REVIEW ARTICLE

TEAM PERFORMANCE IN THE CONSTRUCTION INDUSTRY: A SYSTEMATIC LITERATURE REVIEW

Azi Izwani Nor Hamzah[1]*, Chia Kuang Lee[1], Marián Bujna[2] and Changsaar Chai[3]

[1]Faculty of Industrial Management, Universiti Malaysia Pahang Al-Sultan Pahang, 26600 Pahang, Malaysia

[2]Faculty of Engineering, Slovak University of Agricultural, Tr. A. Hlinku 2, 949 76 Nitra, Slovakia

[3]School of Architecture, Building and Design, Faculty of Innovation and Technology, Taylor's University, 47500 Subang Jaya Selangor, Malaysia

ABSTRACT - Numerous studies have been conducted in the construction sector to assess how project delivery techniques affect project success. However, the project team's setup and structure have received minimal attention, hence requiring more thorough studies that systematically review the body of knowledge on project team performance in the construction industry. This study aims to improve project team performance in the construction sector by systematically reviewing a considerable number of prior research that focused on project team approaches. A narrative literature review approach was used to accomplish this goal using two major journal databases, Scopus and Web of Science. The search efforts resulted in the identification of 28 publications for systematic review. The results found 23 essential approaches for raising project team productivity. Based on the workplace, these approaches were divided into two categories: psychosocial factors and physical factors. Importantly, the results of this review demonstrated a significant relationship between the majority of variables and the elements of the psychosocial work environment. Finally, this study offers several suggestions for future research based on the knowledge gathered from the review.

1.0   INTRODUCTION

The construction industry is vital since rapid economic development has increased the demand for the construction of infrastructure and facilities around the world. In the context of Malaysia, the local construction industry plays a vital role in the country's economy. However, several issues have triggered the low project performance of the Malaysian construction industry, which is now plagued with the bad publicity of cost overruns, uncontrolled and unrealistic schedules, accidents, poor quality, abandoned, unfinished private or public construction projects, and conflict among project team members. Moreover, the construction industry needs to improve in delivering quality construction projects because it compromises many professions, occupations and organisations. Therefore, there is a need and urgency to prevent project delivery failure to improve the construction industry's performance. Since the construction industry has been evaluated as one of the most active, complex and dynamic environments, it raises interesting team issues, from the development of team composition to their task performance.

Various studies have explored critical factors for achieving project success in the construction industry. The study of project performance plays a crucial role that contributes to project success. However, for many years, project delivery methods have been studied in the construction industry to assess their impact on project performance by focusing on the effect of team composition to some extent (Laurent & Leicht, 2019). Therefore, more effort must be made to contextualise the findings into local contexts where the concerned organisations' structure, culture and maturity differ.

Given this literary gap, the present study aims to conduct a Systematic Literature Review (SLR) that focuses explicitly on the adaption strategies that have been studied and practised for team performance to facilitate an updated understanding of the current conditions of project team performance variables in the construction industry. This SLR research mainly aims to explore past studies on team performance that are related to the construction industry. Conducting a systematic review and synthesising the scientific literature will help to distinguish, select, and evaluate significant research in the construction industry towards team performance. The results shall highlight any loopholes in previous research that can be considered as a focus for future research.

This study was guided by the central research question: What are the project team adaption strategies practised by the team member in the construction industry to improve their team performance? It study aims to systematically fill the gap by reviewing related studies to better understand previous adaption strategies of project team performance in construction industry projects. The research question was formulated based on PICo, which is a tool that assists authors in developing a suitable research question for a review. PICo is based on three main concepts: Population or Problem, Interest, and Context. Based on these concepts, the authors have included three main aspects in the review, namely project team

members (Population), adoption strategies to improve project team performance (Interest), and construction industry (context). The investigation hopes to narrow the informational gap regarding team performance in the construction industry.

Furthermore, the study shall enable interested parties to understand the current adaptation practised and strategise an adaptation plan that aligns with the needs of the project and team. Researchers can also utilise the empirical evidence to identify the gaps and guide the direction for future research in this field. This study also contains information on the specific areas and content of research that should be the focus of future studies.

Project performance can be defined as a project's progress targeted by the project goals (Lu et al., 2019). It involves continuous evaluations of a project in terms of cost, scope, and budget to assess its relative success (Bond-Barnard et al., 2018). Project performance is an essential predictor for organisations to achieve their goals or objectives in both developed and emerging economies (Rehman et al., 2019). Conversely, team refers to the human capital that performs the organisation's project tasks to achieve the set objectives.

2.0   THE REVIEW PROCESS FOR SELECTING THE ARTICLES

To answer the posed question, the authors considered different methods of conducting literature reviews. As there is a need to deal with rapidly changing issues, problems, and solutions, narrative review was used in this study to conceptualise project team performance in the construction industry.

