

# *Optimizing Construction Project Team Management: Identifying Team Development Strategies and Techniques*

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**Abstract** – This qualitative research investigation explores the intersection of team development with team management, specifically within the context of the construction industry. Through conducting in-depth interviews with nine highly experienced construction project managers and team members, qualitative data was meticulously gathered. Employing a qualitative approach, we rigorously applied content analysis to scrutinize the amassed data, centering on the core inquiry: 'What precise strategies and techniques of team development are indispensable for effectively overseeing construction teams?' The principal objectives were dual-fold: firstly, to elucidate the nuanced interplay between team development and team management, and secondly, to outline and underscore the critical strategies essential for fostering effective team development within construction projects. Subsequently, the research unearthed three foundational factors pivotal in facilitating and optimizing effective team development, each underscored by its corresponding techniques. These factors encompass the empowerment of team members, strategic delegation coupled with robust support mechanisms, fostering an environment conducive to building effective teamwork and collaboration, and fostering continuous personal development within the team context.

This comprehensive study delivers invaluable insights into the intrinsic correlation between team development and successful management of construction teams, identifying pivotal strategies and techniques aimed at augmenting overall productivity, team cohesion, and operational efficiency within construction team dynamics. These findings present a valuable guide for enhancing the efficacy of construction team management practices, thereby contributing significantly to the field.

**Keywords** – Coaching, Content Analysis, Debriefing, Qualitative Study, Skills Development, Team Development, Team Intervention, Team Management, Teamwork, Training.

## **Introduction**

Despite having a supportive organizational culture, a well-structured team, and a grasp of team lifecycle stages, crafting an effective project team demands additional measures. In addition, It is crucial to note that transforming behavior, enhancing performance, or cultivating an efficient team is not a singular achievement attainable solely through training interventions. Etareri (2022) underscores the escalating significance and complexity of team development within this framework. Sakalyuk (2021) elaborates on the essence of team development, emphasizing the establishment of conditions that foster effective teamwork skills, the cultivation of team-building capabilities, the identification of leaders, and the facilitation of an environment conducive to informal communication. This process forms the core of team development, essential for nurturing a cohesive and high-performing team within an organization.

The landscape of team dynamics within construction projects undergoes continuous evolution, necessitating ongoing attention despite advancements in the theory of team interaction processes (Wang, 2018). The contemporary challenges in engineering underscore the demand for a diverse skill set among engineers, extending beyond scientific expertise to encompass skills such as adaptability, teamwork, and effective communication (Ismail et al., 2019). Recognizing this shift, there emerges an unmet need to delve into strategies and techniques fostering team development within construction projects, an area often underexplored in the existing literature.

Salas, Reyes and McDaniel (2018) noted the substantial progress in the science of teams while also acknowledging the ample room for further advancement. This recognition sets the stage for a comprehensive inquiry aiming to address the gap in understanding team development strategies within the context of construction projects. This study aims to investigate these strategies and techniques from the perspectives of construction project managers and team members. The pursuit of this inquiry stems from the understanding that a nuanced comprehension of these dynamics is paramount in effectively navigating challenges prevalent in the construction industry.

Hence, this research is guided by the central question: What strategies and techniques of team development are vital for proficiently managing construction teams? Through this exploration, the study endeavors to contribute to the advancement of knowledge in team dynamics within construction projects, ultimately facilitating more effective management practices in the industry.

### Study Objectives and Aims

The study, titled "Optimizing Construction Project Team Performance: Identifying Strategies and Techniques for Effective Team Development," pursued two primary objectives focused on improving the understanding of this correlation:

#### 1- Investigation of Team Development Interventions:

This research initially delved into a comprehensive exploration of team development interventions. It involved a meticulous review of prior studies on teams development and its influence on team management. The primary aim was to discern and clarify the pivotal factors of team development contributing to successful team management, drawing from insights gleaned from existing research.

#### 2- Identification of Essential Strategies and Techniques for Effective Team Management:

Additionally, the study aimed to identify and document critical strategies and actions related to team development that facilitated successful construction team management. It entailed a thorough analysis of best practices from the perspectives of both construction team members and project managers, with the goal of pinpointing consistently successful methods and approaches. The intention was to highlight comprehensive elements outlining essential factors and techniques organizations could adopt to enhance team development and management processes.

In essence, this research delved into the intricacies of managing construction teams and revealed foundational strategies and methods necessary to cultivate effective team development, which in turn bolstered team management. The overarching goal was to provide the construction industry with valuable insights, aiming to enhance industry practices and improve project outcomes.

### Theoretical Background

#### Team Development Overview

literature explored a number of team development interventions aimed at developing team expertise including team training, coaching, and debriefing. Shuffler et al. (2018) Emphasized the necessity of implementing team development interventions to influence a team's performance. After reviewing academic literature, the authors identified ten effective types of interventions that shape how teams perform. These encompass "team task analysis (TTA), team composition (TCO), teamwork design (TWD), team charters (TCHs), team performance monitoring and assessment (TPMA), team debriefing (TD), team building (TB), team training (TT), team coaching (TCa), and team leadership (TL)" (p. 22). Lacerenza et al. (2018) Argued that "team development interventions are crucial in increasing effective teamwork competencies and processes, thereby leading to improvements in proximal and distal outcomes" (p. 517). Bisbey et al. (2021) Reviewed a number of team development

interventions and identified “team training, simulation, coaching, and debriefing as important elements aimed at building team expertise” (p.190). In his research, Smolska (2022) examined project teamwork, exploring the validity and frequency of utilizing developmental approaches like training, consulting, coaching, and mentoring within project teams. The author highlighted that the choice of developmental methods within a project team ought to align with the team's unique characteristics, its specific requirements, and the nature of the tasks involved. The author emphasized the importance of diagnosing the development needs of the project team members on an ongoing basis, both those of a team and individual nature.

### ***Team Training Intervention***

“Training is a programmed process to change attitude, knowledge, or skill behavior by learning experience to achieve effective performance in a range of activities” (Ginting et al., 2020, p. 5). “It is believed that when teams are used effectively and provided with the necessary training, it is possible for the organization to achieve the expected outcomes” (Al-Malki & Juan, 2018, p. 535). “Of all the research on team development interventions, the evidence for team training is perhaps the strongest” (Shuffler et al., 2018, p. 12).

For the effectiveness of the training, “the first recommendation concerns the timing of the training announcement and schedule, a clear understanding of the purpose and goal of the training, and the training activities” (Ginting et al., 2020, p. 5). The authors further argued, “A training program should have relevant goals, evaluation objectives, and appropriate methods”(p. 5). In terms of training methods, McEwan et al. (2017) Identified four methods that targeted the regularity and efficiency of the team performance as well as teamwork processes that include; “the provision of didactic lectures/presentations training, workshops training, simulation training, and review-type activities conducted in situ training” (p. 3). Further, the authors revealed positive and significant effects of team training interventions on team processes and team performance which are:

- 1- Teamwork training was shown to be effective at enhancing both teamwork and team performance across a variety of team contexts. This finding was supported by Salas, Klein, Burkner et al. (2008) that “team training interventions were more effective for team processes, it stands to reason that improving processes will also positively influence performance outcomes” (p.926). Johnston et al. (2019) Concluded that “employing effective team training best practices improved learning, team cognition, emergent team processes, and performance” (p.1). Umar et al. (2020) discovered that “practical training would encourage employees’ soft-skill competence, improve Employee-Creativity, improve team performance, and help in the optimal team performance” (p. 1021). The influence of training on soft skills was supported by Ginting et al. (2020) that training is a significant method for improving soft skills and “the soft skills behaviors that significantly changed through the training were communication and leadership” (p. 1)
- 2- The effects of teamwork training on teamwork outcomes were significantly larger for new teams compared to existing teams. This finding was contradicted by Salas, Klein, Burkner et al. (2008) that “team training to work just well (if not better) for intact teams” (p. 923).
- 3- Although all four training methods (didactic lectures, workshops, simulation, and review-type activity) were effective in enhancing team performance and outcomes, interventions that targeted didactic instruction did not result in significant improvements in teamwork itself. These findings were supported by Salas, Klein, Burkner et al. (2008) that “for process outcomes, task-work training did not work as well as teamwork training. Similarly, teamwork-focused training appeared to result in enhanced affective outcomes in comparison with task-work training” (p. 923)
- 4- It was found that training interventions had a significant effect on both teamwork behaviors and team performance when any dimension of teamwork was targeted.
- 5- Teamwork training has a positive impact on teamwork and team performance regardless of the way in which these variables are assessed.

