

# Project Integration, Conflict Management and Project Success: The Moderating Role of Management Support

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## Abstract

The aim of this study is to measure the effect of project integration and conflict management on project success. In addition, this study also examines the moderating roles of management support on the relationship between (a) project integration and project success; (b) conflict management and project success. The questionnaire used in the study was adapted from the previous literature. The sample size used in the study was 217 with a response rate of 87%. The results suggest that project integration has an insignificant effect on project success. In addition, we find that conflict management has a weak positive effect on project success. It was also found that management support moderates the relationship between (a) project integration and project success; (b) conflict management and project success. This study has several limitations. This study was restricted to Karachi and a limited number of respondents were surveyed. Moreover, selected variables were used.

**Keywords:** *Project integration, conflict management, management support, project success.*

## Introduction

Many countries have initiated major development projects in the health and education sectors. These developments projects are risky, complex and bring new challenges that need to be overcome (Sauser et al., 2009). The success of development projects depend upon effective communication, goal clarity and top management success (Pinto-Gouveia, Galhardo, Cunha & Matos, 2012). Müller & Jugdev (2012) suggest that researchers should examine the relationship between project characteristics and project success. In this context, researchers may investigate the role of management support in moderating the relationship between project integration and project success. In addition, there is also a need to analyze

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how management support moderates the relationship between conflict management and project success. De-Bakker, Boonstra & Wortmann (2010) examined the role of project integration and conflict management in project success. The study suggests that the success of a project depends on effective communication, troubleshooting, mission clarity and top management support. However, Savolainen, Ahonen & Richardson (2012) argues that it is important to differentiate between project success factors and project success criteria. Prior studies have measured project success at the organizational and country level. These studies found that conflict management and emotional intelligence have a positive influence on project success (Sauser, Reilly & Shenhar, 2009; De-Bakker, Boonstra & Wortmann, 2010). However, the aim of this study is to measure the effect of project integration and conflict management on project success. It also examines the moderating role of management support on the relationship between (a) project integration and project success; (b) conflict management and project success.

## **Literature Review**

### **Project Integration**

Project integration is a process which improves project performance by coordinating the elements of a project (Lussier & Hartmann, 2017). Crawford & Nahmias (2010) suggest that project integration helps in bringing change within an organization. Similarly, Nixon, Harrington & Parker (2012) suggest that project management initiatives bring both change and success to an organization. It has been argued that launching new projects lead to change. However, this change is not restricted to a technical process (Hornstein, 2015). The past literature suggests that effective change management and leadership significantly influence the successful implementation of projects (Gilley et al., 2008; Jones et al., 2005; Hulvey et al., 2013; Turner & Müller, 2005). The project integration process has a number of steps. First, develop the project charter which describes the project's goals and objectives. Second, develop the project management plan which includes the budget, resources and scope of the project. Third, monitor, control and provide direction to the project using contemporary tools and techniques for managing business risks. The primary responsibility of the project manager is to coordinate the elements of the project and to motivate the team members (Wang & Gibson, 2010). Project integration involves identifying, defining, combining and coordinating different activities of a project (Baker, Murphy & Fisher, 1983). Thus, project integration is crucial for the successful implementation of a project. Additionally, project integration aims to integrate project knowledge (i.e. scope, time, cost, quality, human resources and risk) in the project management groups. All these activities are necessary to ensure that projects are completed within the allocated time and budget.

It has been argued that the successful completion of a project requires an understanding of the elements that contribute towards project complexities (Mintzberg, 1993). It is also important to distinguish between different and interdependent elements. Past studies suggest that elements that are different and interdependent should be integrated through coordination and control (Baccarini, 1996). Managing integration is particularly important in construction projects as they contain a huge number of elements that are different and interdependent (Ireland, 1985). Thus, a project manager should be capable of identifying different and interdependent elements for successful project integration.