A conceptualisation of the topic is recommended before starting the literature search process (vom Brocke & Lippe, 2015). This will provide a clear description of the main terms supporting the identification of search phrases (Zorn & Campbell, 2006). Therefore, the research began by understanding what has been done before and presenting its core features, which served as a guide and direction towards the topics.

The literature review process commonly involves two methods, namely narrative literature and systematic literature review. These two types were used as a guide to proceed with this research. This study conducted three complementary literature searches to delve into and explore previous research on team performance in the construction industry. The article selection strategy consisted of four main stages as shown in Figure 1:

Stage 1: Automated search based on the keywords via an electronic search using online scientific databases (Identification)

Stage 2: Selection based on several criteria and stage (Screening)

Stage 3: Selection based on the title of the papers (Eligibility)

Stage 4: Articles classification for analysis (Data extraction)

The review methods were conducted using two primary databases, namely Scopus and Web of Science (WoS). These databases were selected considering their reputation as robust databases covering more than 256 fields of study, including project management.

2.1   Stage 1: Identification

The article selection process consisted of four main stages. The first stage was the identification of keywords, followed by searching for related and similar terms using thesaurus, dictionaries, encyclopaedia, and past research. The authors enriched the existing keywords and developed a whole search string using Boolean operators, phrase searching, truncation, wild card, and field code functions. Two primary databases, namely Scopus and Web of Science were used to search for articles. These databases are among the leading databases in systematic literature review due to having several advantages, such as advanced searching functions, comprehensive indexing of more than 5000 publishers, and having control over the articles' quality and multidisciplinary focus, including environment-management-related studies (Martin-Martin et al., 2018; Gusenbauer & Haddaway, 2020). The search strings for the Scopus and Web of Science databases were developed in May 2022 (see Table 1) after all relevant keywords were determined. The third database, Google Scholar, was selected as an additional database. Whenever appropriate, a combination of keywords such as "team performance", "teamwork performance", "group work performance", "construction industry", "construction project", and "construction team" was practised using the phrase searching functions and Boolean operator (OR, AND). Then, the search process continued through the Google Scholar database. The selection of Google Scholar as the additional database aligned with a suggestion by Haddaway et al. (2015), who noted its ability to act as a supporting database in the systematic review process. The search process in these three databases resulted in 85 articles during the first stage of the systematic literature review process.

Table 1. Search string

Database	Search String
Scopus	TITLE-ABS-KEY (("team performance" OR "team work performance" OR "group work performance") AND ("construction industry" OR "construction project" OR "construction team"))

Table 1. (cont.)

Database	Search String
	TITLE-ABS-KEY (("team performance" OR "team work performance" OR "group work performance") AND ("construction industry" OR "construction project" OR "construction team")) AND (LIMIT-TO (PUBYEAR , 2022) OR LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2016)) AND (LIMIT-TO (LANGUAGE , "English"))
WoS	TS=(("team performance" OR "team work performance" OR "group work performance") AND ("construction industry" OR "construction project" OR "construction team"))

2.2   Stage 2: Screening

The second stage of the systematic literature review was the screening process, which was intended to remove any duplication of articles. A total of 34 articles were excluded while 15 articles were screened based on several inclusion and exclusion criteria determined by the researchers (see Table 2). The first criterion was the literature type, in which the researchers decided to focus only on journal articles because it acts as the primary source that offers empirical data. Hence, publications in the form of article reviews, meta-analyses, meta-synthesis, books, book series or chapter, and conference proceedings were excluded. The review only focused on articles published between 2016 to 2022 and written in the English language. This process excluded 49 articles as they did not fit the inclusion criteria and removed 10 duplicated articles, leaving a remaining of 36 articles.

Table 2. Inclusion and exclusion criteria

Criterion	Eligibility	Exclusion
Literature type	Journal article	Article review, book chapter, book series, book, conference proceeding
Language	English	Non-English
Timeline	Between 2016 and 2022	<2016

