

SOCIAL SKILLS AND COHESION OF CROSS-FUNCTIONAL TEAMS IN CONSTRUCTION FIRMS

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ABSTRACT

The aim of this study is to examine the role of social skills in driving cohesion of cross functional teams in construction firms. Prior studies have specifically examined the nexus between leadership, emotional intelligence and team cohesion; however, communication skills and conflict management skills as facets of social competencies and team cohesion remain unexplored. Accordingly, this study focuses on the connection between communication and conflict management competencies and team cohesion in construction firms. A cross sectional survey design was employed and a structured questionnaire was the means of data collection from a sample of 395, which was selected through stratified sampling procedure from a population 150 construction firms and 24 cross functional teams. Data were analysed through Partial Least Square Structural Equation Modelling (SEM PLS). The study found that there was a positive and significant relationship between communication skills and task cohesion within members; there was a positive significant relationship between conflict management skills and task cohesion among team members; there was a significant positive relationship between conflict management skills and social cohesion in cross functional teams, and social cohesion mediated the relationship between communication skills and task cohesion , and social cohesion mediated the relationship between conflict management skills and task cohesion within cross functional teams. Aside, we advanced theory building, managerial and practical implications for the study.

Keywords: *Social Skills, Communication skills, conflict management skills, Team cohesion, Cross functional teams.*

INTRODUCTION

Cross-functional teams are social groups from diverse professional backgrounds and teams have a fundamental shared objective and co-operation. As cross-functional teams have diverse characteristics, Salas et al. (2015) and Grossman et al. (2021) asserted that team cohesion is key to team performance and effectiveness and that team cohesion means the shared bond, attractiveness, task commitment and a sense of common pride to stay, remain and willingness to work together with team members or group. Accordingly, social skills are indispensable, referring to the ability of individuals to understand and relate with people efficiently and effectively to attain goals in

social situations. Social skills focus on the ability of individuals to understand the thoughts and feelings of other people and appropriately adjusting their behaviour to responses (Zaman et al., 2019). While technical skills are extremely necessary and fundamental for engineers, social skills are required of them to help in relating with other project team members by communicating, collaborating, coordinating project task; and resolving task, and process and relational conflicts while achieving project goals (Phinho-Lopes & Macedo, 2016)

Projects, particularly public projects, require commitment of substantial resources, integration of numerous activities and execution of diverse tasks in accordance with quality standards, time and cost schedules to meet functional performance and public good (Schwable, 2007, Sonuga, Aliboh & Oloke 2002, Kuchta & Marchwicka, 2020). The necessity for the attainment of quality standards, sticking to cost schedules and time frames for the completion of public projects require construction firms to pooling experts from different functional backgrounds and execute series of tasks. Thus, cohesive cross functional teams have gained global relevance and teamworking becomes indispensable particularly in construction and allied firms. The rationale for teamwork is to bring professional experience, complementary skills and cross fertilize ideas amongst team members for prompt completion and delivery of quality projects as public commodities (Senaratne & Melewana, 2011; Nicholas, 2001).

However, Khosravi, Revani and Ashkanasy (2020) contend that the diverse nature of cross-functional teams also engenders intrateam relationship, task and process conflicts arising from diversity of reporting lines, interests, value pluralism and personality of project team members (Senaratne & Hapuarachchi, 2009; Kuiterts, Vulker, & Hermans, 2023; Huo, Zhang, Guo, & Xi 2019). In line with the nature and size of public projects, the ability of cross functional team members and project managers to strike a cordial relationship, initiate and sustain team cohesion in the execution of tasks all through the project life cycle is momentous.

Consistent with the view of Gajendran and Brewer (2012), friendly collaborations through social skills, social and task cohesion among project team members are key drivers to smooth operations and synergistic effects of teams to deliver projects for public good. With the composition of cross functional teams, social relations and behavioral skills are undoubtedly part of the core competencies required for project managers and team members for managing projects and this is extremely vital but have often been overlooked.

The desire of individuals to remain knitted with social relationships and instrumental ties, are to a large extent, depends upon interactions of

individual project team members and that the social and task cohesion contribute substantially to team effectiveness and performance. Social skills are the competencies and knowledge of team members to relate cordially with one another. From the perspective of Little et al (2017) and Rahim et al (2018), social competencies are composed of communication and conflict management skills of team members.

