Impact Study on the Management Performance of Public Sector Construction Projects: The Mediating Effect of Work Attitude

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Dahua Wu, Weiyu Long, Xi Tan, Wei Huang, Yihui Deng
PATHUMTHANI UNIVERSITY, THAILAND

Abstract

This study examines the mediating effect of work attitude on the relationship between process optimization and management performance of public sector construction projects. It explores the factors that mediate the impact of process optimization on the management performance of public sector construction projects in China. The study adopts a quantitative empirical approach, utilizing survey questionnaire design and data collection methods to measure the variables. The collected data is then analyzed using statistical tools such as SPSS and SmartPLS for empirical testing. The results are interpreted and discussed, providing academic references for related fields.

The study aims to achieve the following research conclusions:
1. Work attitude mediates the relationship between process optimization and management performance.
2. Work attitude mediates the relationship between supervision and constraint and management performance.

1.Research Motivation

The construction project management of public institutions is a self-adjusting and self-supervising behavior implemented in accordance with relevant specifications, requirements, and project construction systems to achieve predetermined project management performance goals. The work attitude of project personnel can be reflected through the expression of emotional attitudes, which, through the cycle of actions and behaviors, generate conflict management behaviors that ultimately influence the emotional changes of project individuals and, consequently, impact project management performance. The self-evaluation of emotions, evaluation by others, emotion utilization, and emotion regulation of project personnel are reflected in attitudes and behaviors within specific project contexts. The key to generating corresponding behavioral tendencies lies in the conflict management attitudes generated by emotional attitudes. When the conflict subject approaches conflict emotions or attitudes, the conflict further progresses from the cognitive stage to the behavioral stage, resulting in conflict behaviors. Empirical research has found that project managers' choice of conflict management strategies depends on their perception of these conflict attitudes, and the higher the emotional attitudes of the conflict subject, the more likely they are to influence project management performance (Elfenbein et al., 2004).

In a management scenario, managers and employees can be seen as individuals who respond emotionally to

external stimuli, and managers' management can be realized by influencing employees' emotional responses. Based on this theory, Ahn & Picard (2005) proposed the affective cognitive decision model, which uses computation to explain the influence of cognitive and emotional internal motivations and external environments on decision-making behaviors. The theory of affective cognitive evaluation includes the filtering and evaluation of information and individual reactions, thus having a subjective component in the evaluation process. For managers, they can influence individuals' reactions influenced by emotions by affecting their evaluations of events. Currently, research on affective cognitive evaluation mainly intervenes in evaluations from the following aspects: (1) outcome expectations, which refer to the most basic evaluation of external stimuli and generally tend to be positive; (2) goal congruence, which refers to the comparison of an individual's perception of a specific stimulus with their subjective expectations of it; (3) responsibility attribution, which involves determining the main subject responsible for the occurrence of events and recognizing that different causes (self, others, or other factors) can lead to different emotional reactions; (4) fairness, which refers to individuals' evaluations of events based on their personal moral judgments; (5) certainty, which involves predicting the outcome of event development; and (6) perceived control, which relates to individuals' responses to events based on their knowledge levels (Darley & Pittman, 2003). When managers face conflicts among employees or conflicts involving themselves, guided by the theory of affective cognitive evaluation, they develop cognition and form emotional experiences during the conflict development process. This emotional experience is influenced by self-awareness, indicating that emotions can affect conflict management decisions.

This study takes scientific management and supervisory constraints from the theory of process optimization as independent variables, project management performance as the dependent variable, and work attitude as the moderating variable. Through data collected from questionnaires and using structural equation modeling, the study explores the moderating effect of work attitude on the relationship between process optimization and project management performance. The aim is to construct a disturbance theory model to improve project management performance in Chinese public institutions. The findings of this study are highly valuable for both theory and practice.