2.3   Stage 3: Eligibility

The third stage was eligibility whereby the authors manually monitored the remaining 36 articles to ensure that they were aligned with the criteria. This process was done by reading and carefully examining the title and abstract of each article to ensure that they fulfilled the inclusion criteria and were fit to be employed in this present study. Consequently, 8 articles were excluded because they were not directly related to the topic of project team. Finally, 28 articles were deemed fit and used for further analysis (see. Figure 1).
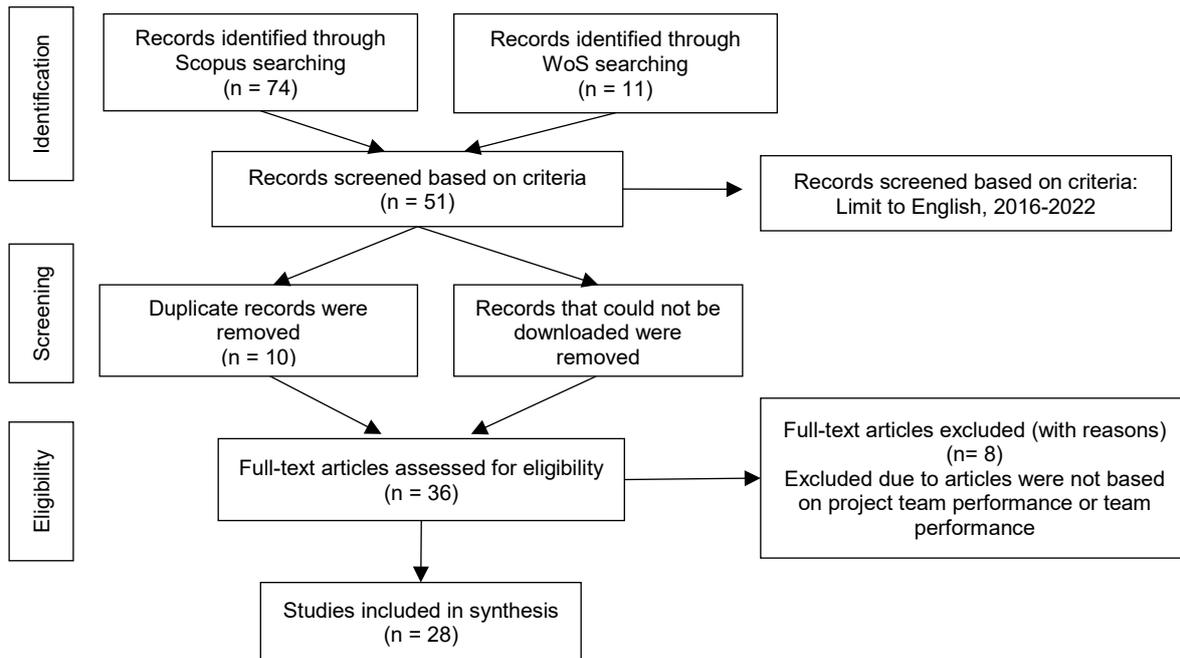

Figure 1. Flow diagram of the article searching process

3.0   DATA EXTRACTION

Stage 4 involved the data extraction process, which was classified under several sub-topics to explore the trend of previous research and its relation with one another. The results serve as possible directions for future research.

3.1   Year

As stated in the search string, the systematic literature review process was limited to articles published between 2016 and 2022. Within this seven-year timeline, 2019 recorded the highest number of empirical studies related to project team performance in the construction industry with 10 articles. The second-highest number of empirical studies was recorded in 2016 with 7 articles. On the contrary, no research papers were published in 2022. This could be due to the fact that this study was conducted in early 2022 and it is predicted that more studies will be produced towards the end of the year. It can be observed from this short timeline that the publication regarding this topic has a biannual trend with an increase in publication was recorded every two years. Therefore, it is predicted that 2022 will have more papers than the previous years.

Table 3. Publication year and authors

Year	Total Paper	Author
2022	0	-
2021	1	Moradi et al. (2021)
2020	5	Ahiaga-Dagbui et al. (2020)
		Yap et al. (2020)
		Thoha & Wahyu Avandana (2020)
		Hashiguchi et al. (2020)
		Omotayo et al. (2020)
2019	8	Rezvani et al. (2019)
		Ekström et al. (2019)
		Tabassi et al. (2019)
		Ballesteros-Pérez et al. (2019)
		Laurent & Leicht (2019)
		Tvedt & Dyb (2019)
		Herrera et al. (2019)
		Hanif (2019)
2018	2	Tabassi et al. (2018)
		Long & Arroyo (2018)
2017	2	Thomson et al. (2017)
		Tabassi et al. (2017)
2016	7	Zhang & Li (2016)
		Zhang (2016)
		Bole et al. (2016)
		Buvik & Tvedt (2016)
		Jr. et al. (2016)
		Zhou et al. (2016)
		Hsu et al. (2016)

3.2   Author

The analysis found two authors who have produced several papers on project team performance, hence denoting their prominent interest and expertise in the topic. The first author was Tabassi who published three research papers within the seven-year timeframe. Two of the articles were published in 2017, which related to team leadership. Moreover, leadership was found as the most interesting variable for the researchers to examine with team conditions.

Other than that, Zhang & Li (2016) also produced several papers on project team performance, particularly concerning the negative impacts of knowledge heterogeneity. However, one article focused on the engineering design team and another paper was associated with team communication.

Table 4. Two authors who produced several papers

Tabassi	
Tabassi et al. (2017)	Conflict Management Style of Team Leaders in Multi-Cultural Work Environment in the Construction Industry

Table 4. (cont.)