### **Conflict Management**

Project management involves the sharing of knowledge, skills and techniques for implementing the project and resolving conflict (Thomas, 1992). A successful project requires that the project manager is involved in the planning, implementation and commissioning of the project (Merchant, & Costantino, 1995; Montoya-Weiss, Massey & Song, 2001). Past studies have found that project costs increase due to time delay and misallocation of funds (Wall & Callister, 1995). Therefore, a good project manager should address the constraints in order to ensure timely completion of a project. The conflict within a team can be task-related conflict or interpersonal conflict (Jehn, 1995). Task conflict arises when team members have different opinions on the assigned task. On the contrary, interpersonal conflicts arise due to interpersonal clashes not related to the team task (Amason & Sapienza, 1997). Both interpersonal and task related conflict adversely affect the success of a project (Jehn, 1995). In addition, both functional and dysfunctional conflicts affect team performance and project success (Amason, 1996).

The concept of conflict is multidimensional. Traditionally, it was believed that conflict within a team is harmful to group development and project success (Wall & Callister, 1995). However, the interactionist perspective does not give importance to conflict between team members. It encourages both conflict stimulation and conflict resolution (Gladstein, 1984). On the contrary, it has been empirically found that interpersonal conflict adversely affects team performance and project success, while task-related conflict has a positive association with innovation, team performance and project success (Amason, & Sapienza, 1997). Gladstein (1984) argues that the type of a task a group performs influences conflict, group performance and project success. Thus, it is possible that different project teams may experience different types of interpersonal conflicts. It has also been argued that team creativity may also generate conflict within the project team (Wall & Callister, 1995). Past studies have found that task conflict adversely affects team performance in complex projects containing non-routine tasks, limited set procedures, non-standardized solutions and uncertainty (Jehn, 1995). On the contrary, it has been argued that conflict between team members promotes creative ideas and new learning (De-Dreu & Weingart, 2003).

Carnevale & Probst (1998) found that team members tend to be more creative in problem solving in an environment of low conflict.

Conflict between team members may also contribute towards project delay and cost overruns. Therefore, it is important that the project manager should have the ability to resolve conflicts. Sometimes, compromise is the best way to resolve a conflict (Wall & Callister, 1995). However, this strategy may not work in complex situations. Managers must maintain an impartial attitude in order to resolve a conflict (Jehn, 1995). Past studies found that the conflict between team members adversely affect the success of a project (Bande, Fernández-Ferrín, Varela & Jaramillo, 2015). Employees tend to perform better under managers who are concerned about their well-being and welfare (Wall & Callister, 1995). It has been found that conflict within a team has a direct association with project failure. Therefore, it is important for the project manager to resolve any conflicts at an early stage to avoid adverse consequences (Bande, Fernández-Ferrín, Varela & Jaramillo, 2015). Conflict between employees tends to arise due to a lack of clarity about organizational objectives and goals. In addition, poor communication between employees also leads to conflict (Wall & Callister, 1995).

## **Management Support**

Top management support is recognized as an important factor for project success (Doll, 1985; Lederer & Mendelow, 1988; Schmidt et al., 2001). Young & Jordon (2008) found that management support has a strong effect on project success. Past studies have found that weaknesses in the implementation of project plans by staff members leads to project failure (Thong, Yap, & Raman, 1996). However, top management support through persistent governance may decrease the incidents of project failure (Kohli & Devaraj, 2004). These findings have been adopted in Australian Standards AS8015 and by the International Standards Organization as ISO38500 (Kohli & Devaraj, 2004; Peppard et al., 2007). Despite this, it is difficult to change the attitude and behavior of board members, senior managers and project managers. It has been observed that some top managers do not take interest in projects and consider it as an operational concern (Crawford, 2005; Jemal, et al., 2002). Sometimes, top managers also ignore the advice of experts as they consider it as lip-service. Similarly, project managers also tend to ignore the advice of experts as they believe that the success of a project is dependent upon technical aspects (Emery & Barker, 2007).

Top management support is important for the successful completion of a project. This support must be extended throughout the project life cycle (Fortune & White, 2006). Many senior executives give more importance to organizational issues as compared to issues faced by a project manager (Luna-Reyes et al., 2005). Organizational maturity models

have emphasized the importance of top management support for the success of a project (Davenport et al., 1998). These models can evaluate the maturity level of an organization and suggest appropriate measures for managing projects successfully. Organizations are considered mature when their top management provide full support to a project being implemented (Healy et al., 1999). Past studies have found that there is a positive correlation between mature organizations and the success of projects (Harter et al., 2002).

