

# Contributing Factors to Relational Conflict in Construction Project Delivery in South Africa

Kenneth Otasowie<sup>1</sup>, Clinton Aigbavboa<sup>2</sup>, Ayodeji Oke<sup>3</sup> and Peter Adekunle<sup>4</sup>

<sup>1</sup> CIDB Centre of Excellence and Sustainable Human Settlement and Construction Research Centre, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa  
[otasowiekenneth@gmail.com](mailto:otasowiekenneth@gmail.com)

## Abstract

The effectiveness of the relationship among key stakeholders influences the progress of a building project. If this relationship weakens, it may result in a number of disagreements that frequently result in litigation or even delay in project delivery. Stopping this from happening depends on identifying the contributing factors to relational conflict in project delivery. This has become necessary particularly in South Africa (SA), considering the rising cases of poor project performance in the country with one of the root cause being poor relationship among project stakeholders. Hence, this study examines the contributing factors to relational conflicts in construction project delivery in SA. Adopting a survey design for the study, construction industry professionals in Guateng Province, SA were the respondents and a total of one hundred seventy-five (175) questionnaires were administered to them. One hundred and twelve (112) of those were returned and deemed appropriate for the study. Utilizing percentage, mean item score, standard deviation, and Kruskal-Wallis, the collected data was analyzed. The findings reveal the contributing factors to relational conflict in construction project delivery in SA which includes opportunistic behaviour, attitude/personality traits, miscommunication, coordination of trades/resource allocation, and working condition among others. The findings of this study provides information to project stakeholders in the country on the contributing factors to relational conflicts and necessary steps to take during project planning to ensure relational conflicts do not occur during project delivery. Doing this will contribute significantly to project success in the country.

## Keywords

Conflicts, Construction, Contributing factors, Project delivery, South Africa.

## 1. Introduction

Construction projects involve a variety of stakeholders, each with their own set of concerns and requirements that must be addressed in order for the project to be successful (Olander, 2007). Construction is a collaborative endeavour in which success is heavily reliant on stakeholder commitments (Leung et al., 2004) and as such it is very crucial for the relationship between the stakeholders to be healthy, fair and lucrative. Construction project stakeholders in a project might come from the inside or the outside of the organisation. Those from the inside have an undeviating effect on the organisation's decision- taking process, whilst those from the outside are influenced by the decisions of the organisations (Atkin & Skitmore, 2008). In a typical construction project, the quality of the relationship between critical stakeholders (client, consultant, and contractor) influences project progress. If this relationship is harmed, it can lead to a variety of disputes, which usually end in litigation or even the delays the delivery of the project (Ogbeifun et al, 2018). The truth is that each stakeholder has a certain job and responsibilities, as well as expectations or interests that must be met. Managing these disparate interests, which requires skill and pragmatism in controlling the relationship makes it easier to reach the project's goals but also can lead to conflict if not well managed. The likelihood of a project experiencing severe disputes increases if the stakeholders are not managed efficiently and their concerns and objectives are not addressed.

PMI (2017) opined that conflicts among stakeholders are unavoidable due to a large number of stakeholders involved in building projects and the significant variability of situations arising from construction processes. Depending on their interests or involvement in the project, construction projects performance can be affected negatively/positively by the various interests of the stakeholders. There is no denying that having many stakeholders in a building project is sure to cause issues among participants (Aghimien et al, 2019). However, healthy stakeholder relationships are extremely critical to the construction organisation's success as the effect of the relationship between the construction stakeholders can be very damaging to the project's objective. The success of a project is mostly determined by the project stakeholders and the project structure, which includes time, cost, and quality (Davis, 2016). Cost and time overruns, loss of production and profit, and harm to business relationships are all outcomes of disagreements among project stakeholders. If neglected, these conflicts may hinder project completion and damage stakeholder relationships, affecting project completion. According to Sinesilassie et al. (2017) and Vaux & Kirk (2018), the following are some of the relational conflicts a construction project could encounter; delays in project delivery, miscommunication about project intentions, disrespect, poor teamwork and ultimately, poor performance by the organisation.