Communication skills refer to the ability of team members to interact within teams to exchange useful information to facilitate the execution and performance of project task. Communication skills involve listening and speaking aptitude to build cohesiveness and engender cordial interpersonal relations in teams (Emmitt & Gorse, 2006). Gervits, et al. (2016) assert that team and group efforts require collaboration and coordination to accomplish task and that the understanding of information and direction through communication and communication competencies are fundamental to the attainment of team success. A prior study established the link between communication quality and task cohesion while task cohesion reduced social loafing among student groups and student project teams (Lam, 2015). The work is both similar to and differ from the current study in some respects as the previous study focused on communication quality and task cohesion but the current investigation, examined communication skills and task cohesion and as well as social cohesion. Also, by context, the studies vary as the previous work focuses on student groups in advanced economy while the current study examines cross-functional teams in construction firms in a developing economy. In this same study, task cohesion is also studied as a mediating variable while the current work assessed the mediating role of social cohesion.

Conflicts are inevitable and ubiquitous in cross-functional teams and therefore managing and resolving conflicts is an inherent part of team dynamics. Conflict is the existence of incompatibility in goals, interests and needs between two or more individuals or groups in organizations (Phillips & Cheston, 1979; Thakore, 2013). With the different forms of relational, task, and process conflicts exist in teams, the social skill of conflict management is indispensable in a cross-functional team

process (Liao, Harris, Li, & Han, 2024). Conflict management is as an interactive process for preventing and mitigating destructive contentions and disagreements between or within parties in a team, group or an organisation and converting conflict circumstances into constructive attitudes through resolution while the method of resolution is referred to as conflict management style (Lawani, Arias Abad, Craig, Hare, & Cameron, 2024).

Prior studies have investigated the role of conflict management as a predictor and criterion variable. Safi and Khairkhwa (2024) examined the link between conflict management practices and employee performance and their study reported that conflict management positively affected employee productivity in organisations while the study of Lawani et al, (2024) asserted that emotional intelligence influenced various styles of conflict management in construction project teams, resulting in positive outcomes of projects. There appears to be no current study that investigated the nexus between conflict management skills and various forms of cohesion in cross functional teams in constructions firms. Extant and current studies focus on technical skills and competencies of project team members and these skills are highlighted as critical determinants of project success (Elmezain et al, 2021) but the social and behavioral role of cross-functional team members have not been seriously considered apart from emotional intelligence, conflict management styles and team cohesion (Rezvani et al, 2016). However, little is known and no significant research is conducted to ascertain the links between social skills like communication skills, conflict management skills and team cohesion in spite of the consequential nature of social competencies in cross-functional teams to engender task and social cohesion and successful outcomes of complex projects.

The paper makes vital contributions to theory building and extend knowledge in the literature of team dynamics, project management and organizational behaviour in several ways. First, prior investigations focused on technical skills, leadership and emotional intelligence and team cohesion to the neglect of other critical social skills of communication and conflict

management. Thus, the study contributes to existing literature and extends existing knowledge by investing the specific social skills in driving task and social cohesion in cross functional teams and positive project outcomes.

The second aspect of contribution is that study further examine the mediating role social cohesion between communication skills and task cohesion and the conflict management skills and task cohesion in cross functional teams in public projects. Prior studies overlooked the interactive role of social cohesion in team dynamics and project success which the present study contributed by extending the existing theory and knowledge.

Furthermore, cross functional teams of public projects provide room for nuance contextual understanding of complex projects with diverse interest groups and stakeholders and providing insights into universal to context-specific dimension of team cohesion and process. In addition, the paper contributes to theoretical underpinnings of social exchange and team member exchange as communication skills, conflict management skills foster task cohesion while social cohesion promotes task-related project outcomes in team dynamics.

Accordingly, the purpose of the study is to explore the relationship between social skills and cohesion in cross-functional project teams of public projects. The specific objectives of the study are to: (1) examine the relationship between communication skills and social cohesion of cross-functional teams (2) assess the relationship between communication skills and task cohesion of cross-functional teams (3) determine the mediation of social cohesion between communication skills and task cohesion of cross-functional teams (4) assess the relationship between conflict management skills and social cohesion of cross-functional teams (5) ascertain the relationship between conflict management skills and task cohesion of cross-functional teams (6) determine the mediation of social cohesion between conflict management skills and task cohesion in cross-functional teams. The remainder of the paper is structured as follows: The first aspect is the review of literature, second part deals with the methodology, and third section focuses on data analysis and results, followed by the discussion

and advancement of the managerial and practical implications and suggestion for further studies.