2.Research Literature and Hypothesis Development

(1)The impact of work attitude on the performance of project management in public institutions

The work attitude often influences the performance of construction project management through emotional expression. Therefore, this study examines the impact of work attitude on the performance of project management in public institutions from the perspective of emotional attitudes. Conflict management resulting from emotional attitudes is time-sensitive. In the early stages of conflict management, greater involvement in daily project management allows for more accurate identification of emotional attitude changes among project members and understanding of the specific reasons behind those emotional attitudes, thereby explaining the behaviors among project members under the influence of emotional attitudes (Bergmann & Volkema, 1994). The emotional attitudes of project managers play a crucial role in conflict management. Through emotional control at the individual level, conflict management norms can be established. Through the application of emotional evaluation and emotion utilization at the project level, the root causes of conflicts can be analyzed, guiding conflict management behaviors, and appropriate coercive conflict management measures can be taken to effectively ensure project management performance. Conflict arises in projects, and the final results of the project are inseparable from project management. Project managers are highly concerned about the outcomes of conflict management. The results of conflict resolution impact project management performance

and primarily revolve around the project level, including the transformation of conflict elements, satisfaction among project team members, and reinforcement of project consensus. Given the characteristics of conflicts, conflicts often contain hidden implications that negatively impact projects. Therefore, it is crucial for project managers to manage the subsequent effects of conflicts. Through the management of emotional attitudes, subsequent conflict effects can be addressed, including promoting positive influences, suppressing negative influences, and predicting subsequent conflict impacts, which can effectively curb the spread of conflicts and minimize resources invested. The emotional control ability of project leaders is key to ensuring fair conflict management. The sense of balance perception requires the alignment between the cognition and acceptance of results by conflict subjects and their expectations. It involves reaching a consensus based on personal value perception and affects the perception and emotional judgment of things. The conflict subject's cognition is to some extent influenced by the project manager's ability to manage emotions, but the degree of influence is limited. However, by evaluating others' emotions, the conflict subject can identify a sense of fairness perception, thereby managing conflicts in a way that is universally accepted by project team members, gaining their trust, and forming a common action guide for achieving project objectives.

At the project team level, emotional attitudes can influence performance, employee satisfaction, and other factors, making it an important ability for managers. The communication ability of project managers is a crucial mediating variable in conflict management (Zhou Mingjian et al., 2013), as it reflects their ability to understand others' emotions and express their own emotions. The emergence of the emotional attitude construct compensates for the shortcomings of cognitive abilities in explaining performance differences. Existing research continuously clarifies the impact of emotional attitudes on performance, the aspects in which they have an impact, and the degree of influence. Zhang & Zillante (2013) found that emotional intelligence has a significant influence on project performance allocation. Rahim's (2002) conflict management paradigm suggests that managers with high emotional attitudes can motivate others to learn, take responsibility, and actively develop. When a team encounters conflicts, the different dimensions of emotional attitudes can influence the choice of conflict management strategies. Emotional attitudes have become an essential capability for handling various complex relationships in the workplace. Tjosvold et al. (2013) also revealed that individuals' level of emotional management has a promotional effect on project conflicts. Love et al. (2013) found that emotional attitudes can alleviate project stress and promote project success. Beyond the project context, Cavazotte & Hickmann (2012) examined mid-level managers in a large energy company in Brazil and demonstrated the promotion effect of emotional attitudes on organizational performance. Whiteoak & Manning (2012) collected information from 130 employees in a government-operated organization through questionnaires, and the results showed that managers' emotional attitudes influence employee job satisfaction and satisfaction with team tasks. Wu Weiku et al. (2011) studied the impact of managers' emotional attitudes on employees. Zhang Huihua (2006) conducted a validity questionnaire survey among managers and employees in enterprises and public institutions, and through regression analysis and other methods, obtained the following conclusions: the better the emotional attitudes of managers, the higher their leadership ability, which further affects job performance. In addition, self-efficacy can also promote the impact of managers' emotional attitudes on job performance. Based on previous research, Gao Hanyang (2006) combined transformational and transactional leadership styles to investigate the influence of entrepreneurs' emotional attitudes on their leadership styles in small and medium-sized private enterprises. Based on this, the study focused on the application of emotional attitudes by leaders within companies to investigate their impact on enterprise performance, job performance, job satisfaction, and employee organizational commitment, demonstrating the

important role of emotional attitudes in enterprise management.