Ogbeifun et al. (2018) posited that although construction project disputes are unavoidable at times, they can be managed from the start of a project, particularly the disputes that arises from relationship breakdown among the project stakeholders. However, this can only be possible if the factors that contributes to relationship breakdown among project stakeholders are identified from the onset. According to Vaux & Dority (2018), there are different types of relationship conflict that could occur among stakeholders of a project, which includes task conflict among others. Wu et al. (2017) posited that these relationship conflicts between stakeholders can arise during any stage of a building project. Hence, it is important to first identify the contributing factors to relational conflict in project delivery. This has become necessary particularly in South Africa (SA), considering the rising cases of poor project performance in the country with one of the root cause being poor relationships among project stakeholders.

## **2. Materials and Methods**

The study took a post-positivist approach in terms of philosophy, employing quantitative research that was carried out using a questionnaire survey. The questionnaire was divided into two segments, with the first segment intended to elicit background data from the respondents. The second segment tried to address the contributing factors to relational conflict in project delivery. The respondents, who are construction professionals were requested to rate the significance of the contributing factors to relational conflict in project delivery in the South African construction industry using a 5-point Likert scale, with 5 being Strongly significant, 4 being significant, 3 being moderately significant, 2 being slightly significant, and 1 being not significant. The study population were made of qualified construction professionals (engineers, architects, quantity surveyors and construction managers) who are working in South Africa and had at least five years of work experience. Due to time and financial restrictions, convenience sampling was used for the study. One hundred and seventy-five (175) questionnaires were sent out to the construction professionals and one hundred and twelve (112) were received and considered appropriate for investigation. Standard deviation, percentages, mean item scores, and Kruskal-Wallis tests as adopted by Otasowie & Oke (2022) were used to analyse the collected data. Using the Cronbach's alpha test, which yielded an alpha value of 0.873, the study validated the questionnaire's reliability. Given that the alpha score is over the cutoff point of 0.6, confirms the questionnaire's high degree of reliability (Tavakol & Dennick, 2011).

## **3. Results**

Professionals in the construction sector from South Africa participated in the survey. The profession with the most involvement (24.5%) is engineers. Following are quantity surveyors (19.6%), trade craftsmen (17.6%), construction managers (15.7%), architects (13.8%), and health and safety agents (8.8%). The majority of these respondents (61.8%) hold bachelor's and honours degrees, while the other levels of education are masters, doctoral, and higher diploma degrees, respectively, with 10.8%, 2.9%, and 24.5%. The total number of respondents had an average working history of 7.6 years, which is a remarkably long period of time in the field. These findings suggest that the study's target respondents, who were construction professionals, were fairly represented and that they had a sufficient degree of education to comprehend the study's questions (Otasowie & Oke, 2022). Also, the answers to these queries were based on a large amount of professional expertise.

Furthermore, the contributing factors to relational conflict in project delivery are shown in Table 1 below, ranging from highest mean to lowest mean. As can be seen, factors with the same mean were ordered according to how much they deviated from the mean (standard deviation). The mean standard error (SE) is a definition of the standard deviation. The standard deviation reveals what the mean of the observed data was. A modest standard deviation illustrates a situation where most data points are near to the mean, whereas a high standard deviation indicates a data point that deviates much from the mean (Field, 2005). As a result, this was used to rank the factors with a similar mean. The average of the replies received from each responder makes up the mean for each factor.

The results show opportunistic behaviour as the highest ranked driver (MIS=4.36, SD = 0.91). This was followed by Attitude/personality traits (MIS=4.35, SD=0.85); miscommunication about project intentions (MIS=4.32, SD =0.85); coordination of trades/resource allocation (MIS=4.20, SD=0.82); adversarial industry culture (MIS=4.20, SD=1.00); working conditions (MIS= 4.17, SD=0.97); unfair risk allocation (MIS=4.16, SD =0.85); Unrealistic information expectations (MIS=4.13, SD=0.93); disrespect (MIS=4.12, SD =0.94); bullying (MIS=4.08, SD =0.91); procrastination (MIS=4.07, SD=1.00); and ranked last was credit stealing (MIS=4.03, SD =1.01).

