

STUDY ON CROSS-CULTURAL MANAGEMENT AND CONFLICT FOR INFRASTRUCTURE PROJECTS OF CHINESE ENTERPRISES IN THAILAND

Ruan Lili*

Master of Project Management Programme, Faculty of Engineering and Technology

Shinawatra University, Thailand

*Corresponding author e-mail: 136451833@qq.com

วันที่รับบทความ 28 สิงหาคม 2569 วันที่แก้ไขบทความ 30 สิงหาคม 2569 วันที่ตอบรับบทความ 31 สิงหาคม 2569

Abstract

Under the Belt and Road Initiative, Chinese enterprises have become major participants in Thailand's infrastructure market, yet cross-cultural friction remains a persistent threat to project performance. This study quantifies the relationship between Sino-Thai cultural differences and cross-cultural management conflict, using China State Construction Engineering (Thailand) Co., Ltd. as the case organisation. Drawing on Hofstede's Cultural Dimensions Theory, four dimensions - Power Distance, Uncertainty Avoidance, Masculinity and Long-Term Orientation - were treated as independent variables and four conflict types - communication, behavioural/overtime, salary/benefit and decision-making/custom - as dependent variables. From an enumerated frame of 135 staff on three project sites, 120 bilingual questionnaires yielded 100 valid responses (50 Chinese, 50 Thai), a response rate of 83.3 per cent equal to the sample required by Cochran's finite population correction. Data were analysed with a standard statistical software package; overall Cronbach's alpha was 0.826. Independent samples t-tests show significant inter-group differences ($p < 0.001$) in Masculinity (mean difference +1.540, $d = 1.73$), Power Distance (+1.100, $d = 1.34$) and Uncertainty Avoidance (-0.640, $d = -0.85$), whereas Long-Term Orientation converged ($p = 0.527$). Pearson correlation identified one dominant association per divergent dimension: Power Distance with decision-making/custom conflict ($r = 0.485$), Uncertainty Avoidance with communication conflict ($r = 0.392$) and Masculinity with behavioural/overtime conflict ($r = 0.578$), each that dimension's largest coefficient. All four hypotheses are supported and none rejected; Long-Term Orientation, a comparison dimension carrying no directional hypothesis, shows no significant association. Communication conflict was the most frequently reported ($M = 3.92$). Conflict frequency is thus systematically associated with measurable cultural distance rather than with individual attitude, supporting a three-level framework of institutionalised cultural

integration, cultural intelligence training and localised overtime and reward practices. As the design is cross-sectional, the results establish association rather than causation.

Keywords: Cross-cultural management; cross-cultural conflict; Hofstede's cultural dimensions; infrastructure projects; Chinese enterprises in Thailand

Introduction

Over the past decade, China has promoted international cooperation under the Belt and Road Initiative, with infrastructure construction emerging as the core cooperation area. As a key node in the economic and transport network of Southeast Asia, Thailand has a sustained demand for infrastructure upgrading - road networks, ports, power stations and municipal facilities - to support its economic development and regional connectivity objectives. Under Thailand's National Economic and Social Development framework for 2015-2036, investment in infrastructure is expected to grow steadily, with rising annual demand for infrastructure-related labour and technical services.

Against this background, Chinese enterprises have become important participants in Thailand's infrastructure construction. Leveraging advantages in construction technology, project management experience and capital strength, they have undertaken a series of key projects that contribute to the modernisation of the country's infrastructure. Unlike domestic work, however, these projects operate in complex cross-border environments encompassing differences in politics, law, culture, custom and natural conditions, and therefore present management challenges that domestic experience does not prepare firms to handle [1], [2].

Among these challenges, cross-cultural difference has become a critical factor affecting project progress. Many Chinese enterprises new to the Thai market struggle to adapt to local cultural characteristics: differences in communication style lead to misunderstanding in technical coordination; discrepancies in work concepts produce conflict over construction schedules; and inattention to religious custom strains relationships with local employees and stakeholders. Such conflicts not only cause delay and cost overrun but also erode the long-term cooperative reputation of Chinese enterprises in Thailand.

Existing literature on international project management has explored cultural conflict extensively in Western contexts [3], [4], yet empirical studies that connect Hofstede's Cultural Dimensions Theory to specific conflict types in Sino-Thai infrastructure projects remain scarce.

While anecdotal evidence suggests that disparities in power distance, uncertainty avoidance and masculinity contribute to workplace tension, there is little quantitative research that measures these relationships systematically and identifies which cultural dimension is associated with which category of conflict. This gap hinders the development of evidence-based cross-cultural management strategy for enterprises operating in Thailand's infrastructure sector.

