

Unlocking Project Success through Benefits management: A Mediation Model of Team Cohesion and Effective Communication

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ABSTRACT

Keywords:

Benefits management,

Project Success,

Team Cohesion,

Effective

Communication,

Resource Based View

Theory.

This research examines the relationship between benefits management and project success within the IT sector project of Pakistan, employing the Resource-Based View (RBV) theory as a fundamental framework. It analyzes how team cohesion and effective communication influence this relationship, offering insights into the internal dynamics that lead to successful project outcomes. The study uses structural equation modeling to demonstrate that benefits management significantly enhances project success. The findings demonstrate that benefits management substantially improves team cohesion and effective communication, which subsequently exert a positive effect on project success. Team cohesion acts as a partial mediator between benefits management and project success; effective communication did not exhibit a significant mediating effect. The findings highlight the crucial role of internal resources, as outlined by RBV theory, and emphasize the significance of fostering team cohesion in Pakistani IT sector projects to enhance the effectiveness of benefits management. This study fills a significant gap in the literature by presenting empirical evidence on the interplay between benefits management, team cohesion, and effective communication, providing practical insights for project managers seeking to enhance project success in a competitive environment.

INTRODUCTION

In the swiftly advancing IT/software sector, firms face continual pressure to execute projects that fulfill immediate needs while also offering enduring strategic value. Experts widely acknowledge the crucial role of efficient benefits management in achieving project success (Aubry et al., 2021). Benefits management includes the identification, planning, and actualization of anticipated benefits from initiatives while ensuring congruence with company

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goals. Nonetheless, the difficulty resides in proficiently converting these benefits management tactics into profitable project results (Aubry et al., 2021). Evidence currently available suggests that elements such as team cohesion and effective communication significantly influence this relationship; however, we have yet to adequately examine the mechanisms by which these variables interact (Zwikael et al., 2018; Zwikael & Smyrk, 2019).

The Resource-Based View (RBV) hypothesis functions as a fundamental framework for this study, asserting that internal resources—both real and intangible—are crucial for achieving competitive advantage (Helfat et al., 2023). Benefits management is considered a strategic asset in project management, which firms can leverage to enhance project success. Internal competencies, particularly team cohesion and effective communication, must bolster these resources for their effectiveness (Helfat et al., 2023; Zwikael & Smyrk, 2019). Although prior research has highlighted the significance of these variables, a discernible gap exists in comprehending how team cohesion and effective communication mediate the relationship between benefits management and project success, particularly within the IT/software sector of Pakistan.

This study addresses the insufficient comprehension of optimizing benefits management procedures through internal dynamics, including team cohesion and effective communication, within the specific context of the IT/software business of Pakistan (Aubry et al., 2021). Notwithstanding the acknowledged significance of benefits management, there is a lack of adequate empirical information about the interaction of various mediating elements and their impact on project success (Aubry et al., 2021). This study seeks to address this gap by examining the direct and indirect impacts of benefits management on project success, mediated by team cohesion and effective communication, thereby offering significant insights for practitioners in the IT/software industry pursuing project success.

LITERATURE REVIEW

Project Success (PS)

The notion of project success has been thoroughly analyzed in academic literature, with scholars highlighting its complex and multifaceted nature. The success of a project is generally recognized as not being solely determined by the triple constraint criterion, sometimes referred to as the iron triangle. Shenhar et al. (2002) noted that the conventional approach to evaluating project performance relies on the triple constraint framework, encompassing scope, time, and cost. Researchers have explored other methodologies,

including assessing project performance by metrics such as quality, cost, and time (Frefer et al., 2018). Additional components have been identified as critical for achieving project success, such as client acceptability, stakeholder satisfaction, organizational performance, commercialization, and potential opportunities (Shaukat et al., 2022).