(2)Research on the interference of work attitude

In the process of examining the impact of process optimization on project management performance, scholars have found that factors such as work attitude may interfere with the project management performance of public sector organizations. Therefore, this study aims to investigate whether work attitude has an interfering effect in the relationship between process optimization and project management performance.

Work attitude can be dialectically viewed as work emotional attitude. Previous research has shown that emotional attitudes on project work can affect project management performance. From the perspective of project organizational structure, the higher the emotional attitude of project managers, the easier it is for their subordinates to receive positive incentives. This positive incentive will affect employees' performance at work, thus positively impacting project management performance (Wu et al., 2011). Zhang & Zillante (2013) also focused on personal abilities of top project management personnel and found that social skills, such as cooperation with others, stakeholder management, leadership, and social consciousness, from a human resource management perspective, could promote personal performance in projects and influence overall project management performance. In Love's (2013) study, the emotional attitude of project personnel during project work affects individual management behavior. Rezvani (2016) investigated how project managers' emotional attitudes affect projects in complex large-scale engineering construction projects and found that project manager job satisfaction and trust act as mediating variables to positively impact project success in a study of 373 Australian defense industry project managers, thus realizing the importance of work attitude for project success. In recent years, this scholar further investigated the impact of personal and team work emotional attitudes on individual and team project management performance through qualitative and quantitative research methods, finding that higher personal and team-level work emotional attitudes could maintain more efficient open communication. This effective communication relationship can then promote relationships among team members, facilitate knowledge and creative information sharing, and enhance trust at the team level, which positively impacts project performance.

However, the degree to which work emotional attitude affects project management performance is controversial. Obradovic et al. (2013) used an empirical study design with a sample of 75 project managers, designed an "emotional intelligence scale" and "middle-level organizational and educational questionnaire," and found that project managers' emotional intelligence is positively related to career success. However, other researchers have found the opposite result. Lindebaum & Cassel (2012) proposed a different perspective based on interpretive and narrative analysis methods, studying the emotional attitudes of construction industry project personnel in the UK and finding that work emotional attitude has limited impact on project management performance. This reminds us that plans purely aimed at improving project staff's work emotional attitudes to enhance project management performance may fail. Therefore, when exploring project emotional attitudes, it is important to clarify the background and theoretical model clearly and not overestimate their role in relation to project management performance.

Based on the above analysis, this study proposes the following hypotheses regarding the relationship between work attitude and project management performance:

H1: Work attitude has an interfering effect between scientific management and project management perfor-

mance.

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H2: Work attitude has an interfering effect between supervisory constraint and project management performance.

3.Research methodology

This study primarily focuses on the research of scientific management and supervisory constraints under the interference effect of work attitude. The main method employed for data collection is a questionnaire survey.

(1)Research framework and hypotheses

This study aims to construct a theoretical model that can serve as a reference for industry and academic research. The model construction is primarily based on the framework proposed by Malär et al. (2011). The model incorporates the factors influencing project management performance measured by the theory of process optimization. Additionally, work attitude is included as an interfering variable. Based on the research variables and hypotheses derived from the aforementioned study, the research framework is proposed to explore the moderating effect of work attitude on the relationship between process optimization and project management performance. The following is the research framework proposed in this study:

hypotheses：

H1: Work attitude has an interfering effect between scientific management and project management performance.

□ □ □

H2: Work attitude has an interfering effect between supervisory constraint and project management performance.

(2)Research Process

After determining the variable scale of key concepts, this study analyzed and studied each questionnaire design detail, including the selection, expression, arrangement, and presentation of scale items, according to the requirements mentioned earlier. The survey focused on the impact of construction project management performance in China's public industry and followed these four steps: □

Literature review: This study reviewed and sorted out relevant literature on scientific management, supervisory constraint, work efficiency, and project management performance. It referenced classical high-quality scales with high reliability and validity. An initial set of measurement terms was formed for further discussion and improvement.

