

The Impact of Project Risk Management Strategies, Group Innovative Performance, and Latent Tensions on Project Conflict Manifestations within Engineering and IT Firms in the UAE

Saeed Alhassani, Amiya Bhaumik

Abstract: *In project life cycle, many manifestation of conflicts happens and these conflicts are affected by many factors inside the organization. The present study seeks to draw on pertinent theories in the area of group innovativeness, latent tension, and project risk management; where project conflict manifestation is the dependent variable, group innovativeness, latent tension, and project risk management is the dependent variable within IT firms in the UAE. Data was collected with the help of survey questionnaire administered through online platform using five likert scale and PLS (Partial Least Squares) SEM-VB (Structural Equation Modelling-Variance Based) was employed to assess the research model by utilising the software SmartPLS 3.0. The findings have shed some lights on some new variables that influence the manifestation of project conflict. Group innovative performance, and project risk management have a significant negative influence on project conflict manifestation. On the other hand, latent tension had a positive impact on the dependent variable. In addition, results added to the body of knowledge, moreover give insights to the managers how to control the project conflicts manifestations.*

Index Terms: *Project risk management strategies; group innovative performance; latent tensions; project conflict manifestations.*

I. INTRODUCTION

The concept of conflict has gained much attention in various social sciences – sociology, psychology, political science and organization development. Conflict has become so broadly applied that it is in danger of losing its status as a singular concept [1]. Weiss & Dehle (1994) [2] argue that a universal definition is “still lacking” It is the intentional mutual exchange of negative sanctions, or punitive behaviours, by two or more parties which may be individuals, corporate actors, or more loosely knit quasi-groups” [3]. Regardless of how conflict is defined, it has become an underlying truth that conflict cannot be suppressed in an organization, at least for a long period of time [4-6] and

given the inevitability of its occurrence in organizations, it is the responsibility of managers to make something productive out of it.

In project life cycle, many manifestations of conflicts happens and these conflicts are affected by many factors inside the organization. The present study seeks to draw on pertinent theories in the area of group innovativeness, latent tension, and project risk management; where project conflict manifestation is the dependent variable, group innovativeness, latent tension, and project risk management is the dependent variable.

The entire IT industry was expected to experience uninterrupted growth, rising to 21.6 percent in 2011, and another 22.3 percent in 2013 [7]. The high growth as opposed to staggered growth in more developed countries imply that UAE has a high potential to compete against Western economies using technology. Even though the IT sector in the country may be smaller compared to some large western economies, businesses will be able to buy the latest technology and acquire market share from foreign competitors who are more inactive [7]. Thus, in this study, empirical evidence was established with principal focus on Information technology firms in UAE. Such firms usually carryout services in the form of projects and have multiple levels of specialties in various scopes of work activities [8]. Each group or specialty is required to contribute to the service project and these are likely to result in conflicts that will appear.

This study attempts to achieve the following research objectives: (1) To examine the effect of Project Risk Management Strategies on project conflict manifestation. (2) To examine the effect of Group Innovative Performance on project conflict manifestation (3) To examine the effect of latent tension on project conflict manifestation.

II. LITERATURE REVIEW

A. Project Conflict Manifestations

Although no single definition of conflict exists, most definitions cuts across having at least two



Revised Manuscript Received on May 22, 2019.

Saeed Alhassani, Faculty of Business and Accountancy, Lincoln University College, Selangor, Malaysia.

Dr Amiya Bhaumik, Faculty of Business and Accountancy, Lincoln University College, Selangor, Malaysia.

The Impact of Project Risk Management Strategies, Group Innovative Performance, and Latent Tensions on Project Conflict Manifestations within Engineering and IT Firms in the UAE

independent groups who are incompatible and interacting in a not so friendly manner. According to Putnam & Poole (1987) [6], conflict is defined “as a pervasive aspect of organizational life” evident in “intrapsychic, dyadic, inter-group and inter-organizational contentions.” It is a phenomenon which is universal [9] and inevitable. It has been argued that as social beings we do have “individual self-interests” [1]. There are two main types of conflict – affective and cognitive conflict [10]. Guetzkow & Gyr (1954) [11] identified two types of conflict – one based on task and the other on group’s interpersonal relations. Priem & Price (1991) [12] also identified task related conflict and socio-emotional conflicts as two different types of conflict. The manifestation of project conflict appears throughout different stages of the project due to the variance in groups inside the projects and it is also impacted by many different factor.