Tabassi	
Tabassi et al. (2017)	Linking Team Condition and Team Performance: A Transformational Leadership
Tabassi et al. (2019)	Conflict Management, Team Coordination, and Performance Within Multicultural Temporary Projects: Evidence From the Construction Industry
Zhang	
Zhang (2016)	How to Reduce the Negative Impacts of Knowledge Heterogeneity in Engineering Project Teams? Exploring the Role of Team Communication
Zhang & Li (2016)	How to reduce the negative impacts of knowledge heterogeneity in engineering design team: Exploring the role of knowledge reuse

3.3 Scope

Some research papers were only for academic purposes and must be tested in the industry. In other words, the research discussed the theory of idea and how it could be implemented on the ground. However, some of the papers still tested the current effect of the current implementation process on the project teams in the construction industry.

3.4 Previous Key Input Factors of Project Team Performance

The results also showed a total of 23 variables that were investigated by previous researchers. As shown in Table 5, "leadership", "trust", and "conflict" were the most common variables examined by researchers in project team performance studies. This was followed by "emotional intelligence" and "competency" as the second most common variables examined in project team performance. Whereas, other variables were examined once or twice in the research papers.

Table 5. The list of variables

Variable	Represented by	
Leadership	4	Thoha & Wahyu Avandana (2020), Tabassi et al. (2019), Shafique & Mollaoglu (2022), Zhou et al. (2016)
Trust	3	Rezvani et al. (2019), Buvik & Tvedt (2016), Jr. et al. (2016)
Conflict	3	Rezvani et al. (2019), Tabassi et al. (2019), Tabassi et al. (2017)
Competency	3	Moradi et al. (2021), Ekström et al. (2019), Bole et al. (2016)
Emotional intelligence	2	Rezvani et al. (2019), Rezvani et al. (2019)
Team coordination	2	Tabassi et al. (2019), Tabassi et al. (2017)
Knowledge heterogeneity	1	Zhang & Li (2016)
Psychological safety	1	Ahiaga-Dagbui et al. (2020)
Team effectiveness	1	Yap et al. (2020)
Psychological factors	1	Hashiguchi et al. (2020)
Continues improvement	1	Omotayo et al. (2020)
Culture	1	Ekström et al. (2019)
Structure	1	Ekström et al. (2019)
Group heterogeneity	1	Ballesteros-Pérez et al. (2019)
Social cohesion	1	Ballesteros-Pérez et al. (2019)
Cross-functional teams	1	Laurent & Leicht (2019)
Soft factors	1	Tvedt & Dyb (2019)
Interaction of team	1	Herrera et al. (2019)
Internal factors	1	Hanif (2019)
Linguistic action	1	Long & Arroyo (2018)
Social capital	1	Thomson et al. (2017)
Team condition	1	Shafique & Mollaoglu (2022)
Team member selection	1	Hsu et al. (2016)

A common concept found in many of the research papers analysed in this study was that they only focused on a project team with one variable. However, some authors examined project team performance with more than one variable in the construction industry. for instance, Rezvani et al. (2019) investigated the association between project team performance with emotional intelligence, trust, and conflict. Ekström et al. (2019) examined project team performance with culture, structure, and competency. Finally, Rezvani et al. (2019) studied the relationship between emotional intelligence, trust, and conflict with project team performance. Table 6 shows the list of authors whose studies examined multiple variables.

Table 6. Authors examining more than one variable

Author	Variable
Rezvani et al. (2019)	intelligence, trust, conflict
Ekström et al. (2019)	culture, structure, competency
Rezvani et al. (2019)	emotional intelligence, trust, conflict

4.0   DISCUSSION

A team is a group of individuals who work together to achieve a mutually agreed upon objective towards accomplishing the respective level of organisation. Meanwhile, team performance refers to the collective output and effectiveness of a group of individuals working together to achieve a common goal or objective at the respective level of organisation. It is a measure of how well the team as a whole performs and accomplishes its tasks rather than focusing solely on individual contributions.

Conversely, teamwork commonly happens in a designated workspace environment according to the suitability of the job. Therefore, all factors reported by previous studies are grouped under one large group related to the work environment. This work environment is closely related to the work done by employees whether individually or in groups, hence affecting the performance evaluation of an organisation individually or as a group. This situation illustrates the importance of the work environment for employees and organisations. Therefore, teams can enhance their performance and achieve tremendous success by focusing on the abovementioned factors.