**Table 1.** Contributing Factors to Relational Conflict in Project Delivery

Factors	Mean	Standard Deviation	Rank
Opportunistic behaviour	4.36	0.908	1
Attitude/personality traits	4.35	0.854	2
Miscommunication	4.32	0.846	3
Coordination of trades/resource allocation	4.20	0.821	4
Adversarial industry culture	4.20	0.959	5
Working conditions	4.17	0.970	6
Unfair risk allocation	4.16	0.853	7
Unrealistic information expectations	4.13	0.934	8
Disrespect	4.12	0.941	9
Bullying	4.08	0.913	10
Procrastination	4.07	0.845	11
Credit stealing	4.03	0.567	12

To compare the responses of the respondents according on their different construction professions, a Kruskal-Wallis's test was conducted. It was found that while the responses for some contributing factors to relational conflict in project delivery in the South African construction industry, such as opportunistic behaviour, attitude/personality traits, miscommunication about project intentions, coordination of trades/resource allocation, working conditions and unrealistic information expectations, do not statistically differ from one another significantly. However, they do differ from one another significantly statistically in the case of other factors. Table 2 below presents the result.

**Table 2.** Kruskal-Wallis Test Showing P-Values for Contributing Factors

Factors	P-Values
Opportunistic behaviour	0.064
Attitude/personality traits	0.050
Miscommunication	0.072
Coordination of trades/resource allocation	0.053
Adversarial industry culture	0.008

Working conditions	0.058
Unfair risk allocation	0.002
Unrealistic information expectations	0.071
Disrespect	0.001
Bullying	0.041
Procrastination	0.000
Credit stealing	0.034

---

#### 4. Discussion

The involvement of several stakeholders with a range of interests in construction project's operations and results is a key factor to success (Abidin, 2010). The conception and implementation of initiatives, as well as guaranteeing their success, depend heavily on stakeholder relationship (Eyiah-Botwe et al., 2016). Cost and time overruns, loss of production and profit, and harm to business relationships are all outcomes of disagreements among project stakeholders. If neglected, these conflicts may hinder project completion and damage stakeholder relationships, affecting project completion. Based on the result above, opportunistic behaviour is the first ranked contributing factor to relational conflict in project delivery in the South African construction industry. This was even made clear by the Kruskal-Wallis test conducted, as the various construction professionals in the South African construction industry agreed that opportunistic behaviour is a significant contributing factors to relational conflict. Opportunism defined by Williamson (1975) as “self-interest seeking with guile” implies that actors deviate from the terms of agreement if it will benefit them more to do so. Eriksson (2006) also includes participants deviating from the spirit of agreement in its definition of opportunism in that, while contract participants might not actually break the terms of agreement, opportunistic behaviour would include such things as lying, tardiness, and intentionally unclear statements and bluffing. A key idea in the assessment of transaction costs is opportunism, which is crucial for economic activity involving relationship-specific expenditures. In earlier studies, “lying, stealing, cheating, and premeditated attempts to mislead, distort, conceal, obfuscate, or otherwise confuse” have been conceived and labeled as “blatant” opportunism. An example of opportunistic behaviour can be when contractors operate in a way that serves their own interests while taking advantage of their clients. Examples of this conduct include breaking promises, shirking responsibilities, and breaking explicit or tacit agreements (Lu et al., 2016). In both professional and academic settings, controlling and preventing opportunistic conduct is a crucial concern. In construction works, opportunistic behaviour from any of the participants can result in relational conflict, which cause delays in the construction period, lower project quality, and affect the two parties' ability to work together. Although, most opportunistic behaviours in construction projects have been traced to the contractors, it is important to note that even clients of projects can exhibit opportunistic behaviours. Example of this can be client delaying payment to consultants for consultancy services rendered, transferring risk to contractors and yet shying away from paying for the risk, and clients refusing to adapt to changing circumstances but rather insist on same work order or specifications irrespective of the greater cost and risk imposed on the contractor among others. The problem with these behaviours is that confidence fostered in cooperation are damaged by the presence of opportunism in projects, and hence, weakens the collaboration. Opportunism is viewed as a big threat and a crucial factor against good corporate collaboration, according to Williamson (1975), who claims that it impacts the growth of trade issues between partners.