Prompt and budget-adherent project execution is essential; however, modern success also hinges on the project's congruence with stakeholder expectations, organizational strategy, and its ability to create sustained value (Naji et al., 2023). Modern projects are expected to be flexible, incorporating feedback systems and iterative approaches that enable adjustments in dynamic environments (Naji et al., 2023). Furthermore, factors such as innovation, social impact, and environmental sustainability have become essential indicators of a project's success, reflecting the evolving expectations of businesses and society (Naji et al., 2023).

Benefits Management (BM)

A 'benefit' is characterized as a flow of value resulting from the utilization of project results by consumers (Chih & Zwikael, 2015). Benefits serve as the rationale for firms to engage in project investments and represent the final deliverables (Zwikael et al., 2018). The success of the Sydney Opera House was not attributable to its project efficiency, characterized by significant time and cost overruns (Godawatte, 2021), but rather to a sustained influx of revenue from visitors and an enhanced reputation for Sydney as a tourist destination. Benefits facilitate organizational strategy by connecting existing value with intended value (Serra & Kunc, 2015).

Benefits Management (BM), or Benefits Realization Management (BRM) (Breese, 2012), is characterized as a collection of processes that guarantee the integration of business strategy requirements into routine operations, thereby generating value in a significant and sustainable way (Godawatte, 2021). The essence of the BM strategy is to initiate with the investment objectives in consideration and thereafter reverse-engineer the necessary steps to attain that ultimate aim. A comprehensive business management technique commences at the project selection phase, wherein executive leaders, business proprietors, and project specialists work together to discern the prospective advantages of investment opportunities (Aubry et al., 2021). Target benefits are articulated and documented in the business case of each relevant project for the approval of the project funder (Zwikael et al., 2018). The intended benefits are thereafter monitored, evaluated, and synchronized with the requirements of pertinent stakeholders throughout the project (Zwikael et al., 2018). The advantages are ultimately realized or 'harvested', which may transpire during the project, at its conclusion, or, more

frequently, post-delivery (Breese, 2012). Consequently, BM occurs prior to, throughout, and subsequent to the conventional life cycle of a project.

Benefits Management and Project Success

Benefits management is widely seen as an essential technique for guaranteeing that initiatives yield sustained value in alignment with company goals. It emphasizes the identification, planning, and actualization of the advantages a project aims to deliver, connecting project outputs to strategic corporate objectives (Chih & Zwikael, 2015). Bradley (2016) asserts that businesses employing structured benefits management frameworks typically see elevated project success rates, since they prioritize not only task completion but also the value derived from those tasks for the organization. The transition from conventional project management approaches, which often emphasize timely and budget-compliant output delivery, to a more outcome-centric methodology highlights the significance of benefits management in attaining enduring project success (Zwikael et al., 2018).

The correlation between benefits management and project success is well-documented in the literature. Zwikael and Smyrk (2019) discovered that proficient benefits management procedures facilitate ongoing evaluation and realignment of project operations with organizational objectives, hence enhancing project success. Projects that implement robust benefits management strategies are more likely to achieve their intended goals, generate enduring value, and secure stakeholder satisfaction (Zwikael & Smyrk, 2019). Achieving this accomplishment necessitates a comprehensive approach, as elements such as team relationships and organizational communication are equally crucial in realizing the benefits. The first hypothesis of the investigation is as follows:

H1: *Benefits management has a positive impact on project success.*

The mediating role of team cohesion between benefits management and project success

Team cohesion has a pivotal mediating function in the correlation between benefits management and project success (Waseem et al., 2022). Team cohesion denotes the degree of unity, trust, and collaboration among team members, which profoundly influences the efficiency of project execution. In benefits management, cohesive teams are more inclined to collaborate effectively to attain project objectives, hence ensuring the realization of anticipated benefits (Zwikael & Smyrk, 2019). Research indicates that cohesive teams exhibit superior communication, enhanced motivation, and a collective comprehension of project objectives, facilitating alignment with benefits management strategies (Waseem et al., 2022). Cohesive teams' exhibit enhanced problem-solving capabilities, adaptability to change, and a

sustained focus on long-term value creation above immediate deliverables. This improved collaboration guarantees that the advantages recognized during the planning phase are efficiently monitored and realized, hence fostering project success (Waseem et al., 2022).