Management support is the intensity of senior management involvement and interest in a project (Larson et al., 2014). Many top managers do not provide mentoring and guidance to employees which adversely affects organizational performance (Kerzner, 2013). Management support is considered as the most important factor for the success of an organization (Healy et al., 1999). The top management of an organization includes the chairman, CEO and directors (Denis & Denis, 1995). Top management should provide a supportive working environment and inspire employees through their leadership qualities (Larson & Gray, 2014). Due to globalization, organizations are expanding in different geographical locations with a diversified culture. Therefore, the top management should also pay attention to the cultural values of employees working on a project (Mulki et al., 2015). Employees must maintain a good reputation and working relationship within the organization. The top management should also provide suitable training and development opportunities to employees to enhance their commitment and motivation level. In addition, a positive attitude of top management will improve the performance and satisfaction level of employees (Katsikea et al., 2015). Managers of service sector firms tend to have a different management style as compared to non-service sector firms (Katsikea et al., 2015). For example, a manager of a fast food business is required to perform multiple tasks. Berssaneti & Carvalho (2015) found that top management support, project management and project success are positively correlated.

## **Project Success**

For project success it is necessary to implement both the short term and long term project goals efficiently (Barrick et al., 2001). For example, the purpose of development projects is to create employment and provide infrastructure facilities to the general public. Therefore, its success should be measured by considering its social cost and social benefits (Joslin & Muller, 2015). Past studies have measured project success from technical, economic, financial and marketing perspectives. In some cases, project success is not exclusively based on ROI but its alignment with the overall vision of the project (Wang & Gibson Jr., 2010). Project success has been extensively researched in the project management literature. Traditionally, the success of a project was measured on the basis of time allocation, cost and objectives. However, project success should also be based on social and economic aspects (De-Carvalho et al., 2015). Project efficiency in the short term and its effectiveness in the

long term are also important aspects for the success of a project (Muller & Jugdev, 2012).

There is no consensus on the definition of project success. The measurement of project success varies according to the type of project, time period and so on (De-Carvalho et al., 2015). Since project success is a multidimensional construct, therefore, all the stakeholders including workers, top management, customers and suppliers have different perspectives on its success (Carvalho & Rabechini-Junior, 2015). It has also been argued that the success of a project can be measured from both macro and micro perspectives (Carvalho & Rabechini-Junior, 2015). The macro- perspective is related to project design, performance and gaps between expected and actual performance. On the contrary, the micro-perspective is related to construction cost and time frame. In general, the end-users and society are more concerned about the micro-perspective of the project (Tang, Shen & Cheng, 2010). Consultants and contractors are generally more concerned about the micro-perspective of a project. Traditional measures for the success of a project revolves around cost, time and scope of the project (Cooke-Davies, 2002). Focusing on these three aspects may adversely affect productivity and quality (Alarcón et al., 2011). In addition, these measures tend to ignore participation, satisfaction, organizational success and future growth potential of an organization (Shenhar et al., 2001).

### Conceptual Framework

The conceptual framework of the study is presented in Figure 1.