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Expert discussions: Based on the first draft of the scale, this study adopted the opinions of relevant experts, professors, and doctoral students in the field of project management to further revise the scale. The main purpose of this stage is to discuss the structure design of the questionnaire and the reflection content of the scale from a theoretical basis. The initial set of measurement terms was sent to the above scholars by email or face-to-face communication to collect feedback and form the second version of the survey questionnaire.

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Communication with practical objects: On the basis of the second version of the survey questionnaire ob-

tained through expert discussions, this study consulted industry experts such as project managers, engineers, construction directors, and contract managers to seek their opinions on the expression, content, and overall presentation of the questionnaire. The main purpose of this stage is to analyze the situational characteristics and relevant topic description of the questionnaire from a practical perspective to improve respondents' understanding of the questionnaire. Therefore, the second version of the questionnaire was sent to the above experts by email or face-to-face communication to collect feedback and form the third version of the questionnaire.

Questionnaire survey: The questionnaire survey predicts the use of the questionnaire through the distribution of small-scale questionnaires, which can increase the reliability and stability of the questionnaire, reduce the uncertainty of the questionnaire test, and avoid the occurrence of questionnaire repeated testing to the greatest extent. This study distributed 100 questionnaires and collected 100 responses for the questionnaire survey. Based on the results of the survey, the relevant reliability and validity of the questionnaire were tested, and the items and expressions that did not meet the requirements or had low quality were modified to form the final version of the survey questionnaire.

(3) Questionnaire Design

This study formed the final version of the survey questionnaire, including an introduction, basic information, and survey questions. The introduction describes the main purpose and background of the survey questionnaire to avoid anxiety about the content that respondents need to answer. The purpose of collecting background information is to introduce the context and guide the respondent to recall past project experience while briefly introducing relevant concepts to give respondents a basic understanding of concepts. Basic information collects basic information about respondents, forming the basic information collection of the surveyed population to describe the basic situation of the respondents. Finally, the survey question section uses a five-point scale to collect relevant information with the aim of measuring project management performance.

(4) Source of the samples

The data collection of this study was primarily conducted through a combination of paper-based questionnaires and electronic questionnaires. The paper-based questionnaires were distributed, collected, and filled out in face-to-face interactions with personnel from Chinese meteorological institutions. The use of on-site descriptions and guidance during the filling process ensured a deeper understanding of the questionnaires and maintained their quality. Additionally, electronic questionnaires were distributed online to selected participants from relevant personnel in meteorological institutions. The participants were provided with questionnaire notifications and links for online completion, with guidance provided by research assistants.

A total of 1,195 questionnaires were distributed in this study, and ultimately 1,068 questionnaires were collected. After screening for missing information, non-compliance with research requirements, and extreme responses, a total of 1,000 valid questionnaires were obtained. The data were primarily collected from a specific meteorological bureau and its affiliated institutions in China. The data represent a high level of representativeness in terms of research subjects, project quality, scale, and management level.

(5) Reliability and validity

For the model, the first thing to determine is internal consistency, that is, Cronbach's alpha, which estimates reliability based on the interrelationship between the observed indicator variables. The results of the validity and reliability test of the measurement model are shown in Table 3.1. From the internal consistency of all measured latent variables and related dimensions in Table 3.1, it can be seen that the Cronbach's alpha coefficient of all measured latent variables is greater than the recommended value of 0.7, indicating that the measurement model of this study is reliable.

The convergence validity of the conceptual model was measured, which reflects the degree to which one measurement method is positively correlated with an alternative measurement method for the same construct. Convergence validity is determined by factor loadings and AVE values. A factor loading greater than 0.708 is considered better convergence validity, and an AVE greater than 0.5 indicates that the construct explains more than half of the variation in its measurement items. All factor loadings and AVEs for all conceptual dimensions measured in this study meet the standard, indicating that the measurement model has good convergence validity.