### ***Coaching Intervention***

Altering behavior, enhancing performance, or cultivating an efficient team isn't a singular achievement attainable solely through training interventions. “While in a training approach, the person might utilize these for a short period of time, his/her habitual style is likely to return” (Passmore & Gordon, 2018, p. 50). Thus, as stated by Passmore, Van Nieuwerburgh and Barr (2019), “coaching is now widely used in organizations in a variety of different ways to achieve a range of different outcomes” (p.

4). Therefore, Coaching was regarded as a vital organizational tactic, serving as a means to drive behavioral shifts, enhance skill sets, motivate individuals, implement problem-solving approaches, and employ interventions aimed at enhancing team results.

In the modern era, Smolska (2021) contended that coaching holds immense sway in fostering the growth of individuals and teams. It serves as a catalyst for uncovering untapped potential, establishing ambitious objectives, nurturing motivations, and dismantling both internal and external barriers that hinder progress. Beyond mere personal enhancement, coaching empowers individuals and teams to evolve into enhanced versions of themselves, addressing personal concerns and aspects linked to holistic self-fulfillment. Moreover, its impact extends beyond individual aspirations, rendering it a crucial tool for fostering cohesion and effectiveness within group dynamics and teamwork.

### ***Individual coaching***

Individual coaching involves offering personalized guidance and instruction directly to an individual, aiming to enhance their knowledge, skills, and overall job performance through one-on-one interactions. “Although coaching is generally conducted to reveal the individual’s potential in order to maximize his or her performance” (Woo, 2017, p. 2), previous studies showed coaching “has an impact on; job performance improvement, self-awareness development, employee satisfaction, satisfaction with work, and satisfaction with the manager” (Szilvia et al., 2019, p. 77). The authors contended that employing coaching correlates with heightened productivity and reduced staff turnover rates.

In a study by Romão et al. (2022), involving 271 employees, the researchers explored how employees perceived their leaders' coaching abilities. The authors discovered that the quality of leaders' coaching negatively affects employees' inclination to leave their jobs, while positively influencing their happiness. Importantly, the study highlighted that an employee's happiness mediates the relationship between a leader's coaching skills and their intent to leave the job. As a recommendation, the authors suggested that organizations recognize the value of a leader's coaching skills, not just in enhancing employee happiness but also in mitigating turnover intentions. Consequently, they advised organizations to encourage leaders to incorporate more coaching skills into their leadership styles. According to Echeverri (2020), coaching is perceived as a multifaceted tool that aids in cultivating customer-focused employees and assisting staff in identifying avenues to enhance their job-related skills. The author contends that coaching supervisors play a pivotal role in fostering a team-oriented mindset, emphasizing power-sharing, serving others, and promoting collaborative teamwork within the workplace. “This may increase the affective commitment with the supervisor because of increased cohesion among team members and feelings being valued” (Ali et al., 2020, p. 12). These findings were supported by Raza, Ali, Ahmed et al. (2017) that through managerial coaching, “employees feel thrive at work, when the manager acts as a coach, openly communicates with subordinates, accepts the ideas of others, gives performance to individual needs, and relies on the team approach to enhance the subordinates learning which further enhance job performance” (p. 805). Akhta and Zia-ur-Rehman (2017) Mentioned that there were “a positive relationships of managerial coaching on role clarity, job performance, and organizational commitment” (p. 297). While, Ribeiro et al. (2021) related this positive relation to the managers’ coaching skills that “have a positive impact on individual performance and affective commitment” (p. 2163). Besides that, “the third thrust of the human resources development strategy plan (PSKSM2016-2020) emphasizes the importance of managing quality human capital or employee through coaching methods to improve work performance in an organization” (Ahmad et al., 2021, p. 156).

Ali et al. (2020) Emphasized the pivotal role of a manager adopting a coaching stance in enhancing the feedback orientation of subordinates, crucial for optimal employee performance. The authors highlighted how this approach nurtures a relationship of open communication between supervisors and their subordinates, fostering an environment where ideas, emotions, and concerns can be freely exchanged. These managers actively promote a team-centric mindset among employees, prioritizing the needs of subordinates and encouraging employee learning that extends beyond traditional job roles of supervision and control. Such managerial behaviors notably enhance the emotional commitment of employees toward their supervisors, a significant factor beneficial for all stakeholders, employees, managers, and the organization at large. Employee emotional commitment, being highly valued, significantly enhances organizational outcomes.

Furthermore, Sharma (2017) noted that coaching yields diverse outcomes across its different stages. Initially, it generates intangible personal advancements that pave the way for more concrete outcomes later on. The intermediary role of these intangible personal advancements suggests their equal importance alongside tangible results. This underscores the need for assessing coaching effectiveness by placing equal emphasis on gathering data related to intangible and unintended outcomes, in

addition to tangible results. Hence, employing multiple criteria to gauge coaching effectiveness becomes essential to fully grasp its contributions within organizational contexts.

Ali et al. (2020) Emphasized the role of coaching in sparking innovation and promoting ongoing learning among employees in the workplace. Their study investigated how managerial coaching (MC) directly and indirectly influences innovative work behaviors (IWBs), revealing a positive correlation between MC and IWBs. The research highlighted MC's effectiveness not only as a managerial practice and an organizational development strategy but also as a cost-effective training approach, crucial for enhancing employees' skills in navigating a constantly changing corporate environment. The authors stressed that when managers embrace a coaching approach, they prioritize individual needs alongside organizational goals, fostering better communication between subordinates and supervisors. This approach cultivates a collaborative team culture, providing individuals with numerous opportunities to learn and thrive within the team dynamic.

### *Team Coaching*

“Despite an increase in the literature on teams, team coaching as a term is a relatively new concept” (Jones et al., 2019, p. 62) and (Widdowson et al., 2020, p. 36). Jones et al. (2019) Further defined team coaching as “a team-based learning and development intervention that considers the team to be a system and is applied collectively to the team as a whole. The focus of team coaching is on team performance and the achievement of a common or shared goal” (p. 75). “team coaching ups the ante by adding topics, such as shared team or organizational purpose, better collaboration, silo-busting, the creation of more open forms of communication, greater creativity, and increasing the external focus of a group” (de Vries, 2020, p. 157). At its heart, “team coaching is a learning process aimed at improving performance relating to a team’s shared goals. Learning implies change, yet the route to change may involve individual shifts in thinking, agreement on collaborative action, and influencing the prevailing business, political, or social environment pertaining to the team’s organization, customers, and wider stakeholders” (James et al., 2020, p. 5). “Team coaching had positive effects on team performance processes regarding effort, skill, and Knowledge, which in turn had a direct impact on team effectiveness” (Urionabarrenetxea et al., 2021, p. 18). “When team coaching is done without organizational constraints, and at the right time in the team’s development, it was suggested that this would lead to significant improvements in the team’s effectiveness” (Hastings & Pennington, 2019, p. 185). The authors cited that “team coaching distinguishes itself: from team building through a focus on a performance outcome, from team training due to a systemic focus, from team facilitation due to be less structured, and differs in its educational component” ( pp. 184 - 185).