The Resource-Based View (RBV) hypothesis provides a useful framework for understanding the connection between benefits management, team cohesion, and project success. The RBV asserts that an organization's internal resources, both real and intangible, are the principal determinants of competitive advantage and success (Helfat et al., 2023). In project management, benefits management serves as an organizational asset that delivers strategic value by ensuring projects connect with overarching corporate objectives (Helfat et al., 2023). To fully utilize this resource, other internal assets, such as team cohesion, must also be established. As per the RBV, resources must be scarce, valuable, inimitable, and organized to enhance competitive advantage (Barney, 2001). Within this framework, team cohesion serves as a crucial intangible asset that improves the capacity to efficiently manage benefits and execute successful initiatives.

The presence of team cohesion maximizes the value of benefits management, enabling cohesive teams to collaborate, communicate, and implement strategies that align with benefit realization objectives. From a RBV standpoint, businesses that cultivate strong team cohesion are more adept at using their benefits management processes to attain superior project results (Helfat et al., 2023). The collaboration between benefits management and team cohesion underscores the necessity of utilizing internal resources in a synchronized fashion to achieve project success, in accordance with the fundamental tenets of RBV (Helfat et al., 2023). Consequently, incorporating RBV theory into the examination of how team cohesion mediates the connection between benefits management and project performance provides a comprehensive elucidation of how internal resources might be maximized to attain enduring success (Helfat et al., 2023). The aforementioned literature review presents the second hypothesis of the study as follows:

H2: *Team cohesion mediates the relationship between benefits management and project success.*

The mediating role of effective communication between benefits management and project success

Effective communication serves a vital mediating function in the correlation between benefits management and project success. Effective communication among project teams and stakeholders is crucial for ensuring that the advantages identified during the planning phase

are comprehensively understood, monitored, and realized throughout the project lifecycle (Villena Manzanares et al., 2024). Effective communication guarantees that all team members and stakeholders are synchronized with the project's objectives, cognizant of any modifications, and apprised of advancements toward achieving anticipated benefits (Greenaway et al., 2015). Research indicates that inadequate communication can result in mismatched expectations, missing deadlines, and a general inability to realize the project's planned advantages (Ismail et al., 2024). Conversely, established communication channels provide improved coordination and feedback mechanisms, aiding in the adaptation of benefits management strategies to the project's evolving requirements, thereby enhancing the probability of project success (Villena Manzanares et al., 2024).

As a mediator, effective communication connects strategic benefit planning with operational execution, guaranteeing that all participants in the project are aligned with the same objectives (Villena Manzanares et al., 2024). Antonio (2023) demonstrate that the quality of effective communication is directly correlated with the accuracy of benefit realization and the overall success of projects. It promotes interdepartmental communication, minimizing misunderstandings and enabling more seamless transitions between project phases (Antonio, 2023). Consequently, communication serves as a crucial facilitator in guaranteeing that the advantages outlined in the preliminary phases are persistently sought and realized, thereby augmenting the project's overall success (Antonio, 2023).