Table 3.1 Validity and reliability test of the measurement model

Variables	Sub-constructs	Measures Items	Factor Loadings	Cronbach's α	(CR)	(AVE)
Scientific management	Value-driven core orientation	2.1	0.868	0.886	0.921	0.746
		2.2	0.856			
		2.3	0.873			
		2.4	0.857			
	Standardization of processes	2.5	0.845	0.92	0.938	0.715
		2.6	0.840			
		2.7	0.834			
		2.8	0.857			
		2.9	0.851			
		2.10	0.846			
	Principles of knowledge management	2.11	0.865	0.888	0.923	0.749
		2.12	0.870			
		2.13	0.863			
		2.14	0.864			
supervisory constraint	Transparent process	3.1	0.861	0.882	0.919	0.738
		3.2	0.851			
		3.3	0.864			
		3.4	0.862			
	Checks and balances of power.	3.5	0.867	0.884	0.92	0.743
		3.6	0.860			
		3.7	0.856			
		3.8	0.864			
	Strict supervision.	3.9	0.848	0.878	0.916	0.732
		3.10	0.863			
		3.11	0.864			
		3.12	0.848			

Work efficiency.	Increase efficiency.	4.1	0.774	0.8	0.87	0.625
		4.2	0.788			
		4.3	0.797			
		4.4	0.803			
	Continuous improvement.	4.5	0.803	0.816	0.879	0.644
		4.6	0.802			
		4.7	0.810			
		4.8	0.796			
Work attitude.	Senior Management Attitude.	5.1	0.855	0.901	0.927	0.716
		5.2	0.842			
		5.3	0.854			
		5.4	0.841			
		5.5	0.839			
	Frontline Attitude	5.6	0.845	0.902	0.927	0.718
		5.7	0.844			
		5.8	0.838			
		5.9	0.856			
		5.10	0.854			
Project management performance.		6.1	0.854	0.926	0.942	0.729
		6.2	0.853			
		6.3	0.852			
		6.4	0.851			
		6.5	0.851			
		6.6	0.862			

In this study, measurement of discriminant validity was performed for the measurement model. First, it is necessary to compare the square root of AVE with the correlation coefficient between latent variables to determine whether the former is greater than the latter. As shown in Table 3.2, the square root of AVE (bold font on the diagonal) of all latent variables is greater than the correlation coefficient between them and other variables. Therefore, the measurement model of this study has good discriminant validity.

Table 3.2 Correlation coefficients of latent variables in the measurement model

	Work attitude	Work efficiency	supervisory constraint	Scientific management	Project management performance.
Work attitude	0.825				
Work efficiency	-0.011	0.757			
supervisory constraint	-0.029	0.625	0.824		
Scientific management	0.029	0.631	0.011	0.827	
Project management performance.	0.618	0.546	0.358	0.432	0.854

Note: The numbers on the diagonal are the square root of AVE values.

To test whether there is collinearity among the constructs in this study, Pearson product-moment correlation coefficient is used to examine whether the constructs have collinearity. This diagnostic method examines the distribution of two continuous variables through a covariate, i.e., the standardized correlation coefficient obtained by removing the units from the covariance matrix. It tests for problems with multicollinearity. A correlation coefficient greater than 0.85 is likely to cause multicollinearity problems, which may result in model

misjudgments (Hill et al., 2001).

The analysis results of this study show that the correlation coefficients among the constructs are all less than 0.85, indicating that there are no collinearity problems in the model. This is shown in Table 3.3.

Table 3.3 Collinearity Diagnosis of Latent Variables in the Measurement Model

	Scientific management	Supervisory Constraint	Work efficiency	Work attitude	Project management performance.
Scientific management	1				
Supervisory Constraint	0.01	1			
Work efficiency	.631**	.625**	1		
Work attitude	0.029	-0.029	-0.011	1	
Project management performance.	.432**	.358**	.546**	.618**	1

** Significantly correlated at the .01 level (two-tailed).

4. Data Analysis

(1)Background Information of the Sample

From gender, it can be noted that there were 393 male respondents, accounting for 39.3%, and 607 female respondents, accounting for 60.7%, with a significant difference between the two genders, which is related to the business characteristics of engineering projects. In terms of age distribution, the highest proportion was aged 31-40 (331 people, 33.1%), followed by the age group of 21-30 years (291 people, 29.1%), which corresponds to the project experience distribution feature of mostly 6-10 years (312 people, 31.2%) and secondarily 3-5 years (286 people, 28.6%), reflecting the good quality of the sample to some extent. In terms of education level, the number of people who have received college and undergraduate education (300 people, 30%) is the highest, while those who have received master's (167 people, 16.7%) and high school or below education (173 people, 17.3%) are relatively balanced, which also indicates that the respondents have good quality.