Additionally, de Vries (2020) highlighted several advantages of team coaching:

- Enhances collective awareness by enabling learning from shared experiences.
- Improves understanding of how organizations share, process, and utilize information.
- Boosts productivity by fostering shared practices and leveraging lessons learned.
- Offers a platform to receive coaching while benefiting from the successes and challenges of fellow team members.
- Promotes increased self-mastery and leadership skills through mutual support and coaching among team participants.
- Generates synergy, commitment, and enthusiasm due to the intensive coaching process.
- Significantly, team coaching's scalability enhances the likelihood of creating transformative changes within organizations.

In order to answer the question; Could good team coaching solve performance deficiency in the workplace?, Salihovic (2021) Reviewed the literature on team coaching and concluded that “team coaching establishes a new quality of relationships within teams and organizations, empowers an invisible force that drives collective progress, creates recognizable difference, and adds value to a company by increasing optimism, competence, and performance” (p. 19).

The values of team coaching are not only on the team but extend to team leadership development. Fontannaz and Cox (2020) highlighted several key points about coaching's role in team leader development. “Firstly, coaching aids transitioning leaders by enabling them to navigate their and others' experiences and bridge gaps between expectations and reality. Secondly, it supports leaders in their roles by offering both support and challenges. Thirdly, continuous coaching can foster a coaching culture

within teams. Lastly, the study noted that coaching contributes to confidence-building, serving as a mediator between leader development and team performance” (p.31-32). Thus, Coaching serves as a potent intervention method, offering valuable support to leaders navigating transitions in their careers (de Vries, 2020; Terblanche and Albertyn 2018; Terblanche, Albertyn and Collier–Peter 2017).

In summary, team coaching benefits include improved collective awareness, enhanced productivity, skill development, and the creation of a supportive and energized team environment, ultimately facilitating transformative organizational change.

### *Team Debriefing Intervention*

“While team training and coaching are often formal team development interventions led by trained facilitators, team debriefs are often led by team members” (Bisbey et al., 2021, p. 197). Although debriefing is used intensively in the health sector, aviation, education, and the army, “it plays an imperative role in the process of professional development in various fields” (Ku et al., 2019, p. 1).

Debriefing aims to “identify and resolve gaps in knowledge, skills, attitudes, and communication related to the individual, team, and/or system” (Decker et al., 2021, p. 27). “organizations and groups use debriefs for different purposes. These purposes include but are not limited to, information sharing, performance management, problem-solving, decision-making, enhancing group identity, experiential learning, minimizing accidents, identifying hazards, taking corrective action, establishing psychological safety, and so forth” (Allen et al., 2018, p. 506). A thorough debriefing fosters a collective comprehension among team members regarding their respective roles and duties, and about the team’s priorities, strengths, and shortcomings. Besides that, team debriefs help a team “build shared mental models (i.e., collective knowledge structures encompassing task and team-relevant knowledge) which have been shown to increase team effectiveness” (Lacerenza et al., 2018, p. 18).

In the debriefing session, team members review a recent experience, analyze successes, pinpoint areas for enhancement, and establish collective plans for future actions. Thus, “debriefing promotes learning, enables teams to adjust” (Tannenbaum & Greulich, 2022, p. 1), “allows for team performance examination (Rajwani, 2019, p. 1), “effective, time- and cost-efficient strategy” (Fatima et al., 2020, p. 415), “facilitates reflective thinking through structured discussion and feedback” (Sahin & Basak, 2021, p. 1), a tool for stress management (Ko & Choi, 2020, p. 11), a method to “determine opportunities for improvement at the individual, team, and system level” (Allam et al., 2020, p. 9), “beneficial for quality assurance” (Arriaga et al., 2019, p. 1039), “tool for detecting errors, improving team communication” (Fiala, 2022, p. 2), and “increasing self-awareness” (Fontenot & White, 2019, p. 1).

Table 1 Summary of Team Development Factors From Literature

1. Improve workgroup skills	2. Develop social relationships
3. Solve problems	4. Create the necessary conditions for the formation of skills of effective teamwork
5. Create an atmosphere of information communications	6. Team task analysis
7. Teamwork design	8. Team charters
9. training Intervention a- Provision of didactic lectures/presentation b- Workshops training c- Simulation training d- Review-type training	10. Coaching Intervention a- Individual coaching b- Team Coaching
10- Team performance monitoring & assessment	11- Team Debriefing



### Study Problem and Questions

While there have been gradual improvements in the theory of team interaction processes, it's evident that certain aspects of team interaction demand ongoing attention (Wang, 2018). Acknowledging the evolving nature of engineering challenges, it's recognized that engineers must possess not only scientific expertise but also non-scientific skills like recognizing limitations, acquiring new knowledge, and fostering strong teamwork and communication abilities (Ismail et al., 2019). Consequently, there's an unmet need to explore strategies and techniques for team development, indicating a gap in the existing literature on construction projects. Salas, Reyes and McDaniel (2018) Argued that “the science of teams has made substantial progress but still has plenty of room for advancement” (p. 593).

This study aims to bridge this gap by conducting a comprehensive investigation into team development strategies and techniques from the viewpoint of construction project managers and team members. The inquiry is motivated by the understanding that comprehending these dynamics is crucial for effectively addressing challenges in the construction industry. Therefore, the subsequent question is posed to pursue these research objectives:

*What strategies and techniques of team development are essential for effectively managing construction teams?*

### Research Methodology

This preliminary investigation comprised two pivotal phases in its research design, outlined in Figure 1. The research framework employed qualitative methods for both data collection and analysis.