A review of past studies revealed a total of 23 variables related to project team performance in the construction industry, namely leadership, trust, conflict, competency, emotional intelligence, team coordination, knowledge heterogeneity, psychological safety, team effectiveness, psychological factors, continuous improvement, culture, structure, group heterogeneity, social cohesion, cross-functional teams, soft factors, interaction of team, internal factors, linguistic action, social capital and team condition, and team member selection. All these factors help to answer the research questions of this study, which explored the project team adaptation strategies practised by project team member in the construction industry to improve their project team performance. Accordingly, all these factors were gathered under one group, namely work environment-related factors influencing project team performance in the construction industry.

4.1   Classification of Work Environment Components

This study continues by interpreting the classification of variables in one big theme. All these variables were interpreted as closely related within the scope of the work environment-related factors of project team performance. Previous studies denoted that this work environment can affect work performance individually or as a group. This suggests that the work environment can directly influence job performance.

Accordingly, all the variables were classified into two groups in the work environment. This adhered to the findings by Zoghbi-manrique-de-lara and Sharifiatashgah (2020) who found two types of work environment: behavioural component and physical component. Their research also concluded that the behavioural component, also known as the psychosocial component, consists of factors related to the connectivity between users in the same work environment and the impact of the working environment on the user's behaviour. Meanwhile, the physical environment comprises the user's connectivity with their office setting. The next section will explain these two types of work environments in greater detail.

4.2   Psychosocial Work Environment Components

The psychosocial work environment domain consists of many criteria related to the work conditions of either the employees or the organisation. As Tucker et al. (2020) summarised, a psychosocial work environment is an interaction between employees with different organisational roles. In other research, Zoghbi-manrique-de-lara and Sharifiatashgah (2020) concluded that the psychosocial component is also called the behavioural component. Based on the explanations from previous research, this study illustrates that psychosocial is the interaction or communication between individuals at work. This aspect is important because the project team is formed by a collection of individuals with various backgrounds. They work together to achieve a common objective because the success of group work will contribute to the organisation's success. Therefore, this study considered all the factors related to the human social aspect.

4.3   Physical Work Environment Components

The physical work environment has been identified that workplace setting arrangement in the work environment, which closely relates to the work environment of an organisation. As demonstrated by previous studies, workplace setting arrangement consists of many physical work environment variables such as workplace design, indoor temperature,

lighting and ventilation, colour, noise, and interior plants (Dahlan et al., 2016). Therefore, these workplace setting arrangements were grouped under the physical work environment.

On top of that, the physical working environment can be divided into two main categories: interior and exterior. Some studies denoted that the physical working environment consists of internal and external office layout, temperature, comfort zone, and the office work setting arrangement. This shows that the physical working environment is everything in the work environment, apart from human relationships. Such a statement corresponds to the understanding of the physical working environment by Zoghbi-manrique-de-lara and Sharifiatashgah (2020). However, Abbas and Ghazali (2011) stated that the physical work environment should consider other social, psychological, spiritual, and behavioural components. However, this study considered physical environment elements other than the human social aspect.

4.4   Previous Factors Related to Work Environment to Improve Project Team Performance

The findings of this review paper revealed that all variables are closely related to the aspect of psychosocial work environment because all of the factors are related to the interaction between individuals and others in the work environment. Based on the results, this study concludes that the majority of previous studies on project team performance in the construction industry focused on the psychosocial work environment. Consequently, this result answered the research question whereby previous studies reported that project team members in the construction industry mainly use project team adaption strategies to improve their project team performance through the factors in the psychosocial work environment. In other words, there is an inbalance of strategies within the scope of work environment in the construction industry. The next subtopic will discuss the previous factors with high frequency of use.

4.5   Frequent Variables

All factors identified from this systematic literature review were classified under psychosocial work environment as they are closely related to human interaction. The search string results found that leadership, trust, conflict, competency, emotional intelligence, team coordination, and knowledge heterogeneity are the most important factors concerning project teams in the construction industry. Some researchers have investigated project teams by combining it with other factors. Such findings will help others to improve team projects, specifically in the construction industry.

4.6   Leadership

Leadership is the most frequently investigated variable in the context of this research. Four researchers (Thoha & Wahyu Avandana, 2020; Tabassi et al., 2019; Shafique & Mollaoglu, 2022; Zhou et al., 2016) had incorporated this factor to investigate project team performance in the construction industry. This is because project team composition requires a leader to guide the team and align them with the objective of the organisation. Leaders in project teams have different approaches in bringing their group together; therefore, several studies have investigated the leadership styles in project teams, such as affiliative leadership, democratic leadership, pacesetting leadership, and transformational leadership. Additionally, a group may consist of members with various backgrounds and differing ideas that can be a source of conflict. Therefore, conflict emerged as one of the factors studied with project teams and leadership. It signifies the responsibility of a leader to control the situation in the event of conflict. Ongoing team building and development are also crucial to the project's success and should be led by leaders who implement the most suitable leadership style.