THEORY AND HYPOTHESES DEVELOPMENT

Focusing on social skills and cohesion of cross-functional teams in construction firms, the study is grounded in the Blau's (1964), Cropanzano and Mitchell's (2005) Social Exchange Theory (SET) and the Seers et al (1995) Team Member Exchange Theory (TMX) which underscore the underlying social dynamics in teams. From the SET theoretical roots, cross-functional teams are notably characterized by interactions between individual team members with expectations of reciprocity and mutual benefits through socially equitable exchanges. Social exchanges among team members are expressed in the form of sharing valuable interpersonal and task related information beneficial to members and resolution of intra-team, relational and task-orientated conflicts while executing tasks to realize project outcomes. On the TMX theoretical lens, Liao et al. (2013) and Seers et al. (1995) emphasized that team members' perceptions on reception and extension of emotional support, ideas, resources, knowledge, information, assistance and feedback facilitate team processes, involving a bidirectional reciprocity between and among cross functional team members. The social exchanges foster social and task cohesions, leading to better cross functional team outcomes of projects in construction firms.

Communication skills and cohesion of cross-functional teams in construction firms

Teams are social entities consisting of members with task interdependence, common goals and shared values (Salas et al; 2008). Cross functional teams are of diverse professionals with different backgrounds, executing various tasks in public projects. Salas et al (2008) contend that the ability to work effectively hinges on clear exchange of information, processing and comprehension to facilitate coordination and cooperation among team members in performance of task. Thus, communication is a key element that drives the process of unity and task accomplishment

(Oliveira et al, 2016; Lauret, 2019). Communication is one of the social skills, and the ability of a team member to effectively communicate and integrate the team dynamics refers to social competencies (Green, 2016). Communication skill enables team members to clearly pass messages through verbal and non-verbal means to foster team-building and team-spirit, resulting in team success.

Cohesive teams are critical to project success and cohesion is attributable to clarity and understanding of information through communication (Lauret, 2019). Aside, the ability and competence of team members to communicate, build trust and bond and thereby promotes social cohesion in the overall team dynamics (Laan, 2011). Furthermore, Hirunyawipada et al (2010) stated that the ability of team members to work harmoniously to achieving specific tasks is task cohesion. As team members communicate, it promotes a sense of unity, purpose and focus on task objectives resulting in task cohesion among cross-functional teams. The reason is that teams can co-ordinate their tasks, efforts and exchange information in relation to the task of team members (Yin et al, 2023).

There is a lack of empirical evidence to demonstrate how social cohesion mediates the link between communication skills and task cohesion. However, McLean et al, (2020) investigated the mediating role of communication between efficacy belief and task cohesion. Thus, communication and task cohesion are a part of the variables of the current study. In their finding from the study, the result indicated that communication did not fully mediate the association between collective efficacy belief and task cohesion. From the study of Van Vianen et al (2001) on personality in teams with respect to the relationships among social cohesion, task cohesion, and team performance, one of the findings indicated that cohesion measures had no mediation between personality composition and team performance. The absence of studies to evaluate the mediating mechanism of social cohesion

between communication skills and task cohesion demands investigation. Based on the reviewed literature, we hypothesize that:

Ha₁: There is a relationship between communication skills and social cohesion among cross-functional team members

Ha₂: There is a relationship between communication skills and task cohesion among cross-functional team members

Ha₃: Social cohesion mediates the relationship between communication skills and task cohesion among cross-functional team members

Conflict Management Skills and Cohesion of cross-functional teams in construction firms

Conflicts are inevitable, pervasive and an inherent part of teams and organizational life. Teams experience different forms of conflicts in construction firms while executing task and projects (Tariq & Gardezi, 2023; Adas et al 2023; Dirrler & Podrutzsik, 2023). Accordingly, conflict management skills become indispensable among team members in construction companies. Conflict refers to a disagreement over interests, goals and ideas between two or more people within a group or an organization. It is considered as perceived differences in ideas, intents and purposes leading to contentions and frictions (Esquivel & Kleiner, 1996; Lefley, 2018). As team members encounter conflicts of various kinds, managing conflicts and conflict management skills are consequential. In the position of Owsiak (2015), conflict management involves series of activities aimed at mitigating the negative outcomes of disputes at individual, group and organizational levels. It consists of behavioural patterns, strategies and approaches in containing conflicts. Conflict management skills mean the competencies and aptitude acquired by team members to mitigate conflicts while working with cross functional team members in executing projects (Tang & Kirkbride 1986).