B. Project Risk Management Strategies

Keil, Cule, Lyytinen, & Schmidt (1998) [13] identified the most common risk factors in projects. They include lack of top management commitment to the project; failure to gain user commitment; misunderstanding of the requirements; lack of adequate user involvement and failure to manage end user expectations. These factors are often the same irrespective of the nature of the project. Furthermore, Fairley (1990) [14] came out with 6 phases of project risk management process. These include the identification of risk factors, risk assessment, strategy development, monitoring of risk factors, contingency plan development, managing the crisis and crisis recovery strategy. On the contrary, PMBOK (1996) [15] listed 4 phases in the areas of identification, quantification, response development and control.

The most common challenge faced by project managers is that risks are not properly identified [16]. Oftentimes, project managers and team members identify conditions, signs or events indicating there is a risk but do not take it seriously. Project risks must be identified in terms of schedule, budget, quality or accomplishment of a mission.

Project risk management starts early in the project life cycle; thus, it is important that a clear understanding of the risks inherent in the project be confirmed. Moreover, how well risks are managed in a project depends on the level of risks associated with a project; the risky a project, the more attention and extensive its resolution [17]. The most effective risk avoidance strategy is effective communication among project team and organization [18]. Based on this the manifestation of conflicts will decay. Consequently, the following hypotheses are proposed:

H1: Project risk management strategies have a negative effect on project conflict manifestations.

C. Group Innovative Performance

West & Wallace (1991) [19] define innovation in the context of work teams as the deliberate introduction and implementation of new ideas, procedures or products in work teams in order to create significant benefits to individuals, the team, the organization, or society as a whole. West, Tjosvold, & Smith (2003) [20] add that innovation is

generated after work teams continuously interact internally.

Several Researchers have concurred to the assumption that the effectiveness of work teams in terms of innovation, as well as their ability to be innovative lies greatly in the nature of their internal relationships [21-23]. The way team members handle themselves in conflicts influences the nature of their internal relationships to a large extent. Therefore, project conflict manifestation is greatly affected by the group innovative performance, the more innovative the team working on the project the less the manifestation of project conflicts. Consequently, the following hypotheses are proposed:

H2: Group innovative performance has a negative effect on project conflict manifestations.

D. Latent Tension

Over the years, groups have become building blocks for organizations. However, these groups experience internal problems such as communication, coordination, and conflict management [24]. Parrillo & Donoghue (2005); Verkuyten & Kinket (2000) [25, 26], cite that when a worker is placed in a group where he or she feels different because of other nationalities present, that worker is likely to maintain a social distance. According to Chan & Goto (2003) [27], social distance is the degree of unwillingness to interact with other group members.

Moreover, it is common for workers with different demographic backgrounds to have different belief systems [28] which forms the latent tension that will lead to conflict inside the organisation. Employees find it “hard to coordinate with one another” as a result of different personality [29]. According to Jameson (2007) [30], there are some demographic factors that constitute organizational conflicts such as gender, different culture systems, and age. As the workplace becomes increasingly diversified and people, conflict arises. Organizations break down into subunits and groups, each having its own activity and task. This implies team coordination, group member interdependence, the likelihood of influencing one another and the possibility of conflict occurring. Thus, this accumulated latent tension inside the project groups definitely will lead to a clear appearance of project conflict manifestation throughout the life cycle of the project. Consequently, the following hypotheses are proposed:

H3: Latent tensions have a positive effect on project conflict manifestations.

III. RESEARCH METHOD

A. Overview of the Proposed Conceptual Framework

The present study builds on theories in the area of project conflict management, project risk management and group/project performance measurements. In figure 1, the proposed conceptual model is depicted. It is assumed that project risk management will effectively reduce the project conflict manifestation [H1]. Furthermore, innovative group performance [31]



negatively affect the manifestation of project conflict, as the higher the innovative performance the lower the project conflict manifestation [H2]. Moreover, Latent tensions in group situational paradoxes have been deemed paradoxical and impossible to totally alleviate [32]. These group paradoxes create tensions which is imperative that are reduced during the project life cycle which consequently reduces the project conflict manifestation [H3].

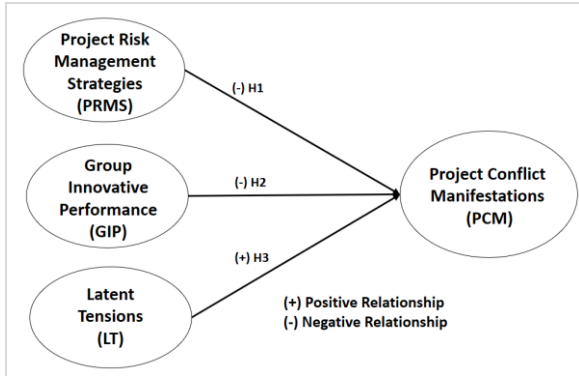


Figure 1: The proposed conceptual framework

B. Development of Instrument and Data collection

Data was collected with the help of survey questionnaire administered through online platform using five likert scale. The survey was mounted online onto Survey Monkey Online Data Collection Platform. The entire period of data collected lasted 12 weeks. The gatekeepers were encouraged to adapt the use of a random sampling technique to select the number of participants allocated to them. The Abu Dhabi Airport Free Zone (ADAFZ) therefore, for instance, was made to select 120 respondents randomly from within their database of employees in the technology related businesses or professions. The gatekeepers were encouraged to use a random number calculator in their selection of participants for the study.