The study also conducted statistics on project total amount, team size, project role, and project construction period and classified the samples according to the specific situation of collecting questionnaires. Among them, the project total amount ranged from 500-2000 million (337 items, 33.7%), the team size ranged from 400-600 people (297 items, 29.7%), and the project construction period was mostly 4-6 years (307 items, 36.7%). Other types of projects were distributed more evenly, reflecting the universality of the sample coverage.

In summary, the respondents have good project experience, which can effectively ensure the filling quality of the questionnaire and enhance the reliability and validity of the sample. At the same time, by assigning values to the results of the items, the mean and variance of each basic variable of the sample were calculated. The results showed that the variances of various variables were small, which also reflects the uniform and reasonable distribution of the sample.

(2) Interference Effect of Work Attitude

In this study, work attitude was taken as an interfering variable, and the following research hypotheses were proposed for the interference effect:

H1: Work attitude has an interference effect between scientific management and project management performance.

H2: Work attitude has an interference effect between supervisory constraint and project management performance.

Analysis of Table 4.1 shows that the interaction between the independent variable and the interfering variable is significant. The regression coefficient of the interaction between work attitude and scientific management on project management performance (dependent variable) is -0.13 with a p-value of 0.000<0.05, indicating a significant effect and supporting the hypothesis that work attitude is an interfering variable.

Secondly, the explanatory power (R2) of the interfering variable decreased from 0.187 in the first stage to 0.030 in the second stage, a decrease of 0.157 that also reached a significant level. Therefore, it can be concluded that work attitude is an interfering variable (negative moderator).

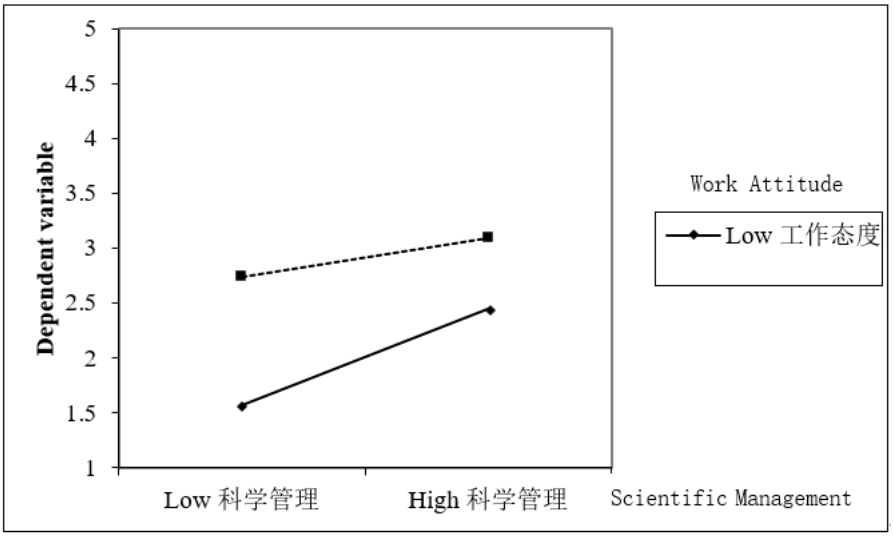
Table 12Table 4.1 Hierarchical Regression Analysis of Interfering Variable: Work Attitude

variable	First stage Project management performance			Second stage Project management performance		
	β	t	p	β	t	p
Scientific Management	0.323	15.145	0.000	0.306	20.173	0.000
Work Attitude × Scientific Management				-0.13	-8.545	0.000
△ R2	0.187			0.030		
△ F	229.356			73.017		
△ p	0.000			0.000		

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Work attitude is the interfering variable, scientific management is the independent variable, and project management performance is the dependent variable. Figure 4.1 shows that when work attitude is relatively high, the impact of scientific management on project management performance is relatively slow. When work attitude is relatively low, the impact of scientific management on project management performance is relatively strong. The statistical results show that the work attitude of project personnel affects project management performance. If project participants promote the project with a more positive work attitude, it will help to improve project management performance.