Utilizing the Resource-Based View (RBV) to analyze the connection between benefits management and project success reveals that communication serves as an organizational resource that enhances the efficacy of benefits management (Helfat et al., 2023). In the absence of robust effective communication strategies, even well designed benefits management frameworks may falter due to misalignment among team members, stakeholders, and project objectives (Antonio, 2023). Effective communication guarantees that the advantages sought are distinctly comprehended, consistently monitored, and modified as needed to conform to changing project circumstances. Effective communication is an essential resource that amplifies the value obtained from benefits management (Antonio, 2023). According to RBV theory, businesses that emphasize and cultivate excellent communication are more likely to attain superior project success by fully leveraging the advantages discovered during the planning phase (Helfat et al., 2023). Consequently, the incorporation of effective communication as a mediating resource underscores the potential of internal capabilities to facilitate project success, in alignment with the concepts of RBV

(Helfat et al., 2023). The preceding literature evaluation articulates the study's third hypothesis as follows:

H3: *Effective communication mediates the relationship between benefits management and project success.*

The suggested theoretical framework encompasses multiple sub-hypotheses alongside its principal hypotheses, outlined as follows:

H4: *Benefits management has a positive impact on team cohesion.*

H5: *Benefits management has a positive impact on effective communication.*

H6: *Team cohesion has a positive impact on project success.*

H7: *Effective communication has a positive impact on project success*

Figure 1 depicts the theoretical framework of the research endeavor.

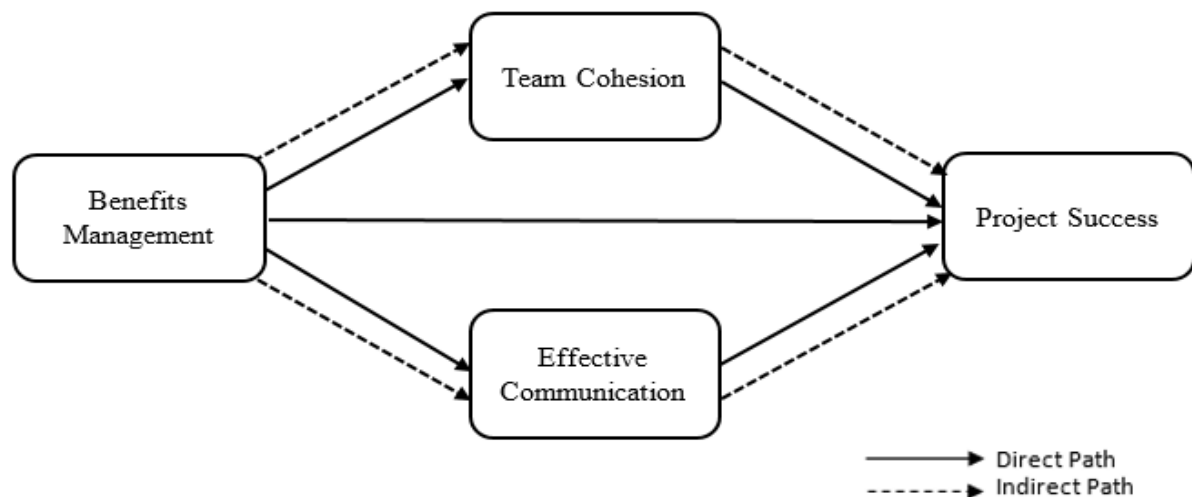


Figure 1: Theoretical Framework

Source: Author's own work

METHODOLOGY

The foundation of the model is based on the Resource-Based View (RBV) of the firm, primarily defined by Jay Barney in 1991, which asserts that a company's competitive advantage depends on its internal resources rather than external market influences. It posits that firms can sustain a competitive advantage if they own resources that are valuable, rare, inimitable, and non-substitutable (VRIN) (Helfat et al., 2023). These resources may be tangible, intangible, or human, and their distinctive combinations can differentiate a firm from its competitors. The resource-based concept asserts that resources differ among firms and are not easily transferable or repeatable, hence strengthening the competitive advantage of their holders (Helfat et al., 2023). Academics have increasingly developed this concept,

arguing that firms ought to focus on their core competencies and strategically enhance their unique internal resources to achieve enduring success (Helfat et al., 2023).