IV. DATA ANALYSIS

PLS (Partial Least Squares) SEM-VB (Structural Equation Modelling-Variance Based) was employed to assess the research model by utilising the software SmartPLS 3.0 [33]. A two-phase analytical technique [34, 35] consisting of (i) measurement model analysis (reliability and validity) and (ii) structural model analysis (examining the conceptualised relationships) was employed after performing the descriptive assessment. This two-phase analytical technique consisting of a structural and a measurement model assessment is better than a single phase assessment [36, 37]. While the model of measurement explains each parameter's measurement, the structural model describes the correlation between the parameters in this model [35].

A. Descriptive Analysis

Table 1 presents the mean and standard deviation of each variable in the current study. The respondents were asked to indicate their opinion in relation to transformational

leadership and human capital based on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Project risk management strategies score the highest with mean 3.545 out of 5.0, with a standard deviation of 0.905. Latent tensions score the lowest with mean 3.362 out of 5.0, with a standard deviation of 0.907.

B. Measurement of Model Assessment

Construct reliability as well as validity (comprising discriminant and convergent validity) were used to examine the measurement model. The particular alpha coefficients of Cronbach were tested to determine the reliability of every core parameter in the measurement model (construct reliability). The quantities of all the unique alpha coefficients of Cronbach in this research ranged from 0.901 to 0.966, which went beyond the proposed value of 0.7 [38]. Moreover, for inspecting construct reliability, all the CR (composite reliability) values ranged from 0.920 to 0.974, which went beyond 0.7 [39-41]. Thus, as Table 1 shows, construct reliability has been fulfilled as Cronbach's CR and alpha were rather error-free for all the parameters.

Analysis of indicator reliability was conducted by utilising factor loadings. When the related indicators are very similar, this is reflected in the construct and signified by the construct's high loadings [35]. As per Hair et al. (2010) [37], the exceeding of values beyond 0.70 suggests substantial factor loadings. Table 1 displays that all articles in this research had factor loadings greater than the suggested value of 0.7 with the exception of the items PRMS5, GIP7, LT6, and LT7 which was removed from the scale because of low loading.

AVE (average variance extracted) was employed in this study to analyse convergent validity, which represents the degree to which a measure is correlated positively with the same construct's other measures. All the AVE values ranged from 0.657 and 0.882, which went beyond the proposed value of 0.50 [37]. Thus, all constructs have complied with the convergent validity acceptably, as shown in Table 1.

The degree to which the articles distinguish among concepts or measure different constructs is demonstrated by discriminant validity. Cross-loadings as well as Fornell-Larcker were employed to analyse the measurement model's discriminant validity. Generally, cross-loadings are employed as the initial step in examining discriminant validity of the markers [35]. In this research, the markers' outer loadings on a parameter went beyond all the cross-loadings with other parameters, and thus the cross-loading condition had met the requirements (Table 2).

The Impact of Project Risk Management Strategies, Group Innovative Performance, and Latent Tensions on Project Conflict Manifestations within Engineering and IT Firms in the UAE

Table 1: Mean, standard deviation, loading, cronbach's Alpha, CR and AVE

Constructs	Item	Loading (> 0.5)	M	SD	α (> 0.7)	CR (> 0.7)	AVE (> 0.5)
Project Risk Management Strategies (PRMS)	PRMS1	0.835	3.54 5	0.90 5	0.901	0.920	0.657
	PRMS2	0.839					
	PRMS3	0.751					
	PRMS4	0.778					
	PRMS5	Deleted					
	PRMS6	0.820					
	PRMS7	0.837					
Group Innovative Performance (GIP)	GIP1	0.836	3.43 9	1.02 8	0.914	0.934	0.701
	GIP2	0.878					
	GIP3	0.860					
	GIP4	0.833					
	GIP5	0.854					
	GIP6	0.759					
	GIP7	Deleted					
Latent Tensions (LT)	LT1	0.953	3.36 2	0.90 7	0.966	0.974	0.882
	LT2	0.958					
	LT3	0.956					
	LT4	0.915					
	LT5	0.912					
	LT6	Deleted					
	LT7	Deleted					
Project Conflict Manifestations (PCM)	PCM1	0.858	2.44 1	1.07 0	0.948	0.957	0.762
	PCM2	0.897					
	PCM3	0.917					
	PCM4	0.894					
	PCM5	0.896					
	PCM6	0.828					
	PCM7	0.815					

Note: M=Mean; SD=Standard Deviation, α = Cronbach's alpha; CR = Composite Reliability, AVE = Average Variance Extracted.