The organisation examined in this study is CSCEC Thailand, a leading Chinese enterprise engaged in international infrastructure construction. It has participated in multiple key projects in Thailand, including regional expressways, solar power stations and water treatment facilities. The company has been engaged in Thailand for more than forty years and has undertaken over one hundred projects. Despite this experience, it continues to encounter cross-cultural conflict during project implementation, such as local employee turnover arising from remuneration disputes and construction delay caused by miscommunication with Thai government departments, which underlines the urgency of strengthening cross-cultural management capability.

Accordingly, this study pursues three objectives: (i) to measure the occurrence and relative prominence of the four categories of cross-cultural conflict identified in the literature within the infrastructure projects of Chinese enterprises in Thailand; (ii) to quantify Sino-Thai cultural differences using Hofstede's framework and to test, for every cultural dimension against every conflict type, whether an association exists and which association is the strongest for that dimension; and (iii) to derive from that evidence a set of targeted management measures aimed at reducing conflict. The remainder of the paper reviews the relevant literature and develops the hypotheses, describes the quantitative methodology, reports the empirical results, and concludes with recommendations, implications and limitations.

Literature Reviews

Culture, management and cultural distance

Culture is commonly understood as the collective programming of the mind that distinguishes the members of one group from another [1]. In an organisational setting it is expressed through shared assumptions about authority, time, obligation and reward, and it therefore conditions how management instruments such as planning, supervision and appraisal are interpreted. Drucker [5] argued that management is itself a cultural practice rather

than a neutral technique, which implies that a management system transplanted without adaptation will be read differently by employees who do not share the assumptions on which it was built. Chen [2] applied this insight to Chinese multinational enterprises and observed that overseas subsidiaries frequently reproduce headquarters practice unchanged, producing an implementation gap between formal procedure and local acceptance.

The internationalisation literature adds a temporal dimension. Johanson and Vahlne [6] described foreign market commitment as an incremental learning process in which psychic distance - including cultural distance - is progressively reduced through experience. In construction, however, the project-based mode of operation and the rotation of expatriate staff interrupt this accumulation, so that organisational learning about the host culture is repeatedly reset.

Cultural difference and cross-cultural conflict

Conflict research distinguishes task conflict, relationship conflict and process conflict, and shows that the outcome of conflict depends on its type and on the norms that govern its expression [7]. Rahim [8] classified conflict-handling styles along the dimensions of concern for self and concern for others, and later cross-cultural work found that the preferred style differs systematically across societies: collectivist and high power distance cultures favour avoiding and obliging styles, while more individualist and results-oriented cultures favour dominating and integrating styles [4]. Bhawuk and Brislin [9] further showed that intercultural sensitivity, rather than mere exposure, predicts effective behaviour in culturally mixed teams.

Applied to Sino-Thai construction projects, four categories of conflict recur in the practice literature and in the case organisation's own incident records: communication conflict arising from language and from the contrast between direct and euphemistic styles; behavioural or overtime conflict arising from divergent expectations about work intensity and work-life balance; salary and benefit conflict arising from perceived inequity between expatriate and local packages; and decision-making or custom conflict arising from centralised leadership and from insufficient accommodation of religious observance [10], [11]. These four categories form the dependent variables of the present study.

Hofstede's Cultural Dimensions Theory

Hofstede's framework remains the most widely used instrument for operationalising cultural distance [1], [12]. Power Distance describes the extent to which less powerful members of an organisation accept an unequal distribution of authority. Uncertainty

Avoidance describes tolerance for ambiguity and the preference for formal rules and standardised process. Masculinity describes the relative emphasis placed on achievement, competition and material reward as against cooperation, relationship and quality of life. Long-Term Orientation describes the extent to which a society defers gratification in favour of future results. China is generally characterised by high power distance, high masculinity and long-term orientation with comparatively low uncertainty avoidance, whereas Thailand is characterised by moderate to high power distance, markedly low masculinity and comparatively high uncertainty avoidance. The theoretical expectation is therefore that the largest Sino-Thai gap will appear on masculinity, followed by power distance, with a reversed gap on uncertainty avoidance.

Prior applications of the framework have concentrated on East-West cooperation and on manufacturing or service settings; the South-South, project-based and schedule-driven context of infrastructure construction has received far less attention [3], [11]. The present study addresses that gap by testing dimension-specific rather than aggregate effects.

Conceptual framework and hypotheses

The four cultural dimensions are treated as independent variables and the four conflict types as dependent variables. The framework proposes that measurable differences in cultural perception between Chinese and Thai employees are systematically associated with the reported frequency of specific conflicts, and that each dimension is associated most strongly with one conflict type rather than uniformly with all four. Because the design is cross-sectional, the hypotheses are stated as associations and no claim of causal direction is made. Directional hypotheses are stated for the three dimensions on which Chinese and Thai country-level scores are expected to diverge. Long-Term Orientation is retained in the model as a comparison dimension without a directional hypothesis, because the two societies are expected to converge on it; it therefore serves as a discriminant check on whether the instrument detects difference indiscriminately or only where cultural distance genuinely exists. Figure 1 presents the conceptual framework and the hypothesised relationships.