4.7   Trust

Trust is a factor with the highest frequency and has been studied together with project teams. Some studies examined the combination of trust with other factors, such as emotional intelligence and conflict (Rezvani et al., 2019). In certain situations, trust not only directly affects team performance but also mediates other variables, such as emotional intelligence and team performance. Trust also impacts project commitment while directly and indirectly influencing team performance (Buvik & Tvedt, 2016). This highlights the importance of trust when different individuals are working in a group. Their curiosity about others must be eliminated and their confidence should be increased to have a good working environment in the organisation.

4.8   Conflict

Conflict will arise when team members differ in any area and the outcome will affect how the conflict can be managed. In the context of project team, conflict must be studied to better manage arising issues. Conflict in the project team relates to the interaction with other humans, hence, their emotions must be considered. Moreover, a project team in the construction industry can have a multicultural project team in the context and the organisation may be temporary or permanent. All issues contributing to the emergence of conflict have been investigated in relation to emotional intelligence and trust to see its impact on the project team (Rezvani et al., 2019; Tabassi et al., 2019). Conflict can be managed in many ways, including avoidance, cooperation, or compromising. As a result, avoiding conflict resolution could be a win-win situation for both the people and the project. Therefore, lower levels of relationship conflict will translate into better performance.

4.9   Competency

Competency is an important contributor to individual and team performance in the dynamic construction industry. This factor has been examined at various levels of project teams in the construction industry, from the individual to the

organisation levels. Many experts perceive competency as subjective and relative because it reflects each person's capability. Different levels have varying effects of competency that contribute to the success of a team or organisation. For instance, event customers' competency has been reported to impact the project team of an organisation (Bole et al., 2016).

4.10 Emotional Intelligence

Emotional intelligence is positively associated with team performance. As previously discussed, the emotional factor was grouped as part of the psychosocial work environment. it is imperative for team members to consider emotions as humans are born with many emotions. Emotional intelligence can also be investigated with other factors to measure the effect of such association. For instance, past studies have investigated the mediating effect played by emotional intelligence towards the relationship between trust, conflict, and team performance (Rezvani et al., 2019). This suggests that higher emotional intelligence improves communication, social cohesion, and knowledge sharing, which deliver greater overall team performance. Furthermore, additional in-team trust and lower levels of conflict in a relationship will translate into better performance.

4.11 Team coordination

A team comprises a collective group of individuals that must be coordinated wisely. Hence, team coordination stands as a factor that has been widely investigated by previous research. It is important for a team to be well-coordinated for the multi-cultural individuals to collectively contribute to the execution of the project. Without good coordination, team members are deemed to fall into conflict, hence affecting the work's success.

5.0   CONCLUSION AND RECOMMENDATION

Project and team performance are distinct concepts with different indicators and interpretations. Nevertheless, both play crucial roles in project success. The results of this SLR study revealed that all the factors were classified under the work environment. Although the work environment is related to the employees as team members, more studies are needed to investigate the relationship between work environment with project team performance, especially in the construction industry.

A thorough review of past literature has found an abundance of studies on project teams within the psychosocial work environment, encompassing the needs and interactions of individuals. However, there is a scarcity of research investigating the influence of the physical work environment towards project team performance in the construction industry. The majority of previous research focused mainly on the causes deriving from psychosocial work environment characteristics, such as teamwork atmosphere, leadership, perceptions of fairness, and corporate values (Zoghbi-manrique-de-lara & Sharifiatashgah, 2020). Therefore, future research should focus on examining the effect of the physical work environment towards employee performance. The findings will contribute to the investigation of trends within the work environment domain that are related to the project team performance in the construction industry. Additionally, future research may focus on the employees in the construction industry.

Moreover, the seven-year timeline employed in this study can be extended to include more recent studies. The search string can also be widened to include other keywords to explore their potential association with team performance. The results will explore new factors, authors, or even the same factors but from other authors. These new factors can be grouped under different main factors or can be discussed individually. The results may offer different points of view that can contribute fresh insights and new knowledge regarding team performance in the construction industry.

For many years, project delivery methods have been studied in the construction industry to assess its impact on project performance; however, the majority of past studies have focused on the effect of team composition and organisation. Although project performance and project team performance have different indicators and understanding, both contribute to the success of a project and share equal importance as other factors like project size, type, environment, and specifications. Furthermore, the success of a project is dependent on various factors, including leadership, trust, conflict management, competency, and human resources. Human capital requires good strategy and implementation to have positive delivery output and productivity performance. Improving human resources quality is part of the efforts to boost work quality and can be influenced by various internal and external factors. However, this study emphasises the need for additional research on the factors influencing project team performance and their impact on project success.