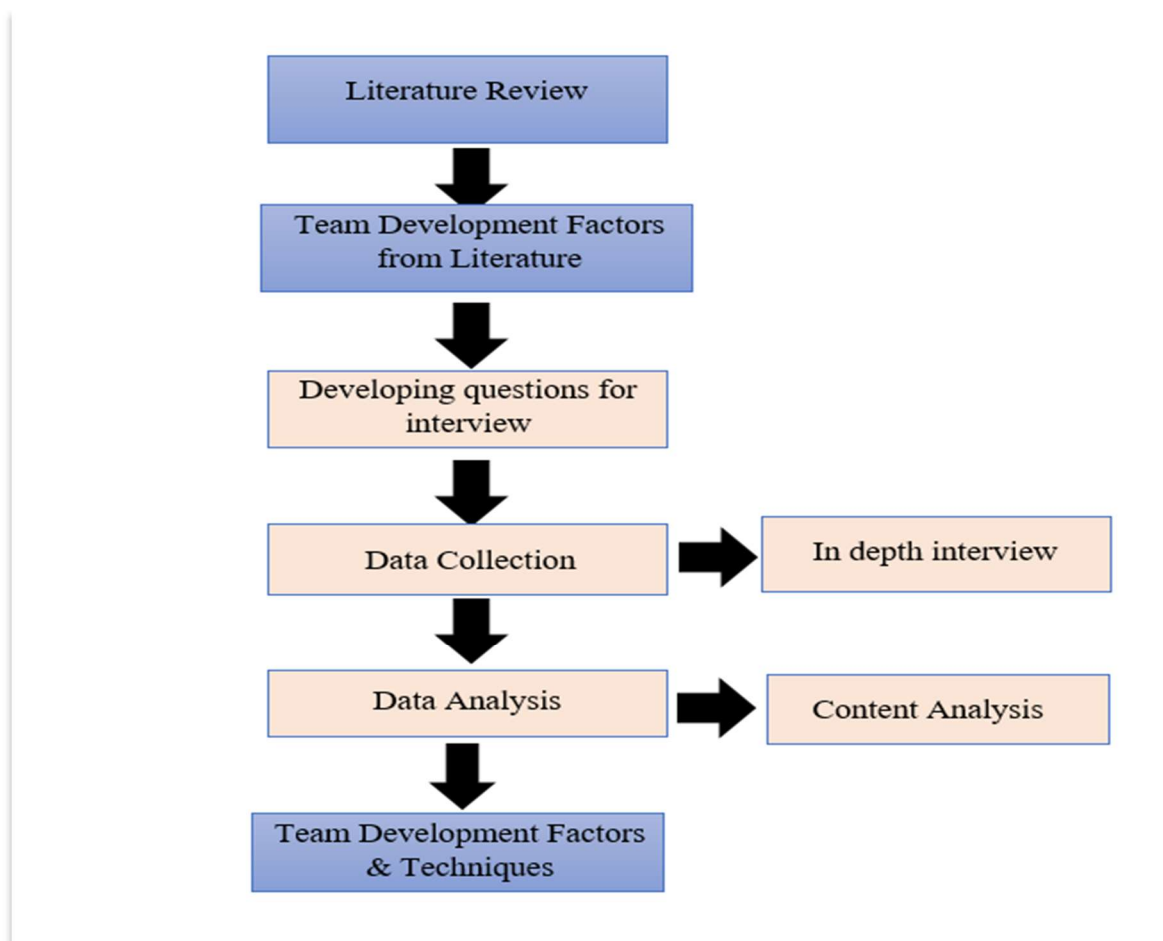


Figure 1 Research Design

The research embarked on its initial step by delving into an extensive review of existing literature and theories to identify factors and elements contributing to team development. This step formed the bedrock for the subsequent phase. It's essential to highlight that these team development strategies were drawn from broader studies encompassing various team dynamics.

Moving into the second phase, the study crafted questionnaires aimed at exploring practical techniques and elements for the development of construction project teams. The primary goal was to address the core research query and delineate the pivotal factors and techniques for team development that significantly impact the adept management of construction teams.

For the second phase, qualitative data collection was conducted via in-depth interviews involving nine expert project managers and project team members. These interviews were carried out individually, employing a face-to-face, semi-structured format. This format allowed the researcher to maintain control and delve deeply into the participants' experiences. The interview questions were meticulously crafted, drawing insights from the literature (referenced in Appendix 1) to ensure clarity without leading or provoking responses. To preserve data integrity, all interviews were recorded and securely stored.

The subsequent data analysis phase involved a qualitative content analysis approach, employing thematic analysis techniques. This entailed initial coding, the construction of overarching themes, and the development of broader conceptual frameworks.

In essence, this research adopted a qualitative methodological approach for both data collection and analysis. This method enabled a thorough and extensive examination of myriad factors and techniques influencing effective team development and management within construction teams.

### **Data Collection and Analysis**

#### **In-depth Interview**

Nine team members with diverse backgrounds and roles within their organization participated in a series of comprehensive, in-person interviews conducted separately. Each interview was meticulously organized to enable participants to express their personal experiences and viewpoints concerning successful strategies and methods for team development. The primary goal was to acquire valuable insights into the diverse effective strategies and techniques they had applied for team development.

To analyze the data gathered, a content analysis technique was utilized. This method involved extracting recurring themes and patterns from the responses provided by the interviewees.

#### **Interviewees Overview**

Table 2 serves as a comprehensive repository of information regarding the study participants. It offers an in-depth summary of these individuals, highlighting crucial details about their professional backgrounds, particularly emphasizing their years of experience in construction projects, the organizations they are associated with, and the specific roles they hold within these organizations.



Table 2. Interviewees' Professional Information

Interviewee	Organization Type	Position	Years of Experience
Interviewee 1	Consultant	Cost control and contract engineer	28
Interviewee 2	Consultant	Project Manager	25
Interviewee 3	Consultant	Contracts Manager	27
Interviewee 4	Client	Project Manager	9
Interviewee 5	Consultant	Senior Resident Engineer	46
Interviewee 6	Consultant	Resident Engineer	29
Interviewee 7	Contractor	Senior Civil Engineer	15
Interviewee 8	Consultant	Resident Engineer	30
Interviewee 9	Client	Team Leader	25

### Interview Results

Appendix 2 offers a brief overview outlining the different themes and sub-themes derived from the insights shared by seasoned construction project practitioners.

### Interview Analysis

The themes and sub-themes, Table 3, encompass a comprehensive array of strategies and actions essential for fostering effective team development within the construction industry. These encompass various facets, including giving space to team members, delegating with care and trust, providing constructive feedback and recognition, setting clear project plans, encouraging unity and sympathy, establishing clear team boundaries, establishing a framework for team operations, creating supporting processes, and foster social connections and camaraderie. Collectively, these components contribute to the development of a robust, collaborative, and successful team.

Furthermore, the process of effective team development extends to promoting positive interactions, promoting well-being, and addressing problems proactively. These elements, when effectively executed, lead to the formation of a unified and high-performing team.

In addition to these considerations, recognizing exceptional performance, addressing wrong behavior, regularly ensuring accountability, conducting regular meetings, prioritizing task management, implementing ethical standards, ensuring a safe work environment, and leading through collaboration are integral aspects that contribute to the construction of a robust and ethically sound project team.

The insights of nine seasoned construction practitioners have further emphasized the significance of various elements in achieving effective team development within the construction sector. These elements include providing necessary resources, motivating by leveraging strengths, arranging technical workshops, providing training and development, embracing diversity and inclusion, using 360-degree feedback, and establishing protocols for external influences.

In conclusion, effective team development necessitates a holistic approach. Incorporating these factors and techniques, as highlighted by professional construction team members, into construction team management can lead to improved teamwork, productivity, and project outcomes. Customizing these tactics to address the particular requirements and dynamics of the team is essential for success in the construction industry.

Table 3. Team Development Factors and Techniques

Team Development Factors	Team Development Techniques
Empowerment, Delegation, and support	Give space to the team members to do their job
	Delegate with care and trust team members
	Provide constructive feedback and recognition
	Setting a clear plan for the project
	Empower your team to make smart decisions
	Encourage unity, friendliness, and sympathy among team members
	Foster trust, belonging, and inclusivity
	Establish clear team boundaries
	Maintaining stability in team membership
	Establishing a framework for team operations
	Creating processes that support team success
	Fostering the social connections and building camaraderie and trust among team members
	Avoid negative comments and encourage positive interactions
	Promote well-being and foster physical and mental health at work
	Establish Strategies for identifying and resolving problems within the team
	Compliance with relevant standards and references for work execution
	Providing awards or promotions for exceptional performance
	Addressing wrong behavior within the team and applying warnings and penalties
	Regularly checking in with team members to ensure their needs are met and they feel supported

Building Effective Teamwork and a Collaborative Environment	Actively involve all team members and Enhance team-building activities
	Ensuring accountability and Establishing clear rules and guidelines for responsibility
	Addressing logistical needs for effective work operations
	Arranging and conducting regular meetings to discuss work progress and Issues affecting team performance
	Prioritizing tasks and providing guidance on task management
	Leading through collaboration and guidance
	Implement high organizational ethical standards to protect team members
	Ensuring a safe, healthy, and secure work environment
	Providing the necessary resources, equipment, instruments, and tools for work.
	Motivate the team by mitigating weaknesses and supporting the strengths of each member.
Personal Development	Arrange technical workshops
	Provide training and development tools
	Avoid constant routine work to encourage individual skills
	Mentorship for skill development
	Embrace diversity and inclusion
	Use 360-degree feedback
	Establish protocols for handling external influences
	Build resilience and foster Flexibility
	Active listening and empathy
	support Positive attitude
	encourage Problem-solving behavior
	Evaluate performance using standard criteria for all members
	Empower positive behavior among team members
	Integration of team members' expertise and skills
	Encourage Knowledge transfer among team members
	Establish Accountability

### **Discussion**

The primary objective of this study is to identify and document essential strategies and actions related to team development that notably contribute to effective team management. The research outcomes provide valuable insights into the critical factors and techniques essential for fostering successful team management, as depicted in Table 3.