H1: Power Distance is positively correlated with decision-making/custom conflict.

H2: Uncertainty Avoidance is positively correlated with communication conflict.

H3: Masculinity is positively correlated with behavioural/overtime conflict.

H4: Chinese and Thai employees differ significantly in their perception of Power Distance and of Masculinity.

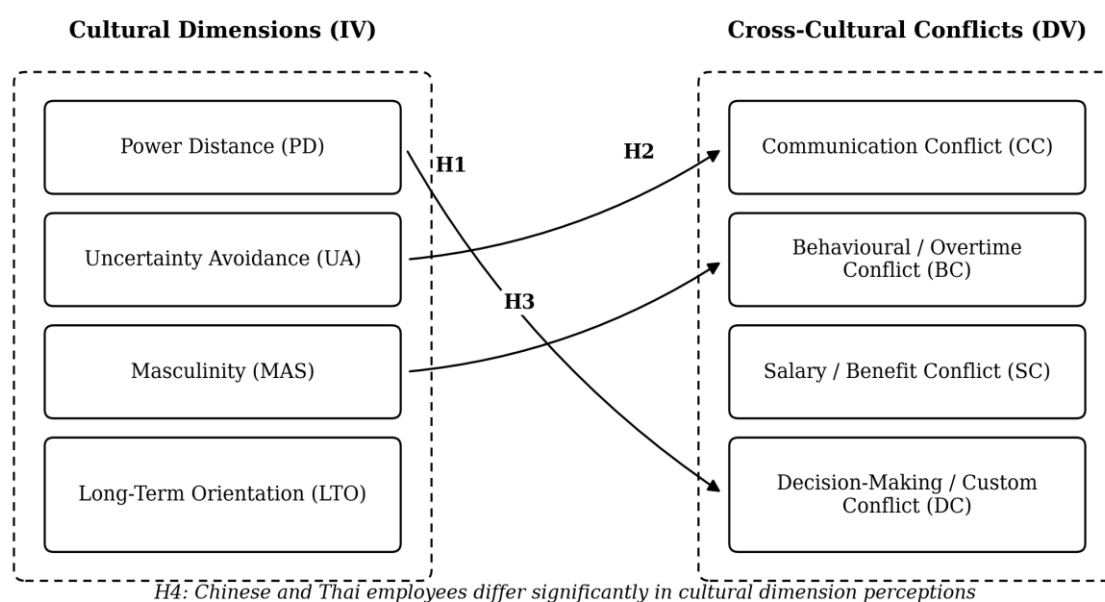


Figure 1 Conceptual framework of the study

Note: Long-Term Orientation is included as a comparison dimension; no directional hypothesis is stated for it.

Methodology

Research design

The study adopts a cross-sectional quantitative design. Numerical measurement was selected because the research question concerns the strength and direction of association between cultural perception and conflict frequency, which requires comparable scores across two cultural groups rather than narrative depth. The design proceeded in three phases: development of hypotheses from the literature; collection of primary data through a structured questionnaire; and statistical analysis with a standard statistical software package, comprising reliability testing, descriptive statistics, independent samples t-tests and Pearson correlation.

Population and sampling

The target population comprised all directly employed full-time staff engaged on the three CSCEC Thailand infrastructure project sites surveyed during the data collection period of October to December 2025, covering transport infrastructure (expressways and bridges), energy infrastructure (solar power stations) and municipal infrastructure (water treatment facilities). Preliminary enquiry indicated a headcount of between 150 and 200. After the frame

had been reconciled against company payroll records and the inclusion criteria applied - direct employment by CSCEC Thailand, current assignment to one of the three surveyed sites, and at least six months of service on a Sino-Thai project - the enumerated sampling frame was fixed at $N = 135$. The frame comprises two strata: 60 Chinese expatriate staff (44.4 per cent), consisting of project managers, technical engineers and supervisory personnel; and 75 Thai local employees (55.6 per cent), consisting of administrative staff, site engineers, foremen and skilled workers. This composition differs from the overall project workforce, in which Thai personnel account for roughly 70 to 75 per cent, because subcontracted construction labour is not directly employed and therefore falls outside the frame.