The purpose of this study was to review the determinants of project team performance that have been investigated by past research, particularly in the context of the construction industry. The systematic literature review methodology was employed to achieve such purpose. The results demonstrated that all the factors were grouped into two types of work environment: physical and psychosocial. Both work environment domains contribute to employees performing their tasks efficiently. However, numerous studies have endeavoured to identify the psychosocial work environment factors that impact project team performance.

This study offers significant practical and theoretical contributions to the body of knowledge. The findings provide stakeholders, including policymakers, the public, researchers, and construction industry professionals, with a better understanding on the mounting need to integrate aspects related to the work environment of project teams to improve the

performance and quality of work in the construction industry. It also emphasises the necessity for more research that looks on the factors influencing project team performance and their impact on project success. Recognising the importance of bridging these knowledge gaps for project success, this research contributes to the existing literature by highlighting the necessity for empirical studies on the factors that may affect project success in the Malaysian construction industry.

6.0   CONFLICT OF INTEREST

The author(s), as noted, certify that they have NO affiliations with or involvement in any organisation or agency with any financial interest (e.g., honoraria, educational grants, participation in speakers' bureaus, membership, jobs, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements) or non-financial interest (e.g., personal or professional relationships, affiliations, expertise or beliefs) in the subject matter or materials addressed in this manuscript.

7.0   AUTHOR CONTRIBUTIONS STATEMENT

Each author involved and contributed evenly to this manuscript. All authors read and approved the final manuscript.

8.0   ACKNOWLEDGEMENT

9.0   REFERENCES

Abbas, M. Y., & Ghazali, R. (2011). Physical Environment: The major determinant towards the creation of a healing environment? *Procedia-Social and Behavioral Sciences*, 30, 1951-1958.

Ahiaga-Dagbui, D. D., Tokede, O., Morrison, J., & Chirnside, A. (2020). Building high-performing and integrated project teams. Engineering, *Construction and Architectural Management*, 27(10), 3341–3361.

Ballesteros-Pérez, P., Phua, F. T. T., & Mora-Melià, D. (2019). Human Resource Allocation to Multiple Projects Based on Members' Expertise, Group Heterogeneity, and Social Cohesion. *Journal of Construction Engineering and Management*, 145(2), 04018134.

Bole, V., Fink, L., & Prašnikar, J. (2016). Customer focus competencies and the dynamics of project teams. *Total Quality Management and Business Excellence*, 27(1–2), 198–214.

Bond-Barnard, T. J., Fletcher, L., & Steyn, H. (2018). Linking trust and collaboration in project teams to project management success. *International Journal of Managing Projects in Business*, 11(2), 432-457.

Buvik, M. P., & Tvedt, S. D. (2016). The impact of commitment and climate strength on the relationship between trust and performance in cross-functional project teams: A moderated mediation analysis. *Team Performance Management*, 22(3–4), 114–138.

Dahlan, A., Ibrahim, S. A. S., & Masuri, M. G. (2016). Role of the physical environment and quality of life amongst older people in institutions: A mixed methodology approach. *Procedia-Social and Behavioral Sciences*, 234, 106-113.

Ekström, D., Rempling, R., & Plos, M. (2019). Integrated project team performance in early design stages – performance indicators influencing effectiveness in bridge design. *Architectural Engineering and Design Management*, 0(0), 1–18.

Gusenbauer, M., & Haddaway, N. R. (2020). Which academic search systems are suitable for systematic reviews or meta-analyses? Evaluating retrieval qualities of Google Scholar, PubMed, and 26 other resources. *Research synthesis methods*, 11(2), 181-217.

Haddaway, N. R., Woodcock, P., Macura, B., & Collins, A. (2015). Making literature reviews more reliable through application of lessons from systematic reviews. *Conservation Biology*, 29(6), 1596-1605.

Hanif, L. (2019). Contractor Project Organization Problems on the Implementation of Building Construction at Lhokseumawe City. IOP Conference Series: *Materials Science and Engineering*, 536(1), 1–14.

Hashiguchi, N., Cao, J., Lim, Y., Kubota, Y., Kitahara, S., Ishida, S., & Kodama, K. (2020). The effects of psychological factors on perceptions of productivity in construction sites in Japan by worker age. *International Journal of Environmental Research and Public Health*, 17(10), 1-10.

Herrera, R. F., Mourgues, C., Alarcón, L. F., & Pellicer, E. (2019). An assessment of lean design management practices in construction projects. *Sustainability*, 12(1), 19.

Hsu, S. C., Weng, K. W., Cui, Q., & Rand, W. (2016). Understanding the complexity of project team member selection through agent-based modeling. *International Journal of Project Management*, 34(1), 82–93.

Jr., N. M., Jr., J. E. taylor, & Javernick_Will, A. (2016). Team Building Moderators of the Engineering and Construction Industry Virtual Team Performance. Proceedings Construction Research Congress 2016, 1999, 2039–2049.