Peterson et al. (2013) have outlined a comprehensive team development process aligned with the research findings. Their process involves setting team goals, creating pacts, evaluating team satisfaction and successes, constructing a decision-making matrix, formulating a communication plan, instituting a peer feedback loop, devising a team performance improvement process, and implementing a team recognition system (p.32).

Similarly, Giedraitis et al. (2017) proposed guidelines emphasizing competence development, setting operational goals for members, assigning more responsibility to team members, and authorizing each member to resolve conflicts independently (p. 220). These propositions support the research findings concerning the second and third crucial factors and techniques for team development.

The research underscores the significance of collaborative human resource management practices, encompassing training and development tools, performance evaluations, diversity and inclusion initiatives, and awards and promotions. Engelsberger et al. (2023) support these findings, highlighting how collaborative human resource management practices, such as team-based recruitment, training, performance management linked with rewards systems, and job design practices, facilitate relational leadership, aiding newly formed teams in overcoming challenges (p. 1).

Wei et al. (2023) reinforce the importance of empowerment and support factors identified in this research by offering insights for team leaders. They emphasize creating a supportive space, fostering a positive and growth-oriented environment, addressing potential team conflicts through resolution strategies, encouraging trust among team members, allowing room for improvement, and facilitating reflection on teamwork experiences.

Furthermore, Salas, Reyes, and McDaniel (2018) argue for teamwork-supportive organizational conditions and environments that promote psychological safety, resolve conflicts, ensure safety and learning, and improve performance before conceptualizing and implementing a team.

Additionally, Elshan and Ebel (2020) emphasize the crucial role of personal development in fostering effective team performance. Moura et al. (2019) highlight proper reward systems as facilitators and negative affectivity and lack of competence as hindering factors. Janardhanan et al. (2019) propose promoting a learning mindset among members to enhance both team and individual performance.

Based on these research outcomes, recommendations for fostering effective team development within the construction industry are delineated. These include establishing clear project plans, setting team boundaries, fostering social connections, encouraging positive interactions and proactive problem-solving, arranging technical workshops, leading through collaboration, implementing feedback mechanisms, providing necessary resources, ensuring a safe work environment, conducting regular team meetings, recognizing exceptional performance, establishing protocols, and encouraging unity and empathy within the team.

Incorporating these strategies into construction team management can significantly enhance teamwork, productivity, and project outcomes. Customizing these approaches to suit specific team dynamics within the construction industry is crucial for optimal success.

### **Research Limitations and Recommendations**

The study's aim was to extract valuable strategies and techniques crucial for the advancement of construction teams, drawing from the perspectives of professional members involved in construction projects. However, the study's scope is constrained by certain limitations. Firstly, the sample size utilized for the research was relatively small, potentially restricting the comprehensiveness and generalizability of the findings. Additionally, the sources of bias originating from the interviewees' viewpoints might have been influenced by the particular project environments and the prevailing organizational culture. These external factors could have shaped and skewed the insights provided, possibly limiting the applicability of the strategies and techniques identified within a broader context. To enhance research and reduce limitations like sample size and bias impact,

consider: broadening sample diversity, using varied sampling methods, triangulating data sources, employing structured interviews, understanding contextual influences, adopting longitudinal studies, and seeking peer validation.

Furthermore, an additional limitation arises from the generic nature of the responses provided by participants, offering restricted assistance for addressing the specific challenges encountered in the development of the construction team. Therefore, to address generic participant response limitations, researchers may use tailored interviews, real scenarios, and probing methods. Engage experts, study ongoing projects longitudinally, seek iterative feedback, and collaborate cross-disciplinarily. Implementing these approaches refines research, yielding precise insights into construction team development challenges.

### **Conclusion**

Drawing insights from interviews with nine construction team members, this research presents key recommendations for fostering effective team development within the construction industry, as evident in Table 3. These recommendations include establishing clear project plans, defining team boundaries, cultivating social connections, fostering positive interactions, facilitating skill development opportunities, promoting collaborative leadership, integrating feedback mechanisms, providing essential resources, ensuring a safe work environment, managing external influences, and nurturing unity and empathy.

Implementing these strategies, endorsed by seasoned construction professionals, carries the potential to significantly enhance teamwork, boost productivity, and improve project outcomes. However, recognizing the necessity for tailored adaptations to suit the unique dynamics of individual construction teams is essential for successful implementation and optimal results. Customization ensures that these approaches resonate and are applicable in addressing the distinct challenges encountered by diverse construction teams.

### **References**

- [1]. Ahmad, N., Haron, I., Noranee, S., Kub, T., Noorkorina, T., & Nor Hafiz, T. (2021). Practice of Managerial Coaching and Employees Performance Behavior. *Empirical Economics Letters*, 20(2), 155-164. Retrieved from [https://www.researchgate.net/profile/Hazliza-Haron/publication/352672414\\_Practice\\_of\\_Managerial\\_Coaching\\_and\\_Employees\\_Performance\\_Behavior/links/60d2a21d299bf19b8d9d9c93/Practice-of-Managerial-Coaching-and-Employees-Performance-Behavior.pdf](https://www.researchgate.net/profile/Hazliza-Haron/publication/352672414_Practice_of_Managerial_Coaching_and_Employees_Performance_Behavior/links/60d2a21d299bf19b8d9d9c93/Practice-of-Managerial-Coaching-and-Employees-Performance-Behavior.pdf)
- [2]. Akhta, S., & Zia-ur-Rehman, M. (2017). Impact of Managerial Coaching Behavior on Job Performance: Analyzing the Role of Organization Commitment And Role Clarity. *Journal of Managerial Sciences*, 11(3), 297-318. Retrieved from [https://www.qurtuba.edu.pk/jms/default\\_files/JMS/special\\_edition/3%20FMM/16%20\(AIC-FMM%202017\)%20297-318%20Sidra%20Akhtar%20Dr.%20Zia%20.pdf](https://www.qurtuba.edu.pk/jms/default_files/JMS/special_edition/3%20FMM/16%20(AIC-FMM%202017)%20297-318%20Sidra%20Akhtar%20Dr.%20Zia%20.pdf)
- [3]. Ali, M., Arbi, A., Raza, B., Malik, Z., & Sheikh, L. (2020). Does Managerial Coaching Effevt Subordinates' Effdback Orientation? Mediating Role of Affective Supervisor Commitment. *Polish Journal of Management Studies*, 22(2), 9-21. doi:10.17512/pjms.2020.22.2.01
- [4]. Allam, T., Ahmed, A., & Ghaly, A. (2020). Effect of Debriefing Learning Strategy on Nursing Students' Knowledge and Performance. *IOSR Journal of Nursing and Health Science*, 9(1), 8-18. doi:10.9790/1959-0901040818
- [5]. Allen, J; Reiter-Palmon, R; Crowe, J; Scott, C. (2018). Debriefs: Teams Learning From Doing in Context. *American Psychological Association*, 73(4), 504-516. doi:10.1037/amp0000246
- [6]. Al-Malki, M., & Juan, W. (2018). Leadership styles and job Performance: A Literature review. *Journal of International Business Research and Marketing*, 3(3), 40-59. doi:10.18775/jibrm.1849-8558.2015.33.3004
- [7]. Arriaga, A., Sweeney, R., Muralidharan, M., Gordon, E., & Baranov, D. (2019). Failure to Debrief After Critical Events in Anesthesia Is Associated with Failures in Communication during the Event. *Anesthesiology*, 130(6), 1039-1048. doi:10.1097/ALN.0000000000002649
- [8]. Bisbey, T., Traylor, A., & Salas, E. (2021). Transforming Teams of Experts into Expert Teams: Eight Principles of Expert Team Performance. *Journal of Expertise*, 4(2). Retrieved from [https://www.journalofexpertise.org/articles/volume4\\_issue2/JoE\\_4\\_2\\_Bisbey\\_etal.html](https://www.journalofexpertise.org/articles/volume4_issue2/JoE_4_2_Bisbey_etal.html)