The resource-based view has become a dominant paradigm in strategic management, evolving through the integration of concepts like dynamic capabilities, which suggest that organizations must be able to adapt and reconfigure resources in rapidly changing environments (Helfat et al., 2023). Proponents of the resource-based view argue that it often overlooks external factors and sometimes struggles with the nebulous definition of resources (Helfat et al., 2023). Despite these concerns, the resource-based paradigm has been widely employed across several industries, demonstrating its efficacy in clarifying corporate performance and competitive advantage (Helfat et al., 2023). This concept is crucial for understanding how effectively managed internal resources can contribute to a firm's sustained success (Helfat et al., 2023).

Data and methods

This work utilized a quantitative methodology to examine the proposed relationship between the recommended model and the common technique for cross-sectional analysis in project management, employing a deductive approach (Joslin & Müller, 2016; Ul-Musawir et al., 2017).

The research was conducted within Pakistan's IT/software development sector, primarily targeting full-time professionals engaged in various software development projects. The unit of analysis comprises individual team members engaged in software development. Pakistan's software industry was selected as a representative sample for analyzing the effects of benefits management, team cohesion, and effective communication on project success, owing to its significant influence on GDP. The study utilized purposive sampling, aligning with prior research in similar contexts (Campbell et al., 2020). The authors employed his social network and personal connections to disseminate the survey instrument among participants. A paper-based questionnaire was distributed to team members.

Sample and Procedure

The sample size profoundly impacts the research analysis. A power analysis was performed using a cross-sectional design to ascertain the minimal sample size required for obtaining statistically significant results. The survey contained 400 participants and featured statistical metrics like a p-value of 0.05, a statistical power of 0.95, and an effect size of 0.30. The study included at least 197 participants (Cohen, 2016).

Table 1 presents the demographic characteristics of the study.

Measures	Items	Frequency	%age
Gender	Male	101	51.27%
	Female	96	48.73%
Age (years)	25 – 30	67	34.01%
	31 – 35	79	40.10%
	Above 35	51	25.89%
Education	MS Degree (18 years)	93	47.21%
	Master's Degree (16 years)	104	52.79%
Work Experience	Less than 3 years	27	13.71%
	3 – 7 years	69	35.03%
	7 – 10 years	77	39.08%
	Above 10 years	24	12.18%

Measures

The measurements included in this study were derived from prior research undertaken in the pertinent field. Participants were instructed to answer questions related to their specific initiatives. The survey utilized a 5-point Likert scale, where 1 represented strongly disagree and 5 denoted strongly agree.

Project Success (PS): A six-item scale was adopted from Latif et al. (2020). Cronbach's alpha is 0.863, signifying substantial reliability of the scale.

Benefits management (BM): BM was measured by adopting the 12 item scale of Serra and Kunc (2015). The Cronbach's alpha value is 0.797, indicating the good reliability of the scale.

Team Cohesion (TC): An 8-item scale of Carless and De_Paola (2000) was adopted to measure TC. The Cronbach's alpha is 0.951, demonstrating the excellent reliability of the scale.

Effective Communication (EC): An 6-item scale was adopted to measure EC developed by Dozier et al. (2013). The Cronbach's alpha value of the scale is 0.944, depicting the excellent reliability of the scale.

ANALYSIS

Table 2: Descriptive Statistics

	Mean	SD	Data Normality		Collinearity Statistics	
			Skewness	Kurtosis	Tolerance	VIF
Project Success	2.837	0.792	0.355	1.925	-	-
Benefits management	2.848	0.645	-0.079	-0.119	0.835	1.198
Team Cohesion	3.085	0.956	-0.396	0.068	0.798	1.253
Effective Communication	3.076	0.897	0.106	-0.087	0.927	1.078

Dependent variable: Project Success

Table 2 displays the mean, standard deviation (SD), skewness, kurtosis, and multicollinearity values of the examined constructs. Table 2 displays the scores given by participants in all categories on a 5-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree). The mean and standard deviation provide critical insights into the average rating and the extent of variation in the responses, respectively. The standard deviation numbers signify the statistical variability of answers in relation to the mean.