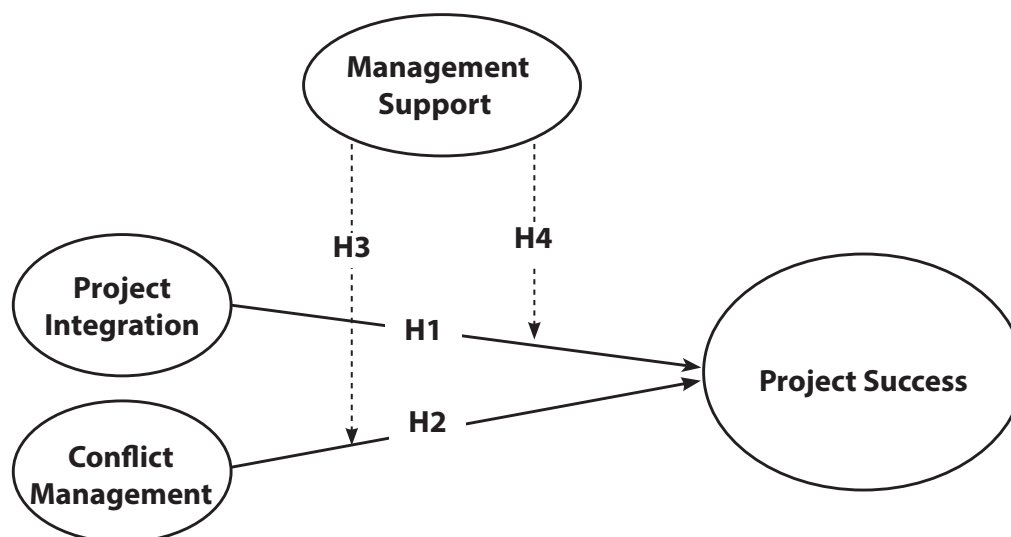


Figure 1: Conceptual Framework

The conceptual framework suggests that project integration and conflict management affect project success. In addition, we postulate that management support moderates the effect of project integration and conflict management on project success.

## Hypotheses

On the basis of the literature review, the following hypotheses have been formulated.

*H1: Project integration has a positive effect on project success.*

*H2: Conflict management has a positive effect on project success.*

*H3: Management support moderates the effect of project integration on project success.*

*H4: Management support moderates the effect of conflict management on project success.*

## Methodology

### Data and Constructs

The data was collected through a questionnaire distributed to project managers working on various projects in Pakistan. A total of 250 questionnaires were distributed through emails and a usable sample of 217 questionnaires was available for statistical analysis. This represents a response rate of approximately 87%. The questionnaire had five constructs and 27 items. The scales and measures of the constructs were adapted from the previous literature (Pinto-Gouveia, Galhardo, Cunha & Matos, 2012; Salovey & Mayer, 1990; Cammann et al., 1983). All were based on the five point Likert scale, where five represents strongly agree and one represents strongly disagree. The constructs and items used in the questionnaire are attached as Annexure 1.

### Data Analysis

The data analysis was carried out in two stages. In the first stage, preliminary analysis including reliability, validity and normality analysis was done. In the second stage, we applied regression analysis in SPSS. The results are discussed in the following sections.



## Results

### Descriptive Analysis

Descriptive analysis for the constructs is presented in Table 1.

**Table 1: Descriptive Analysis**

Constructs	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
Project Integration	2.00	5.00	2.85	0.57	0.44	0.01
Conflict Management	2.00	4.00	2.76	0.47	0.59	-0.07
Management Support	2.00	5.00	2.89	0.57	0.34	-0.16
Project Success	2.00	4.00	2.74	0.46	0.43	-0.19

The results show that the mean value for all the constructs ranged between 2 and 3. Additionally, the lowest skewness value is for management support (Mean = 2.89, SD= 0.57, SK= 0.34) and the highest skewness value is for conflict management (Mean = 2.76, SD= 0.47, SK= 0.59). On the contrary, the highest kurtosis (in absolute) value is for project success (Mean = 2.74, SD= 0.46, KR= -0.19) and the lowest for project integration (Mean = 2.85, SD= 0.57, KR= 0.01). As all the skewness and kurtosis values are between  $\pm 3.5$ , therefore, the dataset fulfills the requirement of univariate normality (Looney, 1995).

### Reliability Analysis

The reliability of the constructs used in the study was assessed through Cronbach's Alpha. The results are presented in Table 2.

**Table 2: Reliability Analysis**

Constructs	Items	Cronbach's Alpha
Project Integration (PI)	6	0.759
Conflict Management (CM)	8	0.710
Management Support (MS)	5	0.720
Project Success (PS)	8	0.670

The results reported in Table 2 show that the Cronbach's alpha values for project management, management support and conflict management are greater than 0.70. This suggests that the constructs are reliable. On the contrary, the Cronbach's alpha value for project success is 0.67 which is reasonable (Carmines & Zeller, 1979).



## Bivariate Correlations Analysis

Bivariate correlations analysis was used to ascertain the linear association between the constructs. The correlations are presented in Table 3.