• The measurement used is seven-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Key: PRMS: project risk management strategies, GIP: group innovative performance, LT: latent tensions, PCM: project conflict manifestations.

Table 2: Results of discriminant validity by the cross loading

	II	IM	IS	KN
PRMS1	0.835	0.419	-0.270	-0.427
PRMS2	0.839	0.404	-0.289	-0.407
PRMS3	0.751	0.355	-0.241	-0.382
PRMS4	0.778	0.345	-0.267	-0.368
PRMS6	0.820	0.647	-0.283	-0.680
PRMS7	0.837	0.625	-0.319	-0.698
GIP1	0.461	0.836	-0.308	-0.601
GIP2	0.508	0.878	-0.286	-0.612
GIP3	0.515	0.860	-0.301	-0.609
GIP4	0.490	0.833	-0.274	-0.598
GIP5	0.574	0.854	-0.306	-0.646
GIP6	0.534	0.759	-0.226	-0.581
LT1	-0.305	-0.320	0.953	0.355
LT2	-0.310	-0.333	0.958	0.357
LT3	-0.322	-0.334	0.956	0.369
LT4	-0.356	-0.320	0.915	0.314
LT5	-0.344	-0.285	0.912	0.320
PCM1	-0.655	-0.655	0.378	0.858
PCM2	-0.562	-0.628	0.275	0.897
PCM3	-0.577	-0.634	0.339	0.917
PCM4	-0.534	-0.586	0.323	0.894
PCM5	-0.569	-0.633	0.320	0.896
PCM6	-0.530	-0.653	0.292	0.828
PCM7	-0.557	-0.641	0.303	0.815

Key: PRMS: project risk management strategies, GIP: group innovative performance, LT: latent tensions, PCM: project conflict manifestations.

Table 3: Results of discriminant validity by Fornell-Larcker criterion



Factors		1	2	3	4
		GIP	LT	PCM	PRMS
1	GIP	0.837			
2	LT	-0.339	0.939		
3	PCM	-0.727	0.367	0.873	
4	PRMS	0.614	-0.347	-0.654	0.811

Note: Diagonals represent the square root of the average variance extracted while the other entries represent the correlations.
Key: PRMS: project risk management strategies, GIP: group innovative performance, LT: latent tensions, PCM: project conflict manifestations.

Table 4: Structural path analysis result

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Decision	R ²
H1	PRMS→PCM	-0.315	0.049	6.438	0.000	Supported	0.60
H2	GIP→PCM	-0.504	0.052	9.781	0.000	Supported	
H3	LT→PCM	0.086	0.032	2.668	0.004	Supported	

Key: PRMS: project risk management strategies, GIP: group innovative performance, LT: latent tensions, PCM: project conflict manifestations.

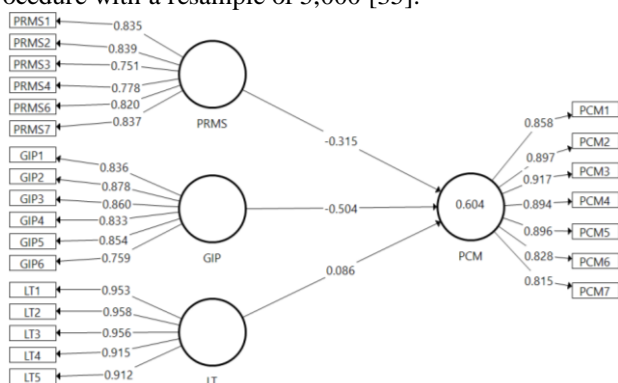
Table 5: IPMA for project conflict manifestations

Latent constructs	Total effect of the construct project conflict manifestations (Importance)	Index values (Performance)
Project Risk Management Strategies (PRMS)	-0.351	64.31
Group Innovative Performance (GIP)	-0.488	60.51
Latent Tensions (LT)	0.074	54.47

Table 3 shows the outcomes for discriminant validity by employing the Fornell-Larcker condition. It was discovered that the AVEs' square root on the diagonals (displayed in bold) is bigger than the correlations among constructs (corresponding row as well as column values), suggesting a strong association between the concepts and their respective markers in comparison to the other concepts in the model [42, 51]. According to Hair et al. (2017) [35], this indicates good discriminant validity. Furthermore, the exogenous constructs have a correlation of less than 0.85 [43, 45]. Therefore, all constructs had their discriminant validity fulfilled satisfactorily.