The skewness and kurtosis were assessed to verify the normality of the data, as per Kline (2023). Data is considered to conform to a normal distribution if the skewness value is within ± 2 and the kurtosis value is within ± 7 , as specified by Hair Jr et al. (2014) and Kline (2023). The data conforms to a normal distribution, as seen by the skewness and kurtosis values displayed in Table 2. The variance inflation factor (VIF) and tolerance were utilized to evaluate the existence of multicollinearity. Daoud (2017) defines multicollinearity as the presence of correlation among variables. Daoud (2017) states that a variance inflation factor (VIF) of 1 indicates no correlation, a VIF ranging from 1 to 5 reflects moderate correlation, and a VIF beyond 5 implies a substantial link. A tolerance value under 0.1 indicates collinearity. The tolerance and VIF values presented in Table 2 demonstrate the absence of multicollinearity within the data.

Data Analysis

The assessment of the component structure, reliability, and validity of the construct is performed. The research was executed utilizing SPSS version 27. The hypothesis and its indirect effect were examined via mediation analysis employing Process Macro Model 4, as established by Preacher and Hayes (2008).

Reliability and validity analysis

Following the preliminary phase of the inquiry, the latent variables were assessed for composite reliability (CR), convergent validity, and discriminant validity. According to the criteria set forth by Fornell and Larcker (1981), the composite reliability (CR) values for all latent variables above 0.90, signifying no issues with internal consistency. The assessment of convergent validity was conducted by examining the average variance extracted (AVE) values, considered a vital criterion. Sarstedt et al. (2016) determined a threshold value of 0.5 for average variance extracted (AVE). All constructs in the present study had average variance extracted (AVE) values beyond 0.5, signifying no substantial concerns with convergent validity. Discriminant validity was established in accordance with the criteria established by Fornell and Larcker (1981). According to the previously stated assumptions, the square root of the mean of all variables must exceed the correlation among all variables. The metrics displayed in Table 3 encompassed factor loading, composite reliability (CR), average variance extracted (AVE), and the square root of AVE (SQRT of AVE).

Table 3: Factor loading, CR, AVE, and SQRT of AVE

Construct	Items	Factor Loadings	CR	AVE	SQRT of AVE
Project Success	PS1	0.917	0.97	0.83	0.910
	PS2	0.917			
	PS3	0.913			
	PS4	0.906			
	PS5	0.908			
	PS6	0.901			
Benefits management	BM1	0.843	0.96	0.66	0.810
	BM2	0.748			
	BM3	0.829			
	BM4	0.832			
	BM5	0.834			
	BM6	0.891			
	BM7	0.890			
	BM8	0.894			
	BM9	0.878			
	BM10	0.662			
	BM11	0.620			
	BM12	0.843			
Team Cohesion	TC1	0.881	0.96	0.77	0.875
	TC2	0.848			
	TC3	0.923			

Construct	Items	Factor Loadings	CR	AVE	SQRT of AVE
Effective Communication	TC4	0.685	0.95	0.76	0.870
	TC5	0.935			
	TC6	0.891			
	TC7	0.920			
	TC8	0.892			
	EC1	0.919			
	EC2	0.899			
	EC3	0.831			
	EC4	0.858			
	EC5	0.903			
	EC6	0.803			

Table 4 presents the values for the assessment of discriminant validity.