The required sample size was determined by Cochran's formula with finite population correction [13]. At a 95 per cent confidence level, a margin of error of 5 per cent and the conservative assumption $p = 0.5$, the infinite-population estimate is $n_0 = 384.16$; applying the correction $n = n_0 / [1 + (n_0 - 1) / N]$ with $N = 135$ yields a required sample of 100.09, that is, 100 cases. The achieved sample of 100 therefore satisfies the statistical requirement exactly, and at 50 cases per stratum it also exceeds Roscoe's guideline [14] of a minimum of thirty cases per group for parametric comparison.

A stratified design was applied with convenience sampling within each stratum. Because the Chinese stratum is small, it was enumerated in full: all 60 Chinese expatriates received a questionnaire. Sixty of the 75 Thai employees were approached, selected by availability during scheduled site visits and shift changes, so that 120 questionnaires were distributed, equivalent to 88.9 per cent of the frame. Equal numbers were approached in each stratum so that the two cultural groups would carry equal weight in the comparative tests; the consequence of this departure from the frame proportions is addressed in the limitations.

Returned questionnaires were screened for completeness (at least 90 per cent of items answered), for straight-line answering and for the six-month experience criterion. Twenty questionnaires (16.7 per cent) were excluded on these grounds, leaving 100 valid responses divided equally between the two strata. The effective response rate is 83.3 per cent, identical in both strata, which exceeds the threshold commonly reported for survey research in organisational settings [15]; the realised sampling fraction is 74.1 per cent of the enumerated population. Table 1 summarises the frame, distribution and valid returns by stratum.

Table 1 Sampling frame, questionnaire distribution and valid responses by stratum

Stratum	Population (N)	Distributed	Valid responses	Response rate (%)	Share of stratum (%)
Chinese expatriate staff	60	60	50	83.3	83.3
Thai local employees	75	60	50	83.3	66.7
Total	135	120	100	83.3	74.1

Note: response rate is calculated as valid responses divided by questionnaires distributed; share of stratum is valid responses divided by stratum population.

Research instrument

Data were collected through a self-administered questionnaire delivered on paper on site and through an online form. The instrument has three parts: demographic profile; perception of cultural dimensions, adapted from Hofstede's Value Survey Module; and assessment of cross-cultural conflict, derived from the four conflict categories identified in the literature. All items in parts two and three use a five-point Likert scale, where 1 denotes strongly disagree or never and 5 denotes strongly agree or very frequently. The instrument was prepared in Chinese and Thai by back-translation to preserve equivalence of meaning. Table 2 sets out the variables, their indicators and the reliability coefficient obtained for each construct.

Table 2 Variables, indicators and reliability coefficients

Type	Construct	Indicators	Cronbach's alpha
IV	Power Distance (PD)	Superior authority; centralisation of decision-making; subordinate participation	0.789
IV	Uncertainty Avoidance (UA)	Compliance with rules; risk tolerance; process standardisation	0.765

Table 2 (Ext.)

Type	Construct	Indicators	Cronbach's alpha
IV	Masculinity (MAS)	Competitive awareness; overtime culture; result versus relationship orientation	0.802
IV	Long-Term Orientation (LTO)	Long-term planning; respect for tradition; patience	0.731
DV	Communication Conflict (CC)	Language misunderstanding; direct versus euphemistic style	0.778
DV	Behavioural/Overtime Conflict (BC)	Perception of work efficiency; work-life balance; attitude to overtime	0.815
DV	Salary/Benefit Conflict (SC)	Perceived pay differential; living standard; fairness of promotion	0.756
DV	Decision-Making/Custom Conflict (DC)	Leadership style; accommodation of religious and monastic custom	0.783

Note: each construct is measured by three items. Overall instrument alpha = 0.826.

Data analysis

Responses were coded from 1 to 5 and composite scores computed as the mean of the constituent items. Internal consistency was assessed with Cronbach's alpha, with 0.70 taken as the acceptable threshold [16]. Descriptive statistics summarised the level of each construct for the whole sample and for each national group. Independent samples t-tests examined whether the two groups differ in cultural perception, with Levene's test used to verify homogeneity of variance, and Pearson correlation examined the association between each cultural dimension and each conflict type. Cohen's d was computed as the effect size for each group comparison. A significance level of $p < 0.05$ was adopted, with $p < 0.01$ treated as highly significant. Participation was voluntary and anonymous, and formal permission was obtained from the company and from the individual project directors.

Results

Respondent profile and reliability

The demographic composition of the 100 valid respondents is shown in Table 3. The sample divides equally between Chinese and Thai respondents by design. Thirty respondents (30 per cent) hold management or supervisory positions and seventy (70 per cent) are technical or general staff, a distribution that reflects the hierarchical structure typical of Chinese construction enterprises operating abroad, in which management posts are predominantly held by expatriates while local employees predominate in technical and site roles. Forty-five respondents have less than three years of experience on Sino-Thai projects and fifty-five have three years or more, so that the sample captures both early-stage adjustment difficulty and longer-term adaptation.