C. Measurement of Model Assessment

The structural model can be tested by computing beta (β), R², and the corresponding t-values via a bootstrapping procedure with a resample of 5,000 [35].



Key: PRMS: project risk management strategies, GIP: group innovative performance, LT: latent tensions, PCM: project conflict manifestations.

Figure 2: PLS algorithm results

- Hypotheses Tests

Figure 2 and Table 4 depict the structural model assessment, showing the results of the hypothesis tests, with 3 out of the 3

hypotheses are supported. Project risk management strategies and group innovative performance negatively influence project conflict manifestations. Hence, H1 and H2 are accepted with ($\beta = -0.315, t = 6.438, p < 0.001$) and ($\beta = -0.504, t = 9.781, p < 0.001$), respectively. Latent tensions positively influence project conflict manifestations. Hence, H3 is accepted with ($\beta = 0.086, t = 2.668, p < 0.01$). The strength of the relationship between exogenous and endogenous constructs are measured by the standardised path coefficients, which in this case show that the direct effects of group innovative performance on project conflict manifestations is much stronger than the influence of other variables.

Sixty percent of the variance in project conflict manifestations is explained by project risk management strategies, group innovative performance and latent tensions. The values of R² have an acceptable level of explanatory power, indicating a substantial model [44, 46].

- Importance-Performance Map Analysis

Importance-performance matrix analysis (IPMA) was employed as a post-hoc PLS procedure in this study, with the project conflict manifestations used as the outcome construct. According to Hair et al. (2017) [35], the IPMA provides an estimation of the total effects corresponding to the importance of predecessor constructs in affecting the target construct (project conflict manifestations); the average latent variable scores correspond to their performance, whereas the index values' (performance scores) calculation was achieved by rescaling the scores of the latent constructs to within a range from 0 (lowest performance) to 100 (highest performance). IPMA enhances the results of PLS analysis [47] because it gives attention to the latent constructs' average value as well as their indicators (the performance dimension) in addition to performing the path

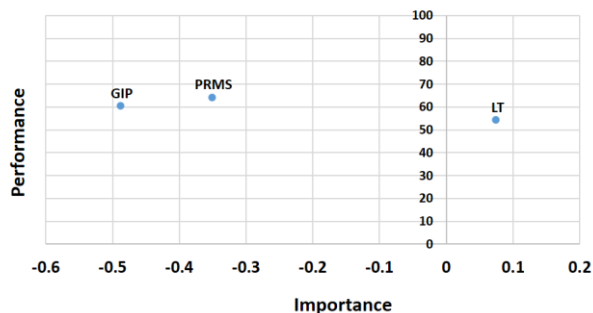


The Impact of Project Risk Management Strategies, Group Innovative Performance, and Latent Tensions on Project Conflict Manifestations within Engineering and IT Firms in the UAE

coefficients analysis (the importance dimension). The results for total effects (importance) and index values (performance) of the IPMA of the outcome construct project conflict manifestations are displayed in Tables 5.

The scores for total effects and index values were plotted on a priority map (refer to Figure 3). It can be observed that group innovative performance is a very important factor in determining the project conflict manifestations due to its relatively higher importance value compared to other constructs in the proposed model.

While there exists an apparent gap on the importance of factors for determining project conflict manifestations, these factors have similar performance. IPMA aims to identify the predecessors that have both relatively high importance (with strong total effect) and relatively low performance for the target construct (with low average latent variable scores) [35]. Particular attention may be given to the attributes of these constructs, which can be potential areas for improvement. In sum, in order to improve the project conflict manifestations, the managerial activities should focus on enhancing the performance of group innovative performance.



Key: PRMS: project risk management strategies, GIP: group innovative performance, LT: latent tensions.

Figure 3: IPMA (Priority Map) for project conflict manifestations

V. DISCUSSION

Conflicts have remained concomitant in project management [48]. Evidence also stipulate that differences in employees and group compositions have remained a key contributor to the project conflicts manifestation in project life cycle. Building on this insight, the present study observes the UAE IT sector, with specific emphasis on the Abu Dhabi IT companies. It draws on pertinent theories in the areas of group innovation, project risk management, and group latent tension to close the main research gap of the study.

In this study, the project risk management strategies was found a negative important predictor of the project conflict manifestation with ($\beta = -0.315$, $t = 6.438$, $p < 0.001$). Using the project risk management strategies will reduce the manifestation of conflicts in project throughout the project life cycle.

As much as they avoid undertaking the activity that gives rise to the risk. In addition reduce the probability of a risk event occurring. Besides transferring it to another stakeholder (customer, supplier, outsourced agency etc) and

sometimes accepting risk head-on and the consequences that come with it, will reduce any apparent manifestation of project conflicts.