Task cohesion is fundamental to team success and outcomes in construction firms because of proper alignment of goals and tasks. There are

several factors that engender cohesion of teams and some of which are trust, coordination, collaboration and conflict management in construction teams (Bon-Barnard et al, 2018). From research evidence of De Dreu and Weingart, (2003) and Tjosvold et al, (2003), effective conflict management enhances task performance, arising from task cohesion in teams and within groups in organizational settings.

From the theoretical lens of Tuckman (1995), teams undergo various stages and that conflict occurs at the embryo stage of team formation, which is referred to as ‘storming’. However, conflict management skills of team members minimize the occurrence and negative impact of conflicts, leading to team cohesion. This is underpinned by the results of a longitudinal study of Tekleab et al. (2009), exploring the nexus among team conflict, conflict management, cohesion and team effectiveness. The findings indicated that conflict management had a direct and positive effect on team cohesion. The prior study is to some extent akin to the current study. However, the various dimensions of team cohesion is not disaggregated as against the current investigation. Conflict management skills facilitate the mitigation of conflicts resulting in cohesion of team members in construction firms. The study of Tekleab et al. (2009) highlighted the critical role of conflict management in shaping team dynamics, cohesion and effectiveness and underscoring the direct and positive impact of conflict management on team cohesion, task conflicts, and relational conflicts. The current study differs from the prior study by exploring the nexus between conflict management skills of team members, social cohesion, and task cohesion and how social cohesion is mediating the links between conflict management skills and task cohesion in cross functional teams of construction firms. Accordingly, team members with conflict management behavioural skills of accommodating, avoiding, compromising, collaborating most likely foster all forms of team cohesion.

Prior investigation of cognitive workforce diversity, conflict management and cohesion of teams is the study of Mello and Delige (2015), which reported that cognitive workforce diversity negatively impacted team cohesion.

However, conflict management plays intervening mechanism, mitigating the negative influence of workforce diversity on cohesion of teams while cohesion mediates the relationship between conflict management and team effectiveness with outcomes of viability and performance. The direction of the current study is to explore the mediating role of social cohesion between conflict management skills and task cohesion which specifically considers the various aspects of cohesion, a disaggregated approach in comparison to cohesion being lumped in the previous study. Jehn and Benderskey (2003), contend that proactive and cooperative conflict management diminish negative effects and fosters cohesion in groups and teams, building strong bond and interpersonal relationships among team members. To buttress the argument, Behfer et al (2008) asserted that conflict management in teams promotes preservation of interpersonal relationship, which no doubt underscores social cohesion among team members in construction firms.

From the reviewed literature, we hypothesize that:

Hb1 There is a relationship between conflict management skills and social cohesion of cross-functional team members in construction firms

Hb2 There is a relationship between conflict management skills and Task Cohesion of cross-functional team members

Hb3 Social cohesion mediates the relationship between conflict management skills and Task cohesion among cross-functional team members in construction firms.

METHODOLOGY

A cross sectional survey design was adopted and employed in this study to collect data from respondents of construction firms at a single point in time (Creswell, 2003). The design is appropriate as it allows for the collection of data with respect to social skills and cohesion of cross-functional teams of construction firms in the Niger Delta region of Nigeria and the aim is to determine the relationships between the

dependent and independent and mediating variables of teams in multiple firms. The target population is 150 construction firms with a total staff strength of 35,654, which provide a wide representation of the construction industry. The population was ascertained by considering construction firms that registered with Corporate Affairs Commission (CAC) of Nigeria from the Niger Delta Region in Nigeria. A sample of 395 respondents from 24 cross-functional teams in construction companies was determined through Yamane (1967) sample size determination formula and the formula is as follows $n = \frac{N}{1 + Ne^2}$ where n is the sample size, N is the population of the study, e is the error term and 1 is the theoretical constant. In applying the above formula, the sample is as follows.

$$34,654 / 1 + 34,658 (0.05)^2$$

$$n = 395$$

In the selection of respondents from a fair sample from each firm and state, stratified sampling procedure was applied in selecting the sample to have a fair representation of the six states of the Niger Delta Region in Nigeria. The states include Akwa Ibom, Cross Rivers, Rivers, Bayelsa, Delta and Edo.