**Table 3: Bivariate Correlations**

	PI	CF	MS	PS
Project Integration (PI)	1			
Conflict Management(CF)	0.335**	1		
Management Support (MS)	-0.068	0.007	1	
Project Support (PS)	-0.010	0.106	0.261**	1

*\*\* Correlation is significant at the 0.01 level (2-tailed).*

The results suggest that the correlation between project integration (PI) and conflict management (CM) is 0.335 which is a moderate (Cohen, West & Aiken, 2014). The correlation between project integration (PI) and Management Support (MS) is -0.068 which suggests a moderate negative association. Similarly, the correlation between project integration and project success is -0.010 which indicates a weak negative association. In addition, the relationship between conflict management and project success is 0.106 which indicates a weak association. Moreover, the relationship between management support and project success is 0.261 which indicates a moderate positive association. As the bivariate correlations are reasonably low there is unlikely to be a multi-collinearity problem in the data (Cohen, West & Aiken, 2014).

## Multiple Regression Analysis

Multiple regression analysis was used to examine the effect of project integration and conflict management on project success. The multiple regression results are presented in Table 4.

**Table 4: Multiple Regression Results**

Hypothesis	Beta Coefficient	p-value
Project Integration has a positive effect on Project Success (H1)	-0.041	0.478
Conflict Management has a positive effect on Project Success (H2)	0.118	0.089

The results reported in Table 4 suggest that project integration does not have a significant

effect on project success ( $\beta = -0.041$ ,  $p\text{-value} = 0.478$ ). Thus, we do not find support for the first hypothesis. In addition, the results also indicate that conflict management has a weak positive effect on project success ( $\beta = 0.118$ ,  $p\text{-value} = 0.089$ ). The coefficient of conflict management is significant at the 10% level. Thus, we find limited support for the second hypothesis.

### **Management Support, Project Integration and Project Success**

The third hypothesis examines whether management support moderates the effect of project integration on project success. The results suggest that management support moderates the relationship between project integration and project success (Preacher & Hayes, 2008). A summary of results are included in Annexure 2. Therefore, the results support the third hypothesis and are consistent with the previous literature.

### **Management Support, Conflict Management and Project Success**

The fourth hypothesis examines whether management support moderates the effect of conflict management on project success. The results suggest that management support moderates the relationship between conflict management and project success (Preacher & Hayes, 2008). A summary of results are included in Annexure 3. Therefore, the results support the fourth hypothesis and are consistent with the previous literature.

### **Conclusion**

The aim of this study is to measure the effect of project integration and conflict management on project success. In addition, this study also examines the moderating role of management support on the relationship between (a) project integration and project success; (b) conflict management and project success. The results indicate that project integration has an insignificant effect on project success. In addition, we find that conflict management has a weak positive effect on project success. It was also found that management support moderates the relationship between (a) project integration and project success; (b) conflict management and project success. This study has several limitations. This study was restricted to Karachi and a limited number of respondents were surveyed. Moreover, selected variables were used.

## Annexure-1

### Constructs and Items used in the Questionnaire

#### Conflict Management

1. I agree that I may be wrong.
2. I yield to my team's decision on the project at the expense of goal.
3. I try to make differences loom less severe among my team.
4. I try to avoid confrontation with my team Members.
5. I try to realize a middle-of-the-road solution.
6. I push my own point of view at the expense of other views.
7. I fight for a good outcome for myself.
8. I emphasize that we have to find a compromise solution.

#### Project Integration

1. The level of accomplishment as a team unit is high.
2. The members working in the project are assigned the task in balance approach
3. There is a lot of learning among the team members due to the integration mechanism.
4. The level of cooperation in the organizations is highly integrated with the objective of the projects.
5. The working environment at our organization allows integration of work place activities and family requirements.
6. Our organization regularly manages social gathering activities to increase the productivity of project team.

#### Management Support

1. CEO/PM attendance at project meetings
2. CEO/PM involvement in information requirements analysis.
3. CEO/PM involvement in reviewing consultant's recommendations.
4. CEO/PM involvement in decision – making.
5. CEO/PM involvement in monitoring project.