Group innovative performance was also was found to have the most negative effect on the project conflict manifestation with ($\beta = -0.504$, $t = 9.781$, $p < 0.001$) in this study. Indicating the higher the innovative performance of players inside the project the less the project conflict manifestation. When groups in the project install and achieve innovative work targets together, achieve step by step work procedures without problems, arrive at innovative procedures for work performance, capable of coming up with procedures that are critical for work performance; manifestation of the project conflict will be at a very low level.

Finally, the third hypothesis was supported as the latent tension positively effect the project conflict manifestation ($\beta = 0.086$, $t = 2.668$, $p < 0.01$). Literature review indicates that conflict management is a significant factor in the UAE and surrounding regions. According to Sarkin (2000) [49], the UAE has a large percentage of its workers from outside its borders, including Thailand, South Africa, India, Philippines, Pakistan, China, in addition to many western countries [49]. This necessitates the need to work in groups towards the achievement of common sets of objectives. These varieties always lead to latent tension. The more the tension the clear apparent of project conflict manifestation. Therefore, management and employees have to trusting each other, and management and employees should depend on each other to utilize the resources including manpower in the project which will lead definitely to reducing the manifestation of project conflicts.

VI. IMPLICATIONS, LIMITATIONS AND FUTURE DIRECTIONS

The study presents new insight on how projects differ from work groups. This insight was considered essential due to the presence of the project conflict manifestation in project life cycle within the research model [50]. Building on the present findings or research model, project risk management and innovative performance and latent tension add to the body of knowledge in organization management. The study is of key practical implications. It adds to the UAE's quest to improve the country's position on the Global Innovation Index. The UAE has remained keen on supporting innovation. Part of these includes the National Innovation Strategy Program and the UAE Vision 2021 [51].

One of the limitations in this current study was encountered in event of primary data collection. It was originally anticipated that response rate might be low and this might harm the results in the form of inadequate data for analysis. To curb this limitation, email reminders were sent agreed participants over the 6-8 weeks reserved for data collection.

VII. CONCLUSIONS

The main objective of the current study is to define the



antecedents that impact the project conflict manifestation throughout the project life cycle. The findings have shed some lights on some new variables that influence the manifestation of project conflict. Group innovative performance, and project risk management have a significant negative influence on project conflict manifestation. On the other hand, latent tension had a positive impact on the dependent variable. Project conflict manifestation

throughout the project life cycle can be significantly reduced via improving the risk management strategies. In addition to improving the group innovative performance inside the project. On the other hand, managers need to take care of the groups' latent tension throughout the various stages of the project. These factors will improve attenuating the project conflict manifestation.

APPENDIX

Appendix A Instrument for variables

Variable	Measure	Source
Project Risk Management Strategies (PRMS)	PRMS1: To avoid risks, we usually avoid undertaking the activity that gives rise to the risk. PRMS2: We reduce the probability of a risk event occurring in my organization PRMS3: To manage risk in my organization, we transfer it to another stakeholder (customer, supplier, outsourced agency etc) PRMS4: Sometimes we accept risk head-on and the consequences that come with it PRMS5: We sometimes outsource risk to outside stakeholders in order to give them pressure. PRMS6: We merge efforts across the organization to overcome risk PRMS7: We implement technological changes to deal with risks sometimes	[52]
Group Innovative Performance (GIP)	GIP1: In my organization, we are able to install and achieve innovative work targets together GIP2: We are able to achieve step by step work procedures without problems GIP3: As a group, we are able to arrive at innovative procedures for work performance GIP4: As a group, we are capable of coming up with procedures that are critical for work performance. GIP5: As a group, we are able to make significant progress in our work performance GIP6: We are able to achieve high work innovation when we work together as a group in my organization GIP7: There is an increased chance of success when we work together as a group in my organization	[19]
Latent Tensions (LT)	LT1: Members in my organization prefer to be identified individually that with the group LT2: Employees are unable to disclose themselves about the company's weaknesses LT3: Management and employees have a problem trusting each other in my organization LT4: Management and employees cannot depend on each other in my organization LT5: The power my organization get from the strength of its members is reduced significantly LT6: In my organization, employees refuse to give up some aspect of their lives to commit to the organization LT7: Employees find it difficult to destroy old structures to pave way for new ones.	[32]
Project Conflict Manifestations (PCM)	PCM1: When undertaking projects, employees often displace priorities PCM2: We have serious conflicts surrounding administrative procedures in project management PCM3: We always have disagreements on technical opinions in project management PCM4: Staffing and personnel allocation is a major problem when we are managing projects PCM5: Cost and budget conflicts often occur in project management in my company PCM6: During project management, conflicts arise out of timing related activities such as sequencing and scheduling. PCM7: Inter-personal issues attributable to personality differences always arise in event of project management	[50]