Instrument for Data Collection and Study Variables

The principal instrument for data collection is a structured questionnaire designed on a 5-point scale ranging strongly agree to strongly disagree. The measurement instrument is compartmentalized into two broad categories. The first part focuses on demographic variables of the target participants while the second part centres on the social skills and cohesion of cross-functional teams in construction firms. Accordingly, the method of data collection was structured questionnaire and data were collected through online platforms and offline distribution of questionnaire. A total of 395 pieces of questionnaire were distributed and 332 were retrieved for data analysis. However, 14 pieces of questionnaire were not utilized for

data analysis as due to irregularities associated with the filled-out questionnaires by the respondents while a total of 318 questionnaires were finally used for data analysis.

To minimise the issues related to potential social desirability and common method bias, we followed the recommendations of Podsakoff et al (2003) by first underscored the importance of the study and the need to respond honestly while we assured them of anonymity and confidentiality. Second, the questionnaire items were set on the bases of social skills and cohesion to ensure a sense of psychological separation by repeating the survey instructions and the critical nature of responding to the questionnaire items honestly.

Measures for Social Skills/ Independent Variables

The measures of social skills are basically communication skills and conflict management skills of team members and how they facilitate cohesion of teams in construction firms. These components serve as the building blocks for social skills that constitute the independent variable of the study. The measures for both communication and conflict management skills consist of 5 questionnaire items (indicators) for each of the latent constructs that represent social skills. The instrument was self-designed by the research team, taking into account of the critical aspects of communication and conflict management skills gleaned from the existing body of literature reviewed (Zhang & Hao, 2022; Kwofie, et al; 2015; Mello & Delise, 2015).

Measures of Cohesion/Dependent Variable

The measures for the dependent variable is team cohesion and the study considers both task and social cohesion of teams. The measures were designed by the research team and each element consisted of five questionnaire indicators, measuring various aspects of the latent constructs consisting of social and task cohesion of cross-functional teams in construction firms. The design of the measure was facilitated based on the existing body of literature (Chiocchio & Essiembre, 2009; Mello & Delise, 2015).

Social Cohesion as Mediating Variable

Social cohesion serves as an independent and a mediating variable. Social cohesion as a mediator variable is intended to determine the indirect relationships between communication skills and task cohesion and between conflict management skills and task cohesion of cross-functional teams in construction firms. Thus, the mediator variable is to ascertain intervening mechanism between the independent and dependent variables (Sanchez et al; 2023) and in specific terms, they are communication skills and task cohesion, and conflict management skills and task cohesion respectively.

DATA ANALYSES AND RESULTS

The table 1 below demonstrates the factor loadings, Cronbach alpha, composite reliability and the average variance extracted that ascertain the item reliability, internal consistency and convergent validity of the measurement instruments for the study. For each latent construct, there are five items in all the constructs for conflict management, communication skills, social cohesion and task cohesion. For the indicator reliability of the constructs, the items with less than the threshold of 0.70 were dropped and excluded for the final analysis except for Social Cohesion (SC) SC1, which was a 0.62 and it was maintained as its removal does not improve the average variance extracted. The decision is to improve the measurement model and be in alignment with the positions of prior scholars (Hair et al., 2019). Thus, the indicators appropriately loaded on the latent constructs of the study. Besides, the constructs attained reliability as both Cronbach alpha and Composite reliability values were above the threshold of 0.70 as recommended by prior scholars (Creswell, 2003; Hair et al., 2019). The measurement instrument furthermore achieved convergent validity with the AVE values above the cut-off mark of 0.05 as established in the current literature (Hair et al., 2019).. The variance inflationary factors (VIF) ranges from 1.07 to 3.30 and the values do not exceed the threshold of 10.0 as recommended by scholars (Chatterjee & Hadi, 2012). This demonstrates that the instruments and the results are not spurious.

Table 2 demonstrates how the discriminant validity of various constructs were assessed by employing Heterotrait-Menotriat Ratio (HTMT). The HTMT is an appropriate criterion to assess the discriminant validity as it is a more conservative and dependable criterion as against the Fornell Larcker method. The table provides the pairs of values for each construct and they are below the generally agreed threshold of 0.90 (Hair et al., 2019), and this clearly indicated that discriminant validity has been attained, suggesting that each construct is distinct and they measure varying concepts.

In Figure 2, the structural model of the results is also presented in a graphical approach, and the path diagram demonstrates the t values for each indicator of the latent constructs, beta coefficients and the probability values for the relationship between the predictors and the criterion variables and the values of the R-square scores. Based on the observation of the results, it is clearly indicated that there is a significant relationship between the variables in regard to each hypothesis with the p values less than 0.05 ($P < 0.05$).