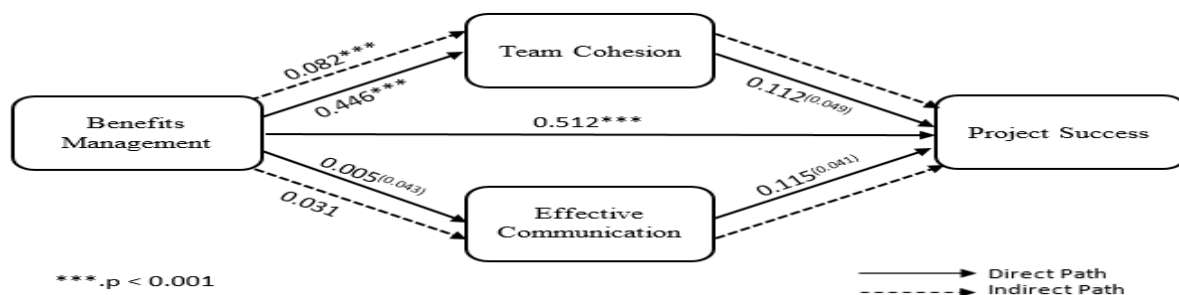
Constructs	PS	BM	TC	EC
PS	<i>0.910</i>			
BM	0.493**	<i>0.810</i>		
TC	0.337**	0.402**	<i>0.875</i>	
EC	0.233**	0.161*	0.262**	<i>0.870</i>

Note(s): PS = Project Success, BM = Benefits Management, TC = Team Cohesion, EC = Effective Communication, **.p < 0.01, *.p < 0.05

Upon thorough examination of the statistical data in Table 4, it is apparent that the bold and italicized numbers are positioned diagonally to signify the square root of the average variance extracted (AVE), implying that all column values are below to the square root of AVE, thereby implying the existence of discriminant validity.

Structural Model testing

A comprehensive assessment of the reliability and validity of the constructs inside the measurement model was performed in the preliminary phase. The second stage entailed assessing the predictive accuracy and interconnections among the variables in the structural model posited by Hair Jr et al. (2014). Consult Figure 2 for a visual depiction of the path diagram.



The standardized coefficient of **H1** ($\beta = 0.512$, $P < 0.001$) demonstrates a statistically significant and positive correlation between benefits management and project success in the structural equation model. As a result, the principal hypothesis (**H1**) of the study has been confirmed. The sub-hypotheses (**H4**, **H5**, **H6**, and **H7**) are directly relevant to the team cohesion, effective communication and project success analyzed in this study. The study's results confirm the **H4** hypothesis ($\beta = 0.446$, $P < 0.001$), demonstrating a direct relationship between benefits management and team cohesion. The research demonstrates a substantial and positive association between benefits management and effective communication (**H5**: $\beta = 0.005$, $P = 0.043$), hence confirming the **H5** hypothesis. The results of the study's **H6** demonstrate a significant and positive correlation between team cohesion and project success ($\beta = 0.112$, $P = 0.049$), hence validating hypothesis **H6**. The findings of the study's **H7** indicate a substantial positive association between effective communication and project success ($\beta = 0.115$, $P = 0.041$), hence confirming hypothesis **H7**.

The research developed hypotheses **H2** and **H3** to align with the indirect effect, particularly mediation. The researcher adhered to the methodology defined by Preacher et al. (2007) and conducted a bootstrap analysis. Wang et al. (2017) demonstrated that the bootstrap method is an effective technique for precisely calculating confidence intervals (CI) to evaluate the indirect effect. The researcher employed a dataset of 5000 bootstrap samples to compute 95% bias-corrected confidence intervals, so assuring the trustworthiness of the estimations.

Table 5 displays the findings of the mediation research for additional examination and analysis.

	Total Effect	T	Sig.	Direct Effect	T	Sig.	Path	Indirect Effect	SE	LLCI 95%	ULCI 95%
H2: BM → PS	0.605	7.905	0.000	0.523	6.339	0.000	BM → TC → PS	0.082	0.036	0.015	0.160
H3: BM → PS	0.605	7.905	0.000	0.574	7.501	0.000	BM → EC → PS	0.031	0.020	-0.001	0.077

Note (s): PS = Project Success, BM = Benefits Management, TC = Team Cohesion, EC = Effective Communication, SE = Standard Error, LL = Lower Limit, UL = Upper Limit, CI = Confidence-Interval, Bootstrap Samples = 5000