#### Project Success

1. The project met all technical specifications.
  2. The project had come in on budget.
  3. The project is used by its intended clients.
  4. Stakeholders are satisfied with the project result.
  5. Project stay within the budget.
  6. Project meets their operational performance goal.
  7. Project meets their schedule objectives.
  8. Clients using this project will experience more effective decision-making or improved performance.
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## Annexure-2

### Moderating Effect of Management Support between Project Integration and Project Success

Y = PS\_idx  
X = CM\_idx  
M = MS\_idx  
Sample size: 217

#### Moderation (Model Summary)

	EFFECT	SE	T	P(Sig)	LLCI	ULCI
MS_IDX(X)	0.2058	0.0588	3.500	0.0006	0.0899	0.3216
PI_IDX(X)	0.0995	0.0640	1.5540	-0.1217	-0.0267	0.2258
	EFFECT	SE	LLCI	ULCI		
Conditional effect	0.0853	0.1025	-0.1168	0.2874		
	EFFECT	SE	F	P(Sig)		
Out Come:	PS_IDX	0.0791	0.1858		4.8325	0.0028

1. CM → PS

2. (CM→ MS) x (MS→ PS)

Note: R=0.2812, R2=0.0791, p=0.0028, p < 0.05, \*\*p < 0.01

### Annexure-3

## Moderating Effect of Management Support between Conflict Management and Project Success

Y = PS\_idx

X = CM\_idx

M = MS\_idx

Sample size: 217

### Moderation (Model Summary)

	EFFECT	SE	T	P(Sig)	LLCI	ULCI
MS_IDX(X)	0.2058	0.0588	3.5003	0.0006	0.0899	0.3216
PI_IDX(X)	0.0995	0.0640	1.5540	-0.1217	-0.0267	0.2258
	EFFECT	SE			LLCI	ULCI
Conditional effect	0.0853	0.1025			-0.1168	0.2874
	EFFECT	SE	F	P(Sig)		
Out Come:	PS_IDX	0.0791	0.1858	4.8325	0.0028	

1. CM → PS

2. (CM → MS) x (MS → PS)

Note: R=0.2812, R<sup>2</sup>=0.0791, p=0.0028, p < 0.05, \*\*p < 0.01

## References

- Alarcón, L. F., Diethelm, S., Rojo, O., & Calderón, R. (2011). Assessing the impacts of implementing lean construction. *Revista Ingeniería de Construcción*, 23(1), 26-33.
- Amason, A. C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, 39(1), 123-148.
- Amason, A.C. and Sapienza, H.J. (1997). The effects of top management team size and interaction norms on cognitive and affective conflict. *Journal of Management*, 23(4), 495-516.
- Bande, B., Fernández-Ferrín, P., Varela, J. A., & Jaramillo, F. (2015). Emotions and salesperson propensity to leave: The effects of emotional intelligence and resilience. *Industrial Marketing Management*, 44, 142-153.
- Baccarini, D. (1996). The concept of project complexity—a review. *International Journal of Project Management*, 14(4), 201-204.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next?. *International Journal of Selection and Assessment*, 9(1-2), 9-30.
- Baker, B.N., D.C. Murphy & D. Fisher. (1983). Factors affecting project success, *Project Management Handbook* (ed.) D.I. Cleland, W.R. King & V. N., Reinhold, NY, (669-685).
- Berssaneti, F. T., & Carvalho, M. M. (2015). Identification of variables that impact project success in Brazilian companies. *International Journal of Project Management*, 33(3), 638-649.
- Cammann, C., M. Fishman, D. Jenkins, Jr., & Klesh, J. (1983), Assessing the Attitudes and Perceptions of Organizational Members, in S. E. Seashore, E. Lawler, P. H. Mirvis, and C. Cammann (eds.), *Assessing Organizational Change*, New York: John Wiley & Sons, 71-138.
- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and Validity Assessment* (Vol. 17). London: Sage Publications.
- Carnevale, P. J., & Probst, T. M. (1998). Social values and social conflict in creative problem solving and categorization. *Journal of Personality and Social Psychology*, 74(5), 1300-1309.
- Carvalho, M. M. D., & Rabechini Junior, R. (2015). Impact of risk management on project performance: the importance of soft skills. *International Journal of Production Research*, 53(2), 321-340.