Table 3 demonstrates the structural model with the results from the analysis, and indicated the dimensions of relationships between social skills and cohesion of cross-functional teams in construction firms. Specifically, the results of the direct relationships showed that there is a negative significant relationship between communication skills and social cohesion ($\beta = -0.26$, $t = 7.81$, $p < 0.05$); there is a positive significant relationship between communication skills and task cohesion ($\beta = 0.29$, $t = 4.25$, $p < 0.05$); there is a positive significant relationship between conflict management skills and social cohesion ($\beta = 0.28$, $t = 3.37$, $p < 0.05$); there is a positive significant relationship between conflict management skills and task cohesion ($\beta = 0.34$, $t = 8.14$, $p < 0.05$); and there is a positive significant relationship between social cohesion and task cohesion ($\beta = 0.28$, $t = 4.22$, $p < 0.05$); For the indirect relationship, the results indicated that social cohesion mediates the relationship between communication skills and task cohesion ($\beta = -0.07$, $t = 3.10$, $p < 0.05$) and social cohesion mediates the relationship between conflict management skills and task cohesion in cross-functional teams in construction firms $\beta = 0.08$, $t = 4.19$, $p < 0.05$)

DISCUSSION OF RESULTS

The study investigated the nexus between social skills and cohesion of cross-functional teams in construction firms. The result demonstrated that all the hypotheses were supported and confirmed for both the direct and indirect relationship between the variables studied.

The data analysis showed that there was a negative relationship between communication skills and social cohesion in cross-functional teams. The negative relationship is contrary to apriori that enhanced communication skills of team members ultimately results in improved social bonding in teams but the reverse is the case. The result presupposed that project managers do not adequately utilised communication skills to foster social cohesion in construction firms. Accordingly, team members should be exposed to training on how communication skills can be applied to enhance social cohesion among teams. The outcome of the study also implies that task efficiency is prioritized by team members over social interaction and bonding. The finding is not consistent with the prior works of Troth, Jordan and Lawrence (2012) who investigated emotional intelligence, communication competence, and student perceptions of team social cohesion. The findings from the previous study indicated that communication competence (effectiveness) positively and significantly mediated emotional intelligence and team social cohesion while communication (appropriateness) does not mediate the relationship between emotional intelligence and social cohesion. Although the previous work considered the mediating role of communication skills, it implies that communication effectiveness had positive effect on social cohesion.

In another light, the result also demonstrated that there was a positive significant relationship between communication skills and task cohesion in cross functional teams. The finding implies that cross functional team members

utilized their communication skills to facilitate the execution of tasks in construction firms. Further, the use of communication skills among team members enhanced proper and effective coordination and completion of task thereby leading to task cohesion in firms. The finding is in agreement with the work of Colins and Spink (2019) who examined member communication network structure and task cohesion in sport teams with the application of quasi experimental design. In their study, the finding demonstrated that as teammates engaged in communication to exchange information, task cohesiveness of sport teams improved.

For the linkage between conflict management skills and social cohesion, there was a positive relationship between conflict management skills and social cohesion. The result implies that amicable and effective conflict resolution build mutual trust and social bond among team members in construction firms. Although the study of Mello and Delise (2015) examined the moderating role of conflict management in attenuating the negative effect of cognitive style diversity on cohesion among teams while the current study uncovers how conflict management skills of team members enhance social and task cohesion in cross functional teams. From the prior research finding that conflict management moderated the negative effects of cognitive style diversity on cohesion by implication underpinned the current study, which indicated that conflict management skills had a positive and significant relationship with social and task cohesion.

In consideration of conflict management skills, the findings from the study indicated that team members' application of conflict management skills culminated in task cohesion as well. The finding suggests that effective management of conflicts in teams' foster unity and maintain focus of team members on the achievement of project objectives. As earlier asserted from the work of Mello and Delise (2015), the study does not disaggregate cohesion and this further suggest that the finding of the current study is in agreement with previous studies that conflict management fosters task cohesion as well among team members in construction firms.