The bootstrap analysis results reveal that **H2** is significant, as evidenced by the mediating effect of team cohesion on the connection between benefits management and project success ($\beta = 0.082$, $SE = 0.036$, 95% CI [0.015, 0.160]). The direct and indirect effects are significant; therefore, there is a partial mediation. The bootstrap analysis of **H3** indicates an

insignificant indirect effect of effective communication on the association between benefits management and project success ($\beta = 0.031$, $SE = 0.020$, 95% CI [-0.001, 0.077]). There is no mediation, as demonstrated by a significant direct effect and an insignificant indirect effect (Baron & Kenny, 1986; Zhao et al., 2010).

DISCUSSION

This study's findings offer significant insights into the correlations among benefits management, team cohesion, effective communication, and project success, validating numerous hypothesized links. The principal hypothesis (**H1**), which posited a positive and significant correlation between benefits management and project success, was corroborated by the data. This outcome corresponds with prior studies that underscore the significance of proficient benefits management in facilitating project success. According to Bradley (2016) and Zwikael and Smyrk (2019), firms that diligently manage and monitor project benefits typically attain more success, as their projects are well aligned with strategic goals and value realization.

The research examined the roles of team cohesion and efficient communication as mediating factors. Hypothesis **H4** was validated, demonstrating a substantial positive correlation between benefits management and team cohesion. This finding aligns with other research, indicating that cohesive teams collaborate more effectively and adhere more closely to benefits management methods, hence enhancing the achievement of project objectives (Cortellazzo et al., 2019). Moreover, effective communication demonstrated a modest yet significant positive correlation with benefits management (**H5**), reinforcing the notion that communication facilitates the efficient transmission of information and alignment with project objectives (Ahmed et al., 2021). This outcome indicates that communication facilitates the clear comprehension and successful management of benefits.

The findings corroborated Hypotheses **H6** and **H7**, illustrating the beneficial impacts of team cohesion (**H6**) and effective communication (**H7**) on project success. These findings align with research highlighting the importance of a cohesive team and effective communication in attaining successful project outcomes (Bakker et al., 2011). Cohesive teams enhance collaboration and decision-making, while good communication guarantees that team members and stakeholders stay aligned with the project's objectives. These characteristics enhance overall project performance and success (Antonio, 2023).

The bootstrap analysis results yield intriguing insights concerning the mediation effects proposed in **H2** and **H3**. Hypothesis **H2**, which posited that team cohesion mediates the

association between benefits management and project success, was corroborated signifying partial mediation. This research underscores that benefits management directly influences project success, while team cohesion serves a supplementary function in strengthening this link by facilitating unified efforts towards shared objectives (Zwikael & Smyrk, 2019). Conversely, Hypothesis **H3**, positing that efficient communication mediates the association between benefits management and project success, lacked support due to an insignificant indirect effect. This indicates that while communication is essential for maintaining alignment, it may not serve a substantial mediating function in this setting.

The discovery that team cohesion exerts a more pronounced mediating influence than communication corresponds with Zhao et al. (2010) definition of mediation, which asserts that partial mediation occurs when both the direct and indirect effects are significant.

CONCLUSION

This study validates the critical importance of benefits management in attaining project success within the IT/software sector, emphasizing the essential responsibilities of team cohesion and effective communication. The findings indicate that cohesive teams, collaborating towards common goals, improve the achievement of project benefits, while effective communication facilitates alignment and information dissemination throughout the project lifespan. The partly mediating effect of team cohesiveness between benefits management and project success highlights the need of robust internal collaboration in dynamic sectors such as IT/Software, where swift innovation and intricate projects necessitate highly cohesive and adaptable teams. Although communication is essential, its diminished mediating role indicates that project managers should prioritize enhancing team cohesion to optimize the effectiveness of benefits management approaches in this dynamic and competitive sector.

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