- Cohen, P., West, S. G., & Aiken, L. S. (2014). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. London: Psychology Press.
- Cooke-Davies, T. (2002). The "real" success factors on projects. *International Journal of Project Management*, 20(3), 185-190.
- Crawford, L. (2005). Senior management perceptions of project management competence. *International Journal of Project Management*, 23(1), 7-16.
- Crawford, L., & Nahmias, A. H. (2010). Competencies for managing change. *International Journal of Project Management*, 28(4), 405-412.
- Davenport, T. H., De Long, D. W., & Beers, M. C. (1998). Successful knowledge management projects. *Sloan Management Review*, 39(2), 43-57.
- De-Bakker, K., Boonstra, A., & Wortmann, H. (2010). Does risk management contribute to IT project success? A meta-analysis of empirical evidence. *International Journal of Project Management*, 28(5), 493-503.
- De- Carvalho, M. M., Patah, L. A., & de Souza Bido, D. (2015). Project management and its effects on project success: Cross-country and cross-industry comparisons. *International Journal of Project Management*, 33(7), 1509-1522.
- De-Dreu, C.K.W. and Weingart, L.R. (2003) Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology*, 88(4), 741-749.
- Denis, D. J., & Denis, D. K. (1995). Performance changes following top management dismissals. *The Journal of Finance*, 50(4), 1029-1057.
- Doll, W. J. (1985). Avenues for top management involvement in successful MIS development. *MIS Quarterly*, 9(1), 17-35.
- Emery, C. R., & Barker, K. J. (2007). The effect of transactional and transformational leadership styles on the organizational commitment and job satisfaction of customer contact personnel. *Journal of Organizational Culture, Communications and Conflict*, 11(1), 77-90.
- Fortune, J., & White, D. (2006). Framing of project critical success factors by a systems model. *International Journal of Project Management*, 24(1), 53-65.
- Gilley, A., Dixon, P., & Gilley, J. W. (2008). Characteristics of leadership effectiveness: Implementing change and driving innovation in organizations. *Human Resource Development Quarterly*, 19(2), 153-169.



- Gladstein, D.L. (1984) Groups in context: A model of task group effectiveness. *Administrative Science Quarterly*, 29, 499–517.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of Applied Psychology*, 87(2), 268-279.
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365-383.
- Hornstein, H. A. (2015). The integration of project management and organizational change management is now a necessity. *International Journal of Project Management*, 33(2), 291-298.
- Hulvey, K. B., Hobbs, R. J., Standish, R. J., Lindenmayer, D. B., Lach, L., & Perring, M. P. (2013). Benefits of tree mixes in carbon plantings. *Nature Climate Change*, 3(10), 869-875
- Ireland, V. (1985). The role of managerial actions in the cost, time and quality performance of high-rise commercial building projects. *Construction Management and Economics*, 3(1), 59-87.
- Jehn, K.A. (1995) A multi method examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 40(2), 256–82.
- Jemal, A., Thomas, A., Murray, T., & Thun, M. (2002). Cancer statistics, 2002. *Ca-A Cancer Journal for Clinicians*, 52(1), 23-47.
- Jones, B. C., Little, A. C., Boothroyd, L., DeBruine, L. M., Feinberg, D. R., Smith, M. L., & Perrett, D. I. (2005). Commitment to relationships and preferences for femininity and apparent health in faces are strongest on days of the menstrual cycle when progesterone level is high. *Hormones and behavior*, 48(3), 283-290.
- Joslin, R., & Müller, R. (2015). Relationships between a project management methodology and project success in different project governance contexts. *International Journal of Project Management*, 33(6), 1377-1392.
- Katsikea, E., Theodosiou, M., & Morgan, R. E. (2015). Why people quit: Explaining employee turnover intentions among export sales managers. *International Business Review*, 24(3), 367–379.
- Kerzner, H. (2013). *Project Management: A Systems Approach to Planning, Scheduling and Controlling*. New Jersey: Hoboken.
- Larson, E. W., Gray, C. F., Danlin, U., Honig, B., & Bacarini, D. (2014). *Project Management: The Managerial Process* (Vol. 6). Grandview Heights, OH: McGraw-Hill Education.