In the case of indirect relationships, the study found that social cohesion mediated the relationships between communication skills

and task cohesion and between conflict management skills and task cohesion. Based on available scholarship and to our knowledge, there are no existing studies that unearth social cohesion as a mediator between communication skills and task cohesion as well conflict management skills and task cohesion. However, a few studies considered the mediating role of social cohesion with other variables. An example is the work of Imam and Zaheer (2021) who investigated the mediating role perceived cohesion between shared leadership and project success and the study found that perceived cohesion positively mediated the relationship between shared leadership and project

MANAGERIAL AND PRACTICAL IMPLICATION

From the findings, there some managerial implications advanced in this study. Management should fashion out periodic training and development programmes aimed at improving communication and conflict management skills. As indicated from the findings, communication skills are critical to ensure clear and effective communication to building both task social cohesion in team dynamics. Further, conflict management skills should form part of the core team development programmes to equip team members to resolve conflicts and disputes in cross functional teams.

Managers of cross functional teams should be conscious of the fundamental role social cohesion and how it serves as a mechanism between communication, conflict management skill set and task cohesion. Accordingly, managers of cross functional teams need to engage in team building activities to engender collaborative and friendly team environment.

For practical implication in project teams, technical skills are core requirement for project success and performance. However, soft skills such as communication and conflict resolution skills are to be considered as indispensable for cross functional and project team members and team performance. Accordingly, both communication and conflict resolution skills are necessary to enhance social and task cohesion among cross functional teams. In this

light, construction firms need to take deliberate steps to monitor and evaluate training programmes related to conflict management and communication with a view to providing feedback and corrective action.

Limitations and Direction for Future Studies

The study undoubtedly makes significant contributions to the scholarship of organisational behaviour and project management but not without limitations. A few of the limitations are the geographical and conceptual scope of the study centred on the Niger Delta region to the exclusion of other regions in Nigeria while the constructs of social skills were two out of the other social skills. This to some extent limited the generalizability of the findings to other contexts.

Further, the study adopted a cross sectional design where data are collected at a single point in time and therefore poses constraint to examine causation between social skills and cohesion within cross functional teams, and in another light, the is likely to suffer from the influence of social desirability, which could be overstatement of their social skills due to data collection by self-report of respondents.

Based on the limitations outlined above, we suggest that future studies should broaden the scope in terms of the other regions in Nigeria and as well consider other social skills of leadership, emotional intelligence and collaboration skills. Future studies should utilise mixed methods for data collection and longitudinal design to identify dynamics in social skills and team cohesion. The use of mixed methods and longitudinal design would give room for interviews and causal links between the variables investigated.

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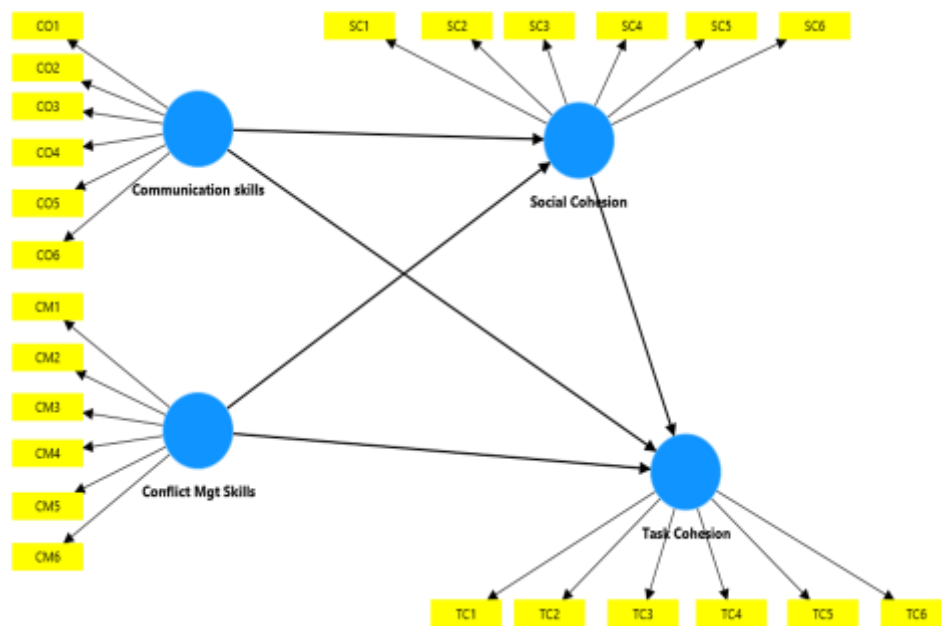


Figure 1: Conceptual Model of Social Skills and Cohesion in Cross-functional Team