Table 3 Demographic characteristics of respondents (N = 100)

Variable	Category	Frequency	Percentage
Nationality	Chinese	50	50.0
	Thai	50	50.0
Position	Management/supervisory	30	30.0
	Technical/general staff	70	70.0
Project experience	Less than 3 years	45	45.0
	3 years or more	55	55.0

The overall Cronbach's alpha of the instrument was 0.826, and the coefficients of all eight constructs, reported in Table 2, range from 0.731 to 0.815. All values exceed the 0.70 threshold, confirming that the scales measure their intended constructs consistently and that the subsequent inferential analysis rests on reliable measurement.

Descriptive statistics

Table 4 reports the mean and standard deviation of each construct for the whole sample and the group means for Chinese and Thai respondents. Two patterns are immediately apparent. First, all four conflict types register means above the scale midpoint, ranging from 3.58 to 3.92, which indicates that cross-cultural friction is a routine rather than an exceptional feature of project life. Communication conflict is the most frequently reported ($M = 3.92$),

followed by decision-making/custom conflict ($M = 3.86$), behavioural/overtime conflict ($M = 3.75$) and salary/benefit conflict ($M = 3.58$).

Second, the group means diverge sharply on three of the four cultural dimensions. Chinese respondents score higher on Power Distance (4.20 against 3.10) and markedly higher on Masculinity (4.45 against 2.91), whereas Thai respondents score higher on Uncertainty Avoidance (4.14 against 3.50). Long-Term Orientation is almost identical in the two groups (4.02 against 3.94). The conflict variables show a corresponding asymmetry: behavioural/overtime conflict is reported far more frequently by Chinese respondents (4.10 against 3.40), while salary/benefit conflict is reported far more frequently by Thai respondents (3.91 against 3.25). Each group, in other words, experiences most acutely the conflict that arises where its own cultural expectation is least accommodated.

Table 4 Descriptive statistics of cultural dimensions and conflict variables ($N = 100$)

Variable	Overall mean	Pooled SD	Chinese mean	Thai mean
Power Distance (PD)	3.65	0.82	4.20	3.10
Uncertainty Avoidance (UA)	3.82	0.75	3.50	4.14
Masculinity (MAS)	3.68	0.89	4.45	2.91
Long-Term Orientation (LTO)	3.98	0.63	4.02	3.94
Communication Conflict (CC)	3.92	0.78	3.85	3.99
Behavioural/Overtime Conflict (BC)	3.75	0.92	4.10	3.40
Salary/Benefit Conflict (SC)	3.58	0.86	3.25	3.91
Decision-Making/Custom Conflict (DC)	3.86	0.81	3.95	3.77

Note: with equal group sizes ($n = 50$ each) the overall mean is the arithmetic mean of the two group means. Pooled SD is the within-group standard deviation pooled across the two national groups ($df = 98$); it is the dispersion measure used in the t-tests in Table 5.

Comparison of cultural dimensions between the two groups

Independent samples t-tests were conducted to determine whether the observed group differences are statistically significant. Levene's test returned p values above 0.05 for all four dimensions, so equal variances were assumed. The results are presented in Table 5.

Table 5 Independent samples t-test of cultural dimensions between Chinese and Thai employees (N = 100)

Cultural dimension	Levene's p	t	df	Sig. (2-tailed)	Mean diff.	Cohen's d	95% CI
Power Distance (PD)	0.325	6.707	98	< 0.001	+1.100	1.34	0.775, 1.425
Uncertainty Avoidance (UA)	0.287	-4.267	98	< 0.001	-0.640	-0.85	-0.938, -0.342
Masculinity (MAS)	0.359	8.652	98	< 0.001	+1.540	1.73	1.187, 1.893
Long-Term Orientation (LTO)	0.412	0.635	98	0.527	+0.080	0.13	-0.170, 0.330

Note: mean difference is calculated as Chinese mean minus Thai mean. Equal variances assumed in all four tests. Cohen's d is the mean difference divided by the pooled standard deviation reported in Table 4.

Masculinity shows the largest difference in the study ($t = 8.652$, $p < 0.001$, mean difference +1.540, Cohen's $d = 1.73$). The two groups sit on opposite sides of the scale midpoint, which means they do not merely weight achievement differently but hold opposing views on whether sustained overtime and competitive performance are legitimate expectations. Power Distance also differs strongly ($t = 6.707$, $p < 0.001$, mean difference +1.100, $d = 1.34$): Chinese respondents accept centralised authority as a condition of construction efficiency, whereas Thai respondents, while not egalitarian, expect consultation before instructions are issued. Uncertainty Avoidance differs significantly in the reverse direction ($t = -4.267$, $p < 0.001$, mean difference -0.640, $d = -0.85$), with Thai respondents expressing a

stronger preference for written procedure and formal confirmation. Long-Term Orientation shows no significant difference ($t = 0.635$, $p = 0.527$, $d = 0.13$), which represents a point of cultural convergence and a usable foundation for joint planning. H4 is therefore supported, and the significant reversal on Uncertainty Avoidance extends the original hypothesis.