Gradient: **0.176** t-value: **1.607** p-value: **0.110**

Figure 4.1: Interference Diagram of Work Attitude and Scientific Management

Analysis report 4.2 shows significant interaction between the independent variable and the confounding variable. The interaction between work attitude and supervisory constraints had a significant impact on project management performance (dependent variable) regression coefficient with a p-value of 0.000<0.05, indicating significance. The regression coefficient was -0.112, suggesting that the interaction between work attitude and supervisory constraints affects project management performance. Therefore, work attitude is a confounding variable.

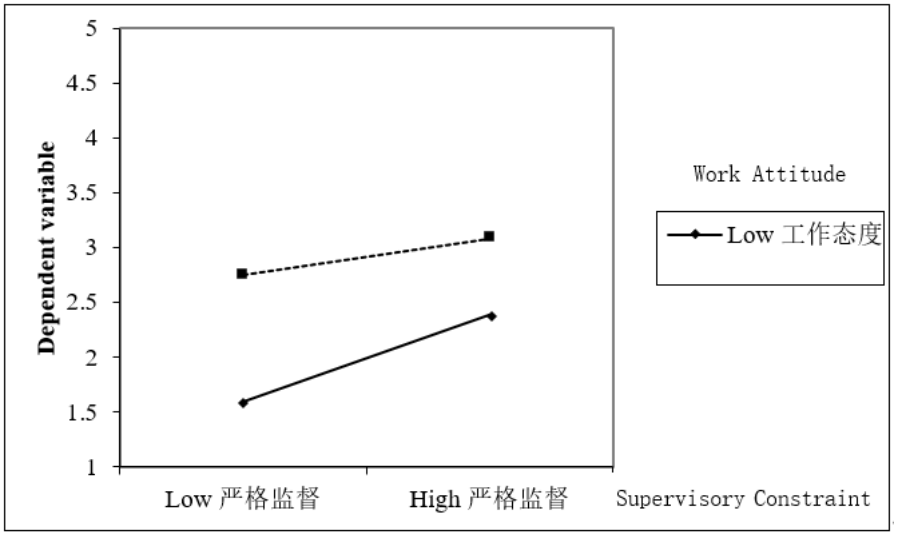
Furthermore, the explanatory power (R2) of the confounding variable decreased from 0.128 in the first stage to 0.022 in the second stage, a decrease of 0.106, which is also significant. Therefore, it can be concluded that work attitude is a confounding variable (negatively regulating).

Table 13Table 4.2 Interference variables: Hierarchical regression analysis table of job attitudes.

variable	First stage Project management performance			Second stage Project management performance		
	β	t	p	β	t	p
Supervisory Constraint	0.267	12.113	0.000	0.279	17.521	0.000
Work Attitude × Supervisory Constraint				-0.112	-6.988	0.000
△ R2	0.128			0.022		
△ F	146.716			48.834		
△ p	0.000			0.000		

Work attitude is the interfering variable, supervisory constraint is the independent variable, and project management performance is the dependent variable. As shown in Figure 4.2, when the work attitude is relatively high, the effect of supervisory constraint on project management performance is relatively slow. When the

work attitude is relatively low, the effect of supervisory constraint on project management performance is relatively strong. The statistical results show that the work attitude of project personnel interferes with project management performance, and if project participants push the project forward with a more positive work attitude, it will help improve project management performance.



Gradient: **0.167** t-value: **1.524** p-value: **0.130**

Figure 4.2: Interference diagram of work attitude and supervisory constraint.

The results obtained from the above study are shown in Table 4.10.