- [9]. de Vries, M. (2020). Executive Group Coaching: Interventions Not for the Faint of Heart. *Advances in Global Leadership*, 12, 153-171. doi:10.1108/S1535-120320190000012009
- [10]. Decker, S., Alinier, G., Crawford, S., Jenkins, D., & Wilson, C. (2021). Healthcare Simulation Standards of Best Practice™ The Debriefing Process. *Clinical Simulation in Nursing*, 58, 27-32. doi:10.1016/j.ecns.2021.08.011
- [11]. Echeverri, P. (2020). Value-forming micro-practices of managerial coaching. *Coaching: An International Journal of Theory Theory, Research and Practice*, 13(2), 191-208. doi:10.1080/17521882.2019.1707245
- [12]. Elshan, E., & Ebel, P. (2020). Let's team Up: Designing conversational agents as teammates. *International Conference on Information Systems (ICIS)* (pp. 1-9). Hyderabad, India: AIS Electronic Library (AISeL) . Retrieved from [https://aisel.aisnet.org/icis2020/digital\\_learning\\_env/digital\\_learning\\_env/2](https://aisel.aisnet.org/icis2020/digital_learning_env/digital_learning_env/2)
- [13]. Engelsberger, A., Bartram, T., & Halvorsen, B. (2023). Maximizing team development for open innovation in digital product development: the role of collaborative HRM and relational leadership. *Personnel Review* , 1-17. doi:10.1108/PR-09-2022-0657
- [14]. Etareri, L. (2022). Fundamental Stages of Development through the Relevance of Team Building. *Medical Engineering Themes*, 3(1), 48-56. doi:10.55162/MCET.03.058
- [15]. Fatima, S., Liaquat, A., Mansoor, S., Rauf, A., & Fatima, S. (2020). Clinical Biochemistry Teaching: Use of Peer Debriefing by Pendleton's Rule as An Instructional Tool. *JPMA*, 70(3). Retrieved from [https://www.researchgate.net/profile/Sumreena-Mansoor/publication/341370671\\_pendeltons\\_jpma-march\\_2020/links/5f3788dc458515b729221476/pendeltons-jpma-march-2020.pdf](https://www.researchgate.net/profile/Sumreena-Mansoor/publication/341370671_pendeltons_jpma-march_2020/links/5f3788dc458515b729221476/pendeltons-jpma-march-2020.pdf)
- [16]. Fiala, T. (2022). Implementation of a Critical Event Debriefing Tool in the Pediatric Intensive Care Unit. (Doctoral dissertation, University of Missouri-St. Louis), 1-5. Retrieved from [https://scholar.google.ae/scholar?hl=en&as\\_sdt=0%2C5&as\\_vis=1&q=Implementation+of+a+Critical+Event+Debriefing+Tool+in+the+Pediatric+Intensive+Care+Unit&btnG=](https://scholar.google.ae/scholar?hl=en&as_sdt=0%2C5&as_vis=1&q=Implementation+of+a+Critical+Event+Debriefing+Tool+in+the+Pediatric+Intensive+Care+Unit&btnG=)
- [17]. Fontannaz, S., & Cox, E. (2020). Team Leadership Development Through Coaching: A Case Study of Skippers in a Round-The-World Sailing Race. *International Journal of Evidence Based Coaching and Mentoring*, 18(2), 19-34. doi:10.24384/14k4-pa14
- [18]. Fontenot, C., & White, K. (2019). Using Evidence-Based Debriefing to Combat Moral Distress in Critical Care Nurses: A Pilot Project. *Journal of Nursing Education and Practice*, 9(12), 1-12. doi:10.5430/jnep.v9n12p1
- [19]. Giedraitis, A., Stašys, R., & Skirpstaitė, R. (2017). Management team development opportunities: A Case of Lithuanian furniture company. *The International Journal Entrepreneurship and Sustainability Issue*, 5(2), 212-222. doi:10.9770/jesi.2017.5.2(4)
- [20]. Ginting, H., Mahiranissa, A., Bektı, R., & Febriansyah, H. (2020). The Effect of Outing Team Building Training on Soft Skills Among MBA Students. *The International Journal of Management Education*, 18, 1-12. doi:10.1016/j.ijme.2020.100423
- [21]. Hastings, R., & Pennington, W. (2019). Team Coaching: A Ahematic Analysis of Methods Used by External Coaches in A Work Domain. *International Journal of Evidence Based Coaching and Mentoring*. *International Journal of Evidence Based Coaching and Mentoring*, 17(2), 174-188. doi:10.24384/akra-6r08
- [22]. Ismail, N., Abdul Aziz, N. A., Hong, C. K., & Zainal, M. Z. (2019). Assessing teamwork value in Project-Based learning of capstone project course. *Advances in Social Science, Education and Humanities Research*, 470, 148-158. Retrieved from [https://www.researchgate.net/publication/346192433\\_Assessing\\_Teamwork\\_Value\\_in\\_Project-Based\\_Learning\\_of\\_Capstone\\_Project\\_Course](https://www.researchgate.net/publication/346192433_Assessing_Teamwork_Value_in_Project-Based_Learning_of_Capstone_Project_Course)
- [23]. James, J., Mavin, S., & Corlett, S. (2020). A Framework of Modes of Awareness for Team Coaching Practice. *International Journal of Evidence Based Coaching and Mentoring*, 18(2), 4-18. doi:10.24384/t724-vm40
- [24]. Janardhanan, N., Lewis, K., Reger, R. K., & Stevens, C. K. (2019). Getting to know You: Motivating Cross-Understanding for imptoved team and imdvidual performance. *Organization Science*, 1-36. doi:10.1287/orsc.2019.1324