- Kohli, R., & Devaraj, S. (2004). Realizing the business value of information technology investments: an organizational process. *MIS Quarterly Executive*, 3(1), 53-68.
- Lederer, A. L., & Mendelow, A. L. (1988). Convincing top management of the strategic potential of information systems. *MIS Quarterly*, 12(4), 525-534.
- Looney, S. W. (1995). How to use tests for uni-variate normality to assess multivariate normality. *The American Statistician*, 49(1), 64-70.
- Luna-Reyes, L. F., Zhang, J., Ramon Gil-Garcia, J., & Cresswell, A. M. (2005). Information systems development as emergent socio-technical change: A practice approach. *European Journal of Information Systems*, 14(1), 93-105.
- Lussier, B., & Hartmann, N. N. (2017). How psychological resourcefulness increases salesperson's sales performance and the satisfaction of their customers: Exploring the mediating role of customer-oriented behaviors. *Industrial Marketing Management*, 62, 160-170.
- Merchant, C. S., & Costantino, C. A. (1995). *Designing Conflict Management Systems: A Guide to Creating Productive and Healthy Organizations*. San Francisco: Jossey-Bass Publishers.
- Mintzberg, H. (1993). *Structure In Fives: Designing Effective Organizations*. London: Prentice-Hall, Inc.
- Montoya-Weiss, M. M., Massey, A. P., & Song, M. (2001). Getting it together: Temporal coordination and conflict management in global virtual teams. *Academy of Management Journal*, 44(6), 1251-1262.
- Müller, R., & Jugdev, K. (2012). Critical success factors in projects: Pinto, Slevin, and Prescott-The elucidation of project success. *International Journal of Managing Projects in Business*, 5(4), 757-775.
- Mulki, J. P., Caemmerer, B., & Heggde, G. S. (2015). Leadership style, salesperson's work effort and job performance: the influence of power distance. *Journal of Personal Selling and Sales Management*, 35(1), 3-22.
- Nixon, P., Harrington, M., & Parker, D. (2012). Leadership performance is significant to project success or failure: a critical analysis. *International Journal of Productivity and Performance Management*, 61(2), 204-216.
- Peppard, J., Ward, J., & Daniel, E. (2007). Managing the realization of business benefits from IT investments. *MIS Quarterly Executive*, 6(1), 1-11.
- Pinto-Gouveia, J., Galhardo, A., Cunha, M., & Matos, M. (2012). Protective emotional regulation

- processes towards adjustment in infertile patients. *Human Fertility*, 15(1), 27–34.
- Preacher, K. J., & Hayes, A. F. (2008). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments and Computers*, 36(4), 717–731.
- Schmidt, R., Lyytinen, K., Keil, M., & Cule, P. (2001). Identifying software project risks: An international Delphi study. *Journal of Management Information Systems*, 17(4), 5-36.
- Sauser, B. J., Reilly, R. R., & Shenhar, A. J. (2009). Why projects fail? How contingency theory can provide new insights—A comparative analysis of NASA's Mars Climate Orbiter loss. *International Journal of Project Management*, 27(7), 665-679.
- Shenhar, A. J., Dvir, D., Levy, O., & Maltz, A. C. (2001). Project success: a multidimensional strategic concept. *Long Range Planning*, 34(6), 699-725.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211.
- Savolainen, P., Ahonen, J. J., & Richardson, I. (2012). Software development project success and failure from the supplier's perspective: A systematic literature review. *International Journal of Project Management*, 30(4), 458-469.
- Tang, L., Shen, Q., & Cheng, E. W. (2010). A review of studies on public–private partnership projects in the construction industry. *International Journal of Project Management*, 28(7), 683-694.
- Thomas, K. W. (1992). Conflict and conflict management: Reflections and update. *Journal of Organizational Behavior*, 13(3), 265-274.
- Thong, J. Y., Yap, C. S., & Raman, K. S. (1996). Top management support, external expertise and information systems implementation in small businesses. *Information Systems Research*, 7(2), 248-267.
- Turner, J. R., & Müller, R. (2005). The project manager's leadership style as a success factor on projects: A literature review. *Project Management Journal*, 36(2), 49-61.
- Wall Jr, J. A., & Callister, R. R. (1995). Conflict and its management. *Journal of Management*, 21(3), 515-558.
- Wang, Y. R., & Gibson Jr, G. E. (2010). A study of preproject planning and project success using ANNs and regression models. *Automation in Construction*, 19(3), 341-346.
- Young, R., & Jordan, E. (2008). Top management support: Mantra or necessity?. *International Journal of Project Management*, 26(7), 713-725.