REFERENCES

- J. Z. Rubin, D. G. Pruitt, S. H. Kim, "Social Conflict: Escalation, Stalemate, and Settlement," McGraw-Hill.
- R. L. Weiss, C. Dehle, "Cognitive behavioral perspectives on marital conflict," in Conflict in personal relationships. US: Lawrence Erlbaum Associates, Inc. 1994, pp. 95–115.
- H. M. Blalock, "Power and Conflict: Toward A General Theory," SAGE Publications, 1989.
- S. H. Appelbaum, B. Shapiro, D. Elbaz. (1998). The management of multicultural group conflict. *Team Performance Management: An International Journal*. 4(5), pp. 211–234.
- M. Myatt. (2012). 5 Keys of Dealing with Workplace Conflict.
- M. Rau-Foster. (2016). Conflict in the Workplace.
- M. Hajli, J. M. Sims. (2015). Information technology (IT) productivity paradox in the 21st century.
- A. Ohlendorf. (2001). Conflict Resolution in Project Management.
- C. A. Robarchek, "A Community of Interests: Semai Conflict Resolution," in *Cultural variation in conflict resolution: Alternatives to violence*, D. P. Fry, K. Bjorkqvist, ed. New York: Taylor and Francis, 1997, pp. 51–58.
- L. T. Simons, S. R. Peterson. (2000). Task Conflict and Relationship Conflict in Top Management Teams: The Pivotal Role of Intragroup Trust. *Academy of Management Proceedings*. 85(1), 102.
- H. Guetzkow, J. Gyr. (1954). An analysis of conflict in decision-making groups. *Hum. Rel.* 7, pp. 367–382.
- R. L. Priem, K. H. Price. (1991). Process and Outcome Expectations for the Dialectical Inquiry, Devil's Advocacy, and Consensus Techniques of Strategic Decision Making. *Group & Organization Studies*. 16(2). pp. 206–225.
- M. Keil, P. E. Cule, K. Lyytinen, R. C. Schmidt. (1998). A Framework for Identifying Software Project Risks. *Commun. ACM*. 41(11), pp. 76–83.
- R. E. Fairley. (1990). Risk Management: The Key to Successful Software Projects. *IFAC Proceedings*. 23(5), pp. 45–50.
- PMBOK. (1996). *Guide to the Project Management Body of Knowledge (PMBOK® Guide)*. Project Management Institute.
- J. W. Mayo. (2009). Effective Project Risk Management.



The Impact of Project Risk Management Strategies, Group Innovative Performance, and Latent Tensions on Project Conflict Manifestations within Engineering and IT Firms in the UAE