Correlation between cultural dimensions and conflict types

Pearson correlation coefficients between the four cultural dimensions and the four conflict types are reported in Table 6. The pattern is differentiated rather than uniform, which supports the premise that each dimension is associated most strongly with one conflict type. Because the data are cross-sectional and self-reported, the coefficients below describe the strength and direction of association only; they do not establish which of the two variables precedes the other, and the interpretive mechanisms offered are proposed explanations rather than tested ones.

Table 6 Pearson correlation between cultural dimensions and cross-cultural conflicts (N = 100)

Conflict type	Power Distance	Uncertainty Avoidance	Masculinity	Long-Term Orientation
Communication Conflict (CC)	0.215*	0.392**	0.287**	0.102 ns
Behavioural/Overtime Conflict (BC)	0.263**	0.208*	0.578**	0.125 ns
Salary/Benefit Conflict (SC)	0.189 ns	0.227*	0.315**	0.156 ns
Decision-Making/Custom Conflict (DC)	0.485**	0.256*	0.302**	0.098 ns

Note: ns = not significant; * $p < 0.05$ (2-tailed); ** $p < 0.01$ (2-tailed). With $n = 100$ ($df = 98$) the critical values are $|r| = 0.197$ at the 5 per cent level and $|r| = 0.256$ at the 1 per cent level.

Power Distance correlates most strongly with decision-making/custom conflict ($r = 0.485$, $p < 0.01$), a coefficient approaching the conventional threshold for a strong association and the second largest in the study. Its correlations with communication conflict ($r = 0.215$, $p < 0.05$) and behavioural/overtime conflict ($r = 0.263$, $p < 0.01$) are significant but weak in magnitude, and its correlation with salary/benefit conflict is not significant. The dimension

therefore behaves as a specific rather than a general correlate, and the association is concentrated where decision authority is at stake. H1 is supported.

Uncertainty Avoidance shows its strongest correlation with communication conflict ($r = 0.392$, $p < 0.01$) and weaker but significant correlations with the remaining three conflict types. The association is intelligible in a construction setting: employees with a high tolerance for ambiguity are content with verbal instruction and later clarification, whereas employees who prefer formal procedure regard the same instruction as incomplete, and the gap is experienced as a failure of communication rather than as a difference in procedural preference. H2 is supported.

Masculinity shows the strongest and most pervasive associations in the study. Its correlation with behavioural/overtime conflict ($r = 0.578$, $p < 0.01$) is the largest single coefficient obtained, and it is significant with every conflict type at the 1 per cent level, including salary/benefit conflict ($r = 0.315$, $p < 0.01$), where Power Distance has no significant effect. Uncertainty Avoidance is also significant across all four conflict types, but only one of its coefficients reaches the 1 per cent level and all four are smaller in magnitude. This breadth suggests that the achievement-versus-quality-of-life orientation is not confined to working hours but shapes how performance is appraised, how reward is judged to be fair, and how instructions are framed. H3 is supported. Long-Term Orientation shows no significant correlation with any conflict type, consistent with the absence of an inter-group difference on that dimension.

Table 7 consolidates the evidence for each hypothesis. All four are supported, and in each of H1 to H3 the hypothesised conflict is also the dimension's largest coefficient across the four conflict types, so the framework's premise of one dominant association per dimension holds rather than merely a significant one. The null result for Long-Term Orientation, for which no directional hypothesis was stated, functions as the intended discriminant check: the instrument detects difference where cultural distance exists and not where it does not.

Table 7 Summary of hypothesis testing

No.	Hypothesis	Statistical evidence	Outcome
H1	Power Distance is positively correlated with decision-making/custom conflict	$r = 0.485$, $p < 0.01$; largest of the four PD coefficients	Supported
H2	Uncertainty Avoidance is positively correlated with communication conflict	$r = 0.392$, $p < 0.01$; largest of the four UA coefficients	Supported
H3	Masculinity is positively correlated with behavioural/overtime conflict	$r = 0.578$, $p < 0.01$; largest coefficient in the study	Supported
H4	Chinese and Thai employees differ significantly in their perception of Power Distance and of Masculinity	MAS $t = 8.652$, $d = 1.73$; PD $t = 6.707$, $d = 1.34$; both $p < 0.001$. Two findings beyond the hypothesis: UA also differs ($t = -4.267$, $p < 0.001$) in the reverse direction, and LTO does not differ ($p = 0.527$)	Supported

It should be noted that the four conflict types are unlikely to be independent of one another. Respondents who report frequent miscommunication also tend to report friction over centralised decisions, over overtime demands and over the fairness of appraisal and reward, which suggests a cluster of mutually reinforcing frictions rather than four separate problems. The direction in which such a cluster develops cannot be determined from cross-sectional data, but the clustering itself implies that an intervention aimed at a single conflict type in isolation is unlikely to be sufficient.