Laurent, J., & Leicht, R. M. (2019). Practices for Designing Cross-Functional Teams for Integrated Project Delivery. *Journal of Construction Engineering and Management*, 145(3), 05019001.

Long, D., & Arroyo, P. (2018). Language, moods, and improving project performance. IGLC 2018 - Proceedings of the 26th Annual Conference of the International Group for Lean Construction: *Evolving Lean Construction Towards Mature Production Management Across Cultures and Frontiers*, 1, 495–504.

Lu, P., Cai, X., Wei, Z., Song, Y., & Wu, J. (2019). Quality management practices and inter-organizational project performance: Moderating effect of governance mechanisms. *International Journal of Project Management*, 37(6), 855-869.

Martín-Martín, A., Orduna-Malea, E., Thelwall, M., & López-Cózar, E. D. (2018). Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories. *Journal of informetrics*, 12(4), 1160-1177.

Moradi, S., Kähkönen, K., Klakegg, O. J., & Aaltonen, K. (2021). Profile of project managers' competencies for collaborative construction projects. Proceedings of the 37th Annual ARCOM Conference, ARCOM 2021, September, 350–359.

Omotayo, T. S., Boateng, P., Osobajo, O., Oke, A., & Obi, L. I. (2020). Systems thinking and CMM for continuous improvement in the construction industry. *International Journal of Productivity and Performance Management*, 69(2), 271–296.

Rehman, S. U., Malik, S., & Asghar, N. (2019). Exploring the relationship among project complexity, change orders and project performance: an evidence from educational building projects in KPK province, Pakistan. *Pakistan Journal of Social Sciences*, 39(4), 1754-1767.

Rezvani, A., Barrett, R., & Khosravi, P. (2019). Investigating the relationships among team emotional intelligence, trust, conflict and team performance. *Team Performance Management*, 25(1–2), 120–137.

Shafique, F., & Mollaoglu, S. (2022). Shared transformational leadership for green architecture engineering and construction project teams: a study of LEED projects. *Journal of Construction Engineering and Management*, 148(12), 04022137.

Tabassi, A. A., Abdullah, A., & Bryde, D. J. (2019). Conflict Management, Team Coordination, and Performance Within Multicultural Temporary Projects: Evidence From the Construction Industry. *Project Management Journal*, 50(1), 101–114.

Tabassi, A. A., Bryde, D. J., Abdullah, A., & Argyropoulou, M. (2017). Conflict Management Style of Team Leaders in Multi-Cultural Work Environment in the Construction Industry. *Procedia Computer Science*, 121, 41–46.

Thoha, N., & Wahyu Avandana, I. M. N. (2020). Project Managers' Leadership Styles and Their Effects on Project Management Performance. Pertanika Journal of Social Sciences and Humanities, 28(2), 803–816.

Thomson, D. S., Carter, K., & Grant, F. (2017). Unpacking Cohort Social Ties: The Appropriateness of Perceived Social Capital to Graduate Early Career Performance in Construction Project Teams. *International Journal of Construction Education and Research*, 13(4), 299–316.

Tucker, P., Peristera, P., Leineweber, C., & Kecklund, G. (2020). Can psychosocial working conditions help to explain the impact of shiftwork on health in male-and female-dominated occupations? *A prospective cohort study*. *Chronobiology International*, 37(9-10), 1348-1356.

Tvedt, I. M., & Dyb, K. A. (2019). The soft factors in design management: A hidden success factor? Emerald Reach Proceedings Series, 2, 111–117.

vom Brocke, J., & Lippe, S. (2015). Managing collaborative research projects: A synthesis of project management literature and directives for future research. *International Journal of Project Management*, 33(5), 1022-1039.

Yap, J. B. H., Leong, W. J., & Skitmore, M. (2020). Capitalising teamwork for enhancing project delivery and management in construction: empirical study in Malaysia. *Engineering, Construction and Architectural Management*, 27(7), 1479–1503.

Zhang, L., & Li, X. (2016). How to reduce the negative impacts of knowledge heterogeneity in engineering design team: Exploring the role of knowledge reuse. *International Journal of Project Management*, 34(7), 1138–1149.

Zhou, Y., Du, J., Shi, Q., & Joe, H. (2016). Directive vs. Empowering Leadership in Temporary Project Teams: An Agent-Based Modeling Approach. Proceedings Construction Research Congress 2016, 2039–2049.

Zoghbi-manrique-de-lara, P., & Sharifiatashgah, M. (2020). An affective events model of the influence of the physical work environment on interpersonal citizenship behavior. *Rev. Psicol. del Trab. y las Organ.*, 36 (2020), pp. 27-37

Zorn, T., & Campbell, N. (2006). Improving the writing of literature reviews through a literature integration exercise. *Business Communication Quarterly*, 69(2), 172-183.