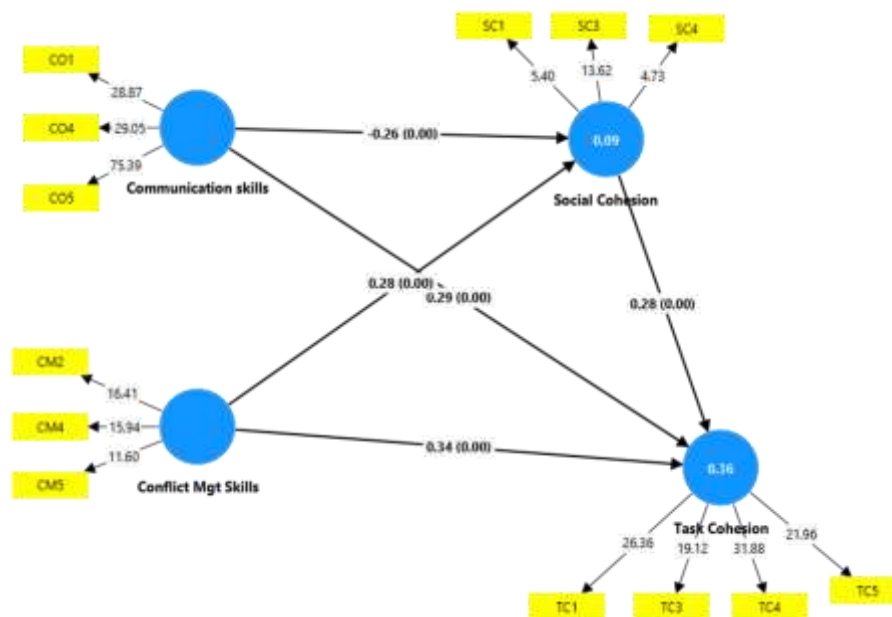


Figure 2: Bootstrapping Structural Model with Path Diagram for Social Skills and Cohesion in Cross-functional Teams

Table 1: Measurement Model for Factor Loadings, Reliability and Validity of Constructs					
Latent Constructs and Indicators	Factor Loading	Cronbach alpha	Composite Reliability	Average Variance Extracted	VIF
Conflict Mgt Skills		0.72	0.78	0.54	
CM2 <- Conflict Mgt Skills	0.73				1.19
CM4 <- Conflict Mgt Skills	0.71				1.12
CM5 <- Conflict Mgt Skills	0.76				1.23
Communication Skills		0.90	0.94	0.83	
CO1 <- Communication skills	0.89				2.52
CO4 <- Communication skills	0.93				2.93
CO5 <- Communication skills	0.94				3.33
Social Cohesion		0.71	0.74	0.50	
SC1 <- Social Cohesion	0.62				1.07
SC3 <- Social Cohesion	0.86				1.20
SC4 <- Social Cohesion	0.60				1.22
Task Cohesion		0.75	0.85	0.59	
TC1 <- Task Cohesion	0.76				1.20
TC3 <- Task Cohesion	0.75				1,89
TC4 <- Task Cohesion	0.80				2,24
TC5 <- Task Cohesion	0.76				1.87

Table 2: Heterotrait-Menotriat Ratio (HTMT) of Discriminant Validity of Measurement Constructs

HTMT	Communication skills	Conflict Mgt Skills	Social Cohesion	Task Cohesion
Communication skills				
Conflict Mgt Skills	0.47			
Social Cohesion	0.26	0.56		
Task Cohesion	0.35	0.69	0.43	

Table 3: Structural Model of Direct and Indirect Relationship between Social Skills and Cohesion in Teams

Direct Effects	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Remark
Communication skills -> Social Cohesion	-0.26	-0.26	0.03	7.81	0.00	<i>Ha₁: Supported</i>
Communication skills -> Task Cohesion	0.29	0.28	0.07	4.25	0.00	<i>Ha₂: Supported</i>
Conflict Mgt Skills -> Social Cohesion	0.28	0.29	0.08	3.72	0.00	<i>Hb₁: Supported</i>
Conflict Mgt Skills -> Task Cohesion	0.34	0.35	0.04	8.14	0.00	<i>Hb₂: Supported</i>
Social Cohesion -> Task Cohesion	0.28	0.28	0.07	4.22	0.00	<i>Supported</i>
Indirect Effects						
Communication skills -> Social Cohesion -> Task Cohesion	-0.07	-0.07	0.02	3.10	0.00	<i>Ha₃: Supported</i>
Conflict Mgt Skills -> Social Cohesion -> Task Cohesion	0.08	0.08	0.02	4.19	0.00	<i>Hb₃: Supported</i>