Conclusion and Recommendation

Discussion and conclusion

This study set out to determine whether cultural difference is measurably associated with conflict in the infrastructure projects of Chinese enterprises in Thailand, and if so, which dimensions are associated with which conflicts. The evidence answers both questions. Chinese

and Thai employees differ significantly and substantially on three of Hofstede's four dimensions, and those differences are systematically associated with the conflicts reported on site. The finding that Masculinity shows the largest inter-group gap and the strongest correlation with conflict qualifies the common assumption, drawn largely from East-West studies, that power distance is the dimension most closely associated with friction in Asian project settings [3], [4]. In a schedule-driven construction environment, the contest between a results-oriented overtime culture and an expectation of work-life balance is experienced daily, whereas questions of decision authority surface episodically.

Communication conflict was the most frequently reported conflict type, but its strongest correlate was uncertainty avoidance rather than power distance. This suggests that much of what project staff describe as a language problem is in fact a procedural one, and that investment in translation alone will not resolve it. Conversely, the absence of any significant difference or correlation on Long-Term Orientation is a practically useful result: both groups value durable outcomes and are willing to defer short-term advantage, which gives managers a shared premise on which to build joint planning and long-horizon incentive schemes.

Measured against the three objectives set out in the introduction, the study delivers on each. The first objective is met by the descriptive results: all four conflict categories occur above the scale midpoint, and their relative prominence is established as communication ($M = 3.92$), decision-making/custom (3.86), behavioural/overtime (3.75) and salary/benefit (3.58), with the second and fourth of these concentrated in the Thai group and the third in the Chinese group. The second objective is met by Tables 5 and 6, which quantify the cultural gap on all four dimensions and test all sixteen dimension-conflict pairs, identifying a dominant association for each of the three divergent dimensions and none for the convergent one. The third objective is met by Section 5.2, in which each recommendation is tied to a specific coefficient rather than to general good practice; it should be stressed, however, that those measures are derived from the evidence rather than tested by it, and their effect on conflict remains to be demonstrated.

Taken together, the results are consistent with the view that cross-cultural conflict in this setting is structural rather than personal. Conflict frequency tracks group-level differences in cultural perception, with large effect sizes, rather than varying idiosyncratically across individuals; the pattern therefore suggests that similar friction would recur under new

personnel unless the underlying management system is adapted. That inference follows from the pattern of association rather than from a demonstrated causal test, and a longitudinal or quasi-experimental design would be required to confirm it.

Recommendations

The findings support a three-level intervention framework in which organisational, managerial and operational measures reinforce one another.

At the organisational level, cross-cultural management should be converted from an informal individual responsibility into a formal function with dedicated resources and measurable indicators. Three measures follow directly from the results. First, a full-time cultural integration officer should be appointed at project company level, staffed by a bilingual professional with both construction and human resource experience, and made accountable for conflict incidence. Second, a hybrid decision-making mechanism should be introduced in which technical decisions with schedule implications are subject to a defined consultation step with Thai supervisory staff before issue, addressing the association between Power Distance and decision-making conflict identified in Table 6. Third, a formal Thai cultural calendar - covering religious observance, ordination leave and major festivals - should be embedded in the master programme at the planning stage rather than accommodated as an exception during execution.

At the management level, the target is the cross-cultural competence of Chinese expatriate managers, who form the principal interface between the two cultures. The one-day pre-departure briefing typical of current practice should be replaced by structured cultural intelligence training covering motivation, knowledge, strategy and behavioural adaptation [17], with assessment before and after deployment. Training should be reinforced by situational leadership practice adapted to the local context and by a reverse mentoring scheme pairing Chinese managers with experienced Thai supervisors, which transfers tacit local knowledge in the opposite direction to the conventional expatriate-to-local flow and partly offsets the loss of institutional memory caused by two- to three-year rotation cycles.