- [25]. Johnston, J., Phillips, H., Milham, L., Riddle, D., Townsend, L., DeCostanza, A., . . . Fitzhugh, S. (2019). A Team Training Field Research Study: Extending a Theory of Team Development. *Frontiers in Psychology*, 1-13. doi:10.3389/fpsyg.2019.01480
- [26]. Jones, R., Napiersky, U., & Lyubovnikova, J. (2019). Conceptualizing The Distinctiveness of Team Coaching. *Journal of Managerial Psychology*, 34(2), 62-78. doi:10.1108/JMP-07-2018-0326
- [27]. Ko, E., & Choi, Y.-J. (2020). Debriefing Model for Psychological Safety in Nursing Simulations: A Qualitative Study. *International Journal of Environmental Research and Public Health*, 17(8), 1-12. doi:10.3390/ijerph17082826
- [28]. KU, O., LIANG, J., Change, S., & WU, M. (2019). A Preliminary Case Study of Promoting Teacher Professional Development via Post-Lesson Debriefing with the Support of Sokrates Cloud Services. *Proceedings of the 27th International Conference on Computers in Education* (pp. 1-7). Taiwan: Asia-Pacific Society for Computers in Education. Retrieved from [https://apsce.net/icce/icce2019/proceedings/paper\\_168.pdf](https://apsce.net/icce/icce2019/proceedings/paper_168.pdf)
- [29]. Lacerenza, C., Marlow, S., Tannenbaum, S., & Salas, E. (2018). Team development interventions: Evidence-based approaches for improving teamwork. *American Psychologist*, 73(4), 517-531. doi:10.1037/amp0000295
- [30]. Lawrence, P. (2017). What do Experienced Team Coaches Do? Current Practice in Australia and New Zealand. *International Journal of Evidence Based Coaching and Mentoring*, 15(1), 94-113. Retrieved from [https://www.researchgate.net/publication/312283868\\_What\\_do\\_experienced\\_team\\_coaches\\_do\\_Current\\_practice\\_in\\_Australia\\_and\\_New\\_Zealand](https://www.researchgate.net/publication/312283868_What_do_experienced_team_coaches_do_Current_practice_in_Australia_and_New_Zealand)
- [31]. Lyons, R., Lazzara, E., Benishek, L., & Zajac, S. (2015). Enhancing the Effectiveness of Team Debriefings in Medical Simulation: More Best Practices. *The Joint Commission Journal on Quality and Patient Safety*, 41(3). doi:10.1016/S1553-7250(15)41016-5
- [32]. McEwan, D., Ruissen, G., Eys, M., Zumbo, B., & Beaucham, R. (2017). The Effectiveness of Teamwork Training on Teamwork Behaviors and Team Performance: A Systematic Review and Meta-Analysis of Controlled Interventions. *PLoS One*, 12(1), 1-23. doi:10.1371/journal.pone.0169604
- [33]. Moura, I., Dominguez, C., & Varajao, J. (2019). Information systems project teams: factors for high performance. *Team Performance Management*, 25(1/2), 69-83. doi:10.1108/TPM-03-2018-0022
- [34]. Passmore, J., van Nieuwerburgh, C., & Barr, M. (2019). *Workplace coaching*. New York, United State of America: Oxford University Press. Retrieved from <http://centaur.reading.ac.uk/83129/>
- [35]. Passmore, J; Gordon, S. (2018). *International Coaching Psychology Review*. The Australian Psychological Society, 13(1), 1-112. Retrieved from [https://organisationalpsychology.nz/wp-content/uploads/2019/07/Volume\\_13\\_No\\_2\\_Autumn\\_2018.pdf](https://organisationalpsychology.nz/wp-content/uploads/2019/07/Volume_13_No_2_Autumn_2018.pdf)
- [36]. Peterson, K., Rauch, J., & Lee, S. (2013). Economic validation for performance improvement initiative base on a strategic team development campaign. *International Society for Performance Improvement*, 52(3). doi:10.1002/pfi.21333
- [37]. Rajwani, K. (2019). Debriefing in Critical Care. *Qatar Medical Journal*, pp. 1-2. doi:10.5339/qmj.2019.qccc.43
- [38]. Raza, B., Ali, M., Ahmed, S., & Ahmad, J. (2018). Impact of Managerial Coaching on Organizational Citizenship Behavior: The Mediation and Moderation Model. *International Journal of Organizational Leadership*, 27-46.
- [39]. Raza, B., Ali, M., Ahmed, S., & Moueed, A. (2017). Impact of Managerial Coaching on Employee Performance and Organizational Citizenship Behavior: Intervening Role of Thriving at Work. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 11(3), 790-813. Retrieved from <http://hdl.handle.net/10419/188317>
- [40]. Reyes, D., Tannenbaum, S., & Salas, E. (2018). Team Development: The Power of Debriefing. *People & Strategy*, 14(2), 46-52. Retrieved from [https://scholar.google.ac/scholar?hl=en&as\\_sdt=0%2C5&as\\_vis=1&q=Team+Development%3A+The+Power+of+Debriefing&btnG=](https://scholar.google.ac/scholar?hl=en&as_sdt=0%2C5&as_vis=1&q=Team+Development%3A+The+Power+of+Debriefing&btnG=)

- [41]. Ribeiro, N., Duarte, T., De Oliveira, T., & Faustino, C. (2021). How Managerial Promotes Employees' Affective Commitment and Individual Performance. *International Journal of Productivity and Performance Management*, 70(8), 2163-2181. doi:10.1108/IJPPM-10-2018-0373
- [42]. Romão, S., Ribeiro, N., Gomes, D., & Singh, S. (2022). The Impact of Leaders' Coaching Skills on Employees' Happiness and Turnover Intention. *Administrative Sciences*, 12(84), 1-15. doi:10.3390/admsci12030084
- [43]. Sahin, G., & Basak, T. (2021). Debriefing Methods in Simulation-Based Education. *Journal of Education in Nursing*, 18(3), 1-6. doi:10.5152/jern.2021.57431
- [44]. Sakalyuk, O. (2021). Models of Team Muilding in The Personnel Management System. *Open Journal Systems*, 2(83), 136-140. doi:10.35432/1993-8330appa2832021237292
- [45]. Salas, E., DiazGranados, D., Klein, C., Burke, S., & StagI, K. (2008). Does Team Training Improve Team Performance? A Meta-Analysi. *Human Factors and Ergonomics Society*, 50(6), 903-933. doi:DOI 10.1518/001872008X375009
- [46]. Salas, E., Reyes, D. L., & McDaniel, S. H. (2018). The Science of Teamwork: Progress, Reflections, and the Road Ahead. *American Psychological Association*, 37(4), 593– 600. doi:10.1037/amp0000334
- [47]. Salihovic, K. (2021). Team Coaching in the Workplace. A literature Review on Team Coaching and Solving Performance Deficiency in the Workplace. *ResearchGate*, 1-22. doi:10.13140/RG.2.2.23925.91366
- [48]. Sharma, P. (2017). How coaching adds value in organisations – The role of individual level outcomes. *International Journal of Evidence Based Coaching and Mentoring*(11), 1-17. Retrieved from <https://radar.brookes.ac.uk/radar/file/9c1a02de-7e38-4379-b8c1-4441a056f176/1/special11-paper-01.pdf>
- [49]. Shuffler, M. L., DiazGranados, D., Maynard, M. T., & Salas, E. (2018). Developing, Sustaining, and Maximizing Team Effectiveness: An Integrative, Dynamic Perspective of Team Development Interventions. *The Academy of Management Annals*, 12(2), 1-37. doi:10.5465/annals.2016.0045
- [50]. Smolska, M. (2021). A team development process based on the High Performance Team Coaching Model: a case study of team maturity management. *Scientific Journals of the Maritime University of Szczecin*, 139(67), 80-87. Retrieved from <https://repository.am.szczecin.pl/handle/123456789/2678>
- [51]. Smolska, M. (2022). The art to select the appropriate development Methods for a project Team: A case study. *European Research Studies Journal*, 25(1), 527-537. Retrieved July 10, 2022, from <https://www.proquest.com/docview/2639731909?pq-origsite=gscholar&fromopenview=true>
- [52]. Szilvia, S., Slavic, A., & Berber, N. (2019). Coaching and its Effect on Individual and Organizational Performance in Central and Eastern Europe. *Anali Ekonomskog fakulteta u Subotici*, 55(6), 67-80. doi:10.5937/AnEkSub1941067S
- [53]. Tannenbaum, S., & Greulich, P. (2022). The Debrief Imperative: Building Teaming Competencies and Team Effectiveness. *BMJ Quality & Safety* , 1-4. doi:10.1136/bmjqs-2022-015259
- [54]. Terblanche, N., & Albertyn, R. (2018). Using Transformative Transition Coaching to Support Leaders During Career Transitions. *African Journal of Business Ethics*, 12(1), 60-77. doi:10.15249/12-1-166
- [55]. Terblanche, N., Albertyn, R., & Coller - Peter, S. (2017). Designing A Coaching Intervention to Support Leaders Promoted Into Senior Positions. *SA Journal of Human Resource Management*, 15(0), 1-10. doi:10.4102/sajhrm.v15i0.842
- [56]. Umar, A., Tamsah, H., Mattalatta, M., Baharuddin, B., & Andul Latief, R. (2020). Training-Effectiveness and Team-Performance in Public Organization. *Journal of Asian Finance, Economics and Business*, 7(11), 1021-1031. doi:10.13106/jafeb.2020.vol7
- [57]. Urionabarrenetxea, S; Fernández-Sainz, A; García-Merino, J. (2021). Team Diversity and Performance in Management Students: Towards An Integrated Mode. *The International Journal of Management Education*, 19(2), 1-29. doi:10.1016/j.ijme.2021.100478.
- [58]. Wang, Y. (2018). An overview on the team interaction process. *Open Journal of Social Sciences*, 6, 1-11. doi:10.4236/jss.2018.612001