- Risk Management for IT Projects. *8th Annual QAI & QAAM Regional Conference*.
17. H. Barki, S. Rivard, J. Talbot. (2001). An Integrative Contingency Model of Software Project Risk Management. *J. Manage. Inf. Syst.* 17(4). pp. 37–69.
 18. H. F. Cervone. (2006). Project risk management. *OCLC Systems & Services: International Digital Library Perspectives.* 22(4). pp. 256–262.
 19. M. A. West, M. Wallace. (1991). Innovation in health care teams. *Eur. J. Soc. Psychol.* 21(4). pp. 303–315.
 20. M. A. West, D. Tjosvold, K. G. Smith, "International handbook of organizational teamwork and cooperative working." England: John Wiley & Sons Ltd. 2003.
 21. O. B. Ayoko, C. E. J. Härtel. (2006). Cultural diversity and leadership: A conceptual model of leader intervention in conflict events in culturally heterogeneous workgroups. *Int. J. Cross Cult. Manag.* 13(4). pp. 345–360.
 22. G. Chen, C. Liu, D. Tjosvold. (2005). Conflict Management for Effective Top Management Teams and Innovation in China. *J. Manag. Stud.* 42(2). pp. 277–300.
 23. S. Mohammed, L. C. Angell. (2004). Surface- and deep-level diversity in workgroups: examining the moderating effects of team orientation and team process on relationship conflict. *J. Org. Behav.* 25(8). pp. 1015–1039.
 24. K. A. Jehn. (1995). A Multimethod Examination of the Benefits and Detriments of Intragroup Conflict. *Admin. Sci. Quarter.* 40(2). pp. 256–282.
 25. V. N. Parrillo, C. Donoghue. (2005). Updating the Bogardus social distance studies: A new national survey. *The Social Science Journal.* 42(2). pp. 257–271.
 26. M. Verkuyten, B. Kinket. (2000). Social Distances in a Multi Ethnic Society: The Ethnic Hierarchy among Dutch Preadolescents. *Soc. Psychol. Quarter.* 63(1). pp. 75–85.
 27. D. K. S. Chan, S. G. Goto. (2003). Conflict Resolution in the Culturally Diverse Workplace: Some Data from Hong Kong Employees. *Appl. Psychol.* 52(3). pp. 441–460.
 28. M. F. Wiersema, K. A. Bantel. (1992). Top Management Team Demography and Corporate Strategic Change. *Acad. Manag. J.* 35(1). pp. 91–121.
 29. A. M. Bodtker, J. K. Jameson (2001). Emotion in conflict formation and its transformation: application to organizational conflict management. *Int. J. Conf. Manag.* 12(3). pp. 259–275.
 30. D. A. Jameson. (2007). Reconceptualizing Cultural Identity and Its Role in Intercultural Business Communication. *J. Bus. Comm.* 44(3). pp. 199–235.
 31. N. Schmitt, R. J. Klimoski, G. R. Ferris, K. M. Rowland, "Research methods in human resources management," South-Western Pub. Co. 1991.
 32. K. K. Smith, D. N. Berg. (1987). A Paradoxical Conception of Group Dynamics. *Hum. Rel.* 40(10). pp. 633–657.
 33. C. M. Ringle, S. Wende, J. M. Becker. (2015). SmartPLS 3. Bonningstedt: SmartPLS.
 34. C. Anderson, D. W. Gerbing. (1988). Structural Equation Modeling in Practice : A Review and Recommended Two-Step Approach. *Psychol. Bul.* 103(3). pp. 411–423.
 35. J. F. Hair, G. T. M. Hult, C. Ringle, M. Sarstedt. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. London: Thousand Oaks: SAGE. 2nd ed. 2017.
 36. R. E. Schumacker, R. G. Lomax, "A Beginner's Guide to Structural Equation Modeling," New York: Lawrence Erlbaum, 2004.
 37. J. F. Hair, W. C. Black, B. J. Babin, R. E. Anderson, "Multivariate Data Analysis," Prentice Hall, 7th ed. 2010.
 38. V. R. Kannana, T. C. Tan. (2005). Just in time, total quality management, and supply chain management: understanding their linkages and impact on business performance. *Omega: The International Journal of Management Science.* 33(2). pp. 153–162.
 39. C. E. Werts, R. L. Linn, K. G. Jöreskog. (1974). Intraclass reliability estimates: Testing structural assumptions. *Educational and Psychological Measurement.* 34(1). pp. 25–33.
 40. R. B. Kline, "Principles and practice of structural equation modeling," 3rd ed. New York: The Guilford Press, 2010.
 41. D. Gefen, D. Straub, M. C. Boudreau. (2000). Structural equation modeling and regression: Guidelines for research practice. *Comm. Assoc. Info. Sys.* 4(1). pp. 1–79.
 42. C. Fornell, D. F. Larcker. (1981). Evaluating structural equation models with unobservable variables and measurement error. *J. Market. Res.* 18(1). pp. 39–50.
 43. W. W. Chin. (1998a). Issues and opinion on structural equation modeling. *MIS Quarter.* 22(1). pp. 7–16.
 44. W. W. Chin, "The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research*," New Jersey: Lawrence Erlbaum Associates, 1998b, pp. 295–358.
 45. Z. Awang (2014). *Structural Equation Modeling Using AMOS*. Shah Alam, Malaysia: University Teknologi MARA Publication Center.
 46. J. Cohen, "Statistical Power Analysis for the Behavioral Sciences," 2nd Ed. New Jersey: Lawrence Erlbaum Associates, 1988.
 47. C. M. Ringle, M. Sarstedt. (2016). Gain more insight from your PLS-SEM results: The importance-performance map analysis. *Ind. Manag. Data Sys.* 116(9). pp. 1865–1886.
 48. A. S. Bu-Qammaz, I. Dikmen, M. T. Birgonul. (2009). Risk assessment of international construction projects using the analytic network process. *Can. J. Civ. Eng.* 36(7). pp. 1170–1181.
 49. J. Sarkin. (2000). Dealing with past human rights abuses: Promoting reconciliation in a future democratic Burma. *Burma Journal*. <http://www.burmalibrary.org/docs/LIOB07-Sarkin.htm>
 50. H. J. Thamhaim, D. L. Wilemon. (1975). Conflict management in project life cycles. *Sloan Management Review.* 16(3). pp. 31–50.
 51. S. Dutta, B. Lanvin, S. Wunsch-Vincent. (2016). *The global Innovation Index 2016: Winning with Global Innovation*.
 52. H. Zhi. (1995). Risk management for overseas construction projects. *Int. J. Proj. Manag.* 13(4). pp. 231–237.