Table 4.10 Summary Table of Interference Effects

Hypotheses	Independent variable	Confounding variable	Dependent variable	Independent variable × Confounding variable	
H1	Scientific Management	Work Attitude	Project management performance	β=-0.13 t=-8.545***	Y
H2	Supervisory Constraint	Work Attitude	Project management performance	β=-0.112 t=-6.988***	Y

5. Conclusion and Recommendations

(1)Research Conclusions

The conceptual model of this study examines the interfering effect of work attitude on the relationship between scientific management and supervisory constraints on project management performance. The empirical research demonstrates that work attitude has a significant interference effect on project management performance in the context of project process optimization (β=-0.13, p<0.001), supporting hypothesis H1. Additionally, work attitude has an interference effect on the relationship between supervisory constraints and project management performance (β=-0.112, p<0.001), also supporting hypothesis H2.Therefore, the following re-

search conclusions were obtained.

Conclusion1. Work attitude mediates the relationship between process optimization and management performance.
Conclusion2. Work attitude mediates the relationship between supervision and constraint and management performance.

Based on the results, we find that when the overall project staff has a more intense work attitude towards the project, it strongly interferes with the impact of project process optimization on project management performance. However, if the overall project staff has a more moderate work attitude towards the project, the interference effect will be relatively mild. In specific cases, if the project staff has a strong positive emotion towards the project, such as confidence in the project or belief that the project will bring sufficient benefits, it can optimize the impact of project process optimization on project management performance. On the other hand, if the project staff has a strong negative emotion towards the project, such as no longer being willing to continue the project, it can reverse the positive effect of project process optimization on project management performance or even have a negative impact. If the project staff does not have any specific attitude towards the project, the interference effect on the entire process will not be significant.

(2)Research significance

This article deeply analyzes the influencing factors of project process optimization and management performance of construction projects in public institutions, and conducts in-depth research on the interference mechanism generated by emotional attitudes in their relationship. By identifying the internal laws of how emotional attitudes affect project process optimization and management performance, the theoretical framework of project process optimization in the management of construction projects in public institutions is enriched. Case analysis research conducted in project contexts helps construct conceptual models depicting the interference between emotional attitudes, project process optimization, and management performance of construction projects in public institutions. These models reveal the specific role of project members' work attitudes, thereby revealing the interfering effect of emotional attitudes on the relationship between project process optimization and management performance of construction projects in public institutions.

The research on the impact of process optimization on management performance of construction projects in public institutions is essentially a philosophy of continuous improvement of management processes in a progressive manner. By studying and analyzing existing management processes and identifying their problems, management performance can be improved in a more effective and productive way. As public institutions have unique characteristics, academic research on the influencing factors of construction projects in public institutions is still in its early stages, with most studies being theoretical and lacking practical testing and mechanism analysis.

Therefore, this study explores the intrinsic relationship between process optimization and management performance of construction projects in public institutions through field research in order to enrich research in this field. Furthermore, by empirically validating the mechanism relationship, this study also expands the applicability of relevant theories.

(3)Research contribution

From the perspective of emotional attitude, this study analyzes the interference effect of work attitude on the impact of process optimization on project management performance and proposes the influence of work attitude on the relationship between process optimization and project management performance. In existing research on project management performance, there is a lack of research on the interference effect of external factors on the relationship between internal factors in the model. This study constructs a conceptual model of the relationship between project process optimization and project management performance under the interference of emotional attitude influencing factors and empirically tests the interference effect of work attitude on the relationship between project process optimization and project management performance, opening up the "black box" of the internal mechanism of the relationship between work attitude and project process optimization and project management performance in the context of emotional cognitive evaluation theory. This enriches the research on the impact of project process optimization on project management performance in different perspectives and provides insights for the theoretical applicability and explanatory power of emotional cognitive evaluation theory.

(4)Research limitations and future prospects

This study focuses on the impact of scientific management, supervisory constraint based on process optimization principles on the project management performance of Chinese public institutions under the influence of work attitudes. This study did not test the interaction and impact of other process optimization facets and external factors, as well as potential antecedent variables that may affect project management performance.

For other process optimization dimensions and external factors that may affect the project management performance of Chinese public institutions, future research can use qualitative comparative analysis to sort out the interactions between different concepts, systematically analyze the common effects of other variables such as resource redundancy and risk orientation, and further expand the relevant theory of project management performance in public institutions.

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