At the operational level, the measures address the friction that the correlation analysis identifies as most intense. A culturally adaptive overtime policy should replace mandatory extended hours with a planned system combining advance notice, voluntary registration and compensatory rest, which responds to the strongest single relationship in the study, that between Masculinity and behavioural/overtime conflict. The salary and welfare system should

be localised, with transparent grading criteria and visible promotion paths for local staff, since salary/benefit conflict is the conflict reported most strongly by Thai respondents. Finally, site facilities and daily routines - including prayer space, meal arrangements and safety briefings delivered in Thai - should be reviewed against local expectations, as these low-cost measures address the custom-related component of decision-making conflict.

Implications, limitations and future research

Theoretically, the study extends Hofstede's framework to a South-South, project-based context and demonstrates that dimension-specific analysis yields more actionable insight than aggregate measures of cultural distance. Practically, it offers Chinese enterprises entering the Thai infrastructure market a diagnostic sequence: measure the dimensional gap, identify the dominant conflict association, and select the intervention that addresses it. Because the design is correlational, that sequence is a diagnostic aid rather than a demonstrated causal chain.

Three limitations qualify these conclusions. The study examines a single, long-established state-owned enterprise, whose accumulated local knowledge may cause it to understate the difficulties facing newer or privately owned entrants. The deliberate 1:1 stratification, necessary for equal statistical weight in the comparative tests, over-represents Chinese employees relative to the enumerated frame, in which they form 44.4 per cent, and far more markedly relative to the total project workforce once subcontracted Thai labour is counted; unweighted overall means should therefore be read as a comparison of two equally sized groups rather than as an estimate for the workforce as a whole. Most importantly, the design is cross-sectional and correlational: it establishes that cultural perception and conflict frequency co-vary, but not that one produces the other, and a common-method effect cannot be excluded because both sets of measures come from the same self-report instrument at the same point in time. Self-reported perception may also be affected by social desirability. Future research should therefore extend the sample across multiple enterprises and countries, adopt a longitudinal design capable of testing whether the interventions proposed here reduce conflict over time, and complement the survey with interview or observational data to explain the mechanisms that the correlations only indicate.

Acknowledgement

The authors thank China State Construction Engineering (Thailand) Co., Ltd. for granting access to its project sites, and the project directors and employees who took part in the

survey. The authors also thank the Faculty of Engineering and Technology, Shinawatra University, for academic support. This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

References

- D. P. S. Bhawuk and R. W. Brislin. (1992). The measurement of intercultural sensitivity using the concepts of individualism and collectivism. *International Journal of Intercultural Relations*, 16(3), 209-225.
- G. Hofstede. (1983). The cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 14(2), 75-89.
- G. Hofstede. (1997). *Cultures and Organizations: Software of the Mind*. New York, NY, USA: McGraw-Hill.
- H. O. Lee and R. Rogan. (1991). A cross-cultural comparison of organizational conflict management behavior. *International Journal of Conflict Management*, 2(2), 181-199.
- J. C. Nunnally. (1978). *Psychometric Theory*, 2nd ed. New York, NY, USA: McGraw-Hill,
- J. Johanson and J.-E. Vahlne. (1977). The internationalization process of the firm: a model of knowledge development and increasing foreign market commitment. *Journal of International Business Studies*, 8(1), 23-32.
- J. T. Roscoe. (1975). *Fundamental Research Statistics for the Behavioral Sciences*. 2nd ed. New York, NY, USA: Holt, Rinehart and Winston,
- K. A. Jehn and C. Bendersky. (2003). Intragroup conflict in organizations: a contingency perspective on the conflict-outcome relationship. *Research in Organizational Behavior*, 25, 187-242.
- M. A. Rahim. (1983). A measure of styles of handling interpersonal conflict. *Academy of Management Journal*, 26(2), 368-376.
- M. He. (2011). *Research on cultural differences from the perspective of cultural dimension theory*. M.S. thesis, Heilongjiang University, Harbin.
- P. F. Drucker. (1974). *Management: Tasks, Responsibilities, Practices*. New York, NY, USA: Harper & Row,
- P. Rupavijetra. (2011). *Cross-cultural management in Southeast Asian infrastructure projects*. Ph.D. dissertation, Chiang Mai University, Chiang Mai, Thailand,

- S. Ang and L. Van Dyne, Eds. (2008). *Handbook of Cultural Intelligence: Theory, Measurement and Applications*. Armonk, NY, USA: M. E. Sharpe.
- W. G. Cochran. (1977). *Sampling Techniques*, 3rd ed. New York, NY, USA: John Wiley & Sons.
- X. Chen and Y. Sun. (2007). Cultural differences and conflict management in multinational projects, *Journal of International Business Studies*, 38(4), 645-662.
- X. Chen, Cross-Cultural Management in International Enterprises. Beijing, China: Tsinghua University Press, 2005.
- Y. Baruch and B. C. Holtom. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, 61(8), 1139-1160.