- [59]. Wei, S., Mehrabi, A., & Ohland, M. W. (2023). Revisiting Tuckman's team development model in first-year engineering multicultural teams. 023 American Society of Engineering Education Annual Conference & Exposition (pp. 1-14). Baltimore, MD: American Society for Engineering Education. Retrieved from [https://www.researchgate.net/publication/371952031\\_Revisiting\\_Tuckman's\\_Team\\_Development\\_Model\\_in\\_First-year\\_Engineering\\_Multicultural\\_Teams](https://www.researchgate.net/publication/371952031_Revisiting_Tuckman's_Team_Development_Model_in_First-year_Engineering_Multicultural_Teams)
- [60]. Widdowson, L., Rochester, L., Barbour, P., & Hullinger, A. (2020). Bridging the Team Coaching Competency Gap: A review of the literature. *International Journal of Evidence Based Coaching and Mentoring*, 18(2), 35-50. doi:10.24384/z9zb-hj74
- [61]. Woo, H. (2017). Exploratory Study Examining the Joint Impacts of Mentoring and Managerial Coaching on Organizational Commitment. *Sustainability*, 9(2), 1-15. doi:10.3390/su9020181.

## **Appendix 1**

### **Inquiries Regarding Team Development**

- 1- How do you develop your team? What actions do you take, and what practices do you avoid?
- 2- What methods or techniques do you employ to develop your team?
- 3- What techniques are you utilizing to maintain synergy and cohesiveness within your team?
- 4- How do you shield your team from internal and external influences?
- 5- How do you assess the team's performance? What evaluation methods or tools do you utilize?
- 6- What fundamental behaviors and attitudes should project leaders exhibit to maintain the team's effectiveness?

## Appendix 2

### Summary of Themes and Sub-Themes Identified from Team Development Questions

The theme of Team Development	Sub-themes – Team Building								
	Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5	Interviewee 6	Interviewee 7	Interviewee 8	Interviewee 9
Empowerment, Delegation, and support	1-Give space to the team members to do their job  2- Empower your team to make smart decisions  3-Delegate with care  4- Provide constructive feedback and recognition	-	1- Delegate staff with trust  2- Setting a clear plan	1- Delegate and support during project progress	-	1-Delegating with care  2- Provide constructive feedback and recognition	-	-	1- Ask questions and get feedback from team members  2-Delegate tasks
Building Effective Teamwork and Collaborative Environment	1-Encourage unity, friendliness, and sympathy among team members to mitigate disputes  2-Foster trust, belonging, and inclusivity  3- Encourage a growth mindset  4- Establish clear team boundaries  5- Maintaining stability in team membership  6- Providing a clear and motivating vision  7- Setting clear goals and objectives for the team  8- Inspiring team members with a sense of purpose  9- Establishing a framework for team operations  10- Creating processes that support team success  11- Building an environment that fosters	1-Friendship approach for building relationships within the team  2-Leading through collaboration and guidance  3- Breaking down tasks into manageable steps  4- Supporting team members in their progress  5- Keep your team members motivated	1- Establish and maintain the corporate culture and positive behavior among the project team  2- Implement high organizational ethical standards to protect team members  3-Creating an atmosphere that fosters collaboration  4-Building an environment where team members can work together seamlessly  5-The role of social bonds in enhancing teamwork  6-Strategies for fostering social connections within the team  7-Building camaraderie and trust among team members  8- Foster trust		1- Deal with team members equally  2- Ensuring a safe, healthy, and secure work environment  3- Providing the necessary resources, equipment, instruments, and tools for work.  4- Compliance with relevant standards and references for work execution  5- Addressing logistical needs for effective work operations  6- Arranging and conducting regular meetings to discuss work progress  7- Addressing issues affecting work performance  8- Maintaining communication for project success  9- Planning for	1- Work as one team with coworkers to complete and hand over projects to client satisfaction  2- Building trust among team members  3- Prioritizing tasks and providing guidance on task management	1- Ensuring that team members receive their salaries on time  2- Providing bonuses as a form of recognition and motivation  3- Addressing wrong behavior within the team and applying warnings and penalties	1-Regularly checking in with team members to ensure their needs are met and they feel supported	1-Improves collaboration among team members  2-Create Responsibility  3- Actively involve all team members  4- Enhance team-building activities  5-Improves Trust and respect among team members  6- Defining roles and expectations within the team  7- Ensuring accountability for tasks and actions  8- Establishing clear rules and guidelines for responsibility  9-Promoting collaboration and cooperation within the team  10-Emphasizing the importance of working together  11-Achieving

	collaboration  12- Addressing challenges and obstacles and resolving them.  13- Providing resources and support when needed		and respect that contribute to team effectiveness  9- Maintaining positive interpersonal relationships within the team  10- Motivate the team by mitigating weaknesses and supporting the strengths of each member		team members' annual leave to avoid disruptions  10- Immediate substitution of absent team members to maintain workflow  11- Providing awards or promotions for exceptional performance				more through collective efforts  Building trust through consistency and reliability  12- Build trust as a foundation for effective teamwork  13- Recognizing The role of trust in team dynamics
Personal Growth and Character Development	1- Provide training and development tools	1- Knowledge transfer – integration – individuating  2- Integration of team members' expertise and skills	1- Integrity, honesty, and trustworthy behaviors development  2- Empower positive behavior among team members	-	1- Arrange technical workshops  2- Provide training courses  3- Give opportunities to attend relevant seminars/works hops  4- Avoid constant routine work to encourage individual skills  5- Evaluate performance using standard templates	1- Regular training to enhance skills and knowledge	-	1- Provide training and development opportunities  2- Regular check-ins  3- Mentorship for skill development  4- Embrace diversity and inclusion  5- Encourage collaboration  6- Use 360-degree feedback  7- Establish protocols for handling external influences  8- Set clear boundaries  9- Build resilience  10- Clear communication  11- Active listening and empathy  12- Establish Accountability  13- foster Flexibility  14- support Positive attitude  15 encourage Problem-solving behavior	-