral attitudes because it cannot be replaced by other factors. Similarly, PLS-SEM results show that subjective norm exerts the smallest impact on the intention of CPB, but configurational analysis shows that subjective norm is indispensable. This indicates that the traditional regression-based analysis paradigm can only answer the extent to which a variable can influence another variable but cannot assess the importance of a variable. This is also one important reason for adding configurational analysis in this study.

6. Conclusions and Implications

This study examined factors influencing contractors' intention of CPB and obtained the configurations of these factors. First, we found attitude toward benefit, attitude toward cooperation, and attitude toward social value, and subjective norm and perceived behavioral control have significant positive effects on contractors' intention of CPB. Attitude toward social value has the greatest impact on the intention of CPB, whereas the subjective norm is least effective on the intention of CPB.

The second finding is that configurational analysis provides three equifinal combinations of incentive factors of contractors' intention of CPB. Attitude toward cooperation and subjective norm are the core of the contractors' intention of CPB. These two factors cannot be replaced by other factors.

This study contributes to the extant literature related to contractors' behaviors by adding a framework that influences the contractor's CPB. Besides the cooperative behaviors and opportunistic behaviors that have been widely examined by prior studies, this study draws attention to the consummate performance behaviors in light of Nobel Laureate Oliver Hart's reference contract theory.

6.1. Theoretical Implications. The theoretical implication of this study is threefold. First, the analysis framework of contractors' intention of CPB is constructed. The

performance evaluation of construction projects shall include the process performance and result performance. In fact, the realization of the project target is closely related to the contractor's behavior. The contract reference point theory has defined two different performance results. Therefore, it is necessary to separate the contractor's behavior for research. However, previous studies mainly focused on the incentive factors of opportunistic behaviors or cooperative behavior but ignored incentive factors of contractors' intention of CPB. This paper not only confirmed prior results but also offered additional insights. Through the configurational analysis, three equifinal combinations of incentive factors of contractors' intention of CPB are identified and an important finding that attitude toward cooperation and subjective norm are the core of contractors' intention of CPB is acquired. This study not only extended contractors' behavioral literature and identified the incentive factors of contractors' intention of CPB but also promoted the research on project performance evaluation to the behavioral level.

Second, this paper identifies the key to institution construction to promote the contractor's intention of PBC. Previous studies have mostly focused on the prevention of contractors' opportunistic behaviors and have also paid special attention to creating a competitive environment with clear rewards and punishments to urge contractors to implement CPB. This paper has examined the factors affecting the contractors' intention of CPB and has identified the key in the construction of the project management institution, such as attitude toward cooperation and subjective norm (the core for the intention of CPB) and attitude toward social value (the greatest impact on the intention of CPB). These factors mean construction of corporate social responsibility, the construction of flexible engineering culture, the mutual trust system between the owner and the contractor, and the cultivation of the contractor's core competitiveness. This study is a new supplement to the previous contractor management institution, which mainly suppressed opportunism.

Third, this study deepens the research method of the contractor's behavior by using a configuration approach. Previous studies mainly adopted PLS-SEM, which is good at explaining the effects between independent variables and dependent variables. However, PLS-SEM cannot explain combinations of factors that accurately indicate a high score in an outcome condition. The fsQCA adopted by this study provides configurational reasons that contain complex causal relation. Through fsQCA, this study verified the necessary and sufficient conditions of contractors' intention of CPB.

6.2. Managerial Implications. The research provides important practical implications for project managers. First, the results of PLS-SEM show that subjective norm has less significant influence compared with others, which means that contractors do not perceive enough demonstration norms of CPB. This indicates that the contractors' CPB is not properly rewarded at the industry level, such as through

reputation enhancement. However, the results of fsQCA show that subjective norm is the core of contractors' intention of CPB. Therefore, it is important to disseminate contractors' CPB to the industry, which is not only constrained by one owner or one project. This might strengthen the return to contractors' CPB in terms of the benefits and other nonmaterial benefits.

Second, it is found that attitude toward cooperation is the core of the intention of CPB. Therefore, the owner should reward cooperative behavior in order to stimulate the contractors' motivation to perform CPB. In addition, cooperation is based on trust between contractors and owners. Therefore, it is important to build a culture of mutual trust.

Third, the results show that attitude toward social value is an efficient factor to promote contractors to implement CPB. Contractors with social responsibilities attach great importance to the realization of their own values. Therefore, a supportive environment should be created to enhance the social responsibility and honor of general contractors.

6.3. Limitations and Future Research. There are still some limitations. First, the data were collected from one geographic area. Therefore, applying the research results to other countries should be taken with care. Future studies with wider data from other countries and regions can provide valuable information and enable researchers to expand the generalization of research results.

Second, this study only examined the incentive factors of the intention of CPB and the combinations of incentive factors but did not examine the interaction of the incentive factors. Further research may consider the interaction between antecedents of the intention of CPB, e.g., whether there is a relationship between attitude toward social value and attitude toward benefit, which leads to their substitution.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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