Furthermore, attitude/personality traits is a contributing factor to relational conflict in project delivery in the South African construction industry. In fact, it is ranked second based on data collected from the various professionals in the industry and was even made clear by the Kruskal-Wallis test conducted. According to Vaux & Kirk (2018), conflicts between people that are characterised by unpleasant feelings, tension, conflict escalation, and increased stress are manifestations of personality traits that contribute to relational conflict. Several earlier studies have noted the significance of personality traits. Personality trait is a person's unique set of ideas, feelings, and behaviours, but there are psychological processes that give rise to those behaviours (Danja et al., 2021; Barza & Galanakis, 2022). Dumfart

& Neubauer (2016) posited that those with better attitude/personality traits do better in school, on the job, in their physical health, in their relationships, and they live longer. People require relationships in both personal and professional circumstances (Blustein, 2011). Relational management views stakeholder relationships strategies as essential to accomplishing project goals, and attitude/personality traits is a crucial component of relationship. This explains the significant link between relationships and project success (Pinto et al., 2009). Also, considering the relationship of the principal and agent that has been well documented by scholars in construction management literature (Oteng, 2016; Yallew et al., 2018), it is imperative that a positive attitude/personality traits is needed to achieve project goals.

Miscommunication is another significant contributing factor to relational conflict in project delivery in the South African construction industry. It is ranked third based on data collected from the various professionals in the industry. This corroborates Brockman (2014) and Vaux & Kirk (2018) that one of the most frequent cause of relational conflict that has been discovered is a lack of communication and information withholding. Lack of communication was characterised as a behavioural issue by Jaffar et al. (2011). According to Gardiner & Simmons (1998), project teams are frequently put together without having worked together before, which can lead to misunderstandings once the project's intensity is at its peak. Together, these misinterpretations and inexperience frequently cause communication issues that end in relational conflict. Relationship conflict frequently results from a lack of communication abilities essential to sustain a solid flow of communication when operations are closely interconnected and the pace is fast (Vaux & Kirk, 2018). It is important to note that conflict in relationships and issues with communication feed each other in an unhealthy cycle. Communication is impeded when there is relationship conflict, and if there are issues with communication, relationship conflict will frequently follow, creating a vicious cycle.

Coordination of trades/resource allocation is yet another significant contributing factor to relational conflict in project delivery in the South African construction industry. It is ranked fourth based on data collected from the various professionals in the industry. Also, there is no significant difference in how the construction professionals responded to this factor. According to Gunarathna et al. (2018), one of the main causes of relationship conflict in construction projects is the interconnectivity between project tasks that was brought about by the coordination of trades. Furthermore, trade coordination was identified by Brockman (2014) as a major source of relationship conflict. Even high levels of multidisciplinary participation among subcontractors are a major cause of relationship conflict (Gunarathna et al., 2018). This current study supports these various studies on coordination of trades being a contributing factor to relational conflict in project delivery.

In addition, working conditions is another significant contributing factor to relational conflict in project delivery in the South African construction industry. According to Chen et al. (2017), Long hours at the office contributes to relationship problems. This position was corroborated by the current study. Gunarathna et al. (2018) also identified workmanship as a significant contributing factor to relationship conflict. Managing subcontractors to reach the requisite quality outlined in specifications was the root of this conflict. Rework, understanding of the installation procedure, and delayed progress related to quality problems were also noted.

Other significant contributing factors to relational conflict in project delivery in the South African construction industry identified from the study include adversarial industry culture; unfair risk allocation; unrealistic information expectations; disrespect; bullying; procrastination; and credit stealing.

## **5. Conclusions**

Relational conflict is typically seen as counterproductive involving friction, tension, frustration, and occasionally animosity that have a negative impact on team performance, information sharing, and the creative thinking needed to solve complex problems. This study examines the contributing factors to relational conflict in project delivery in the South African construction industry in a bid to identify and manage the contributing factors so as to prevent relational conflicts in construction project delivery. The contributing factors were obtained from the review of relevant literature and presented to the construction professionals in the country. The results of the study show that opportunistic behaviours by project stakeholders is the most significant contributing factors to relational conflict in project delivery in the South African construction industry. Attitude/personality traits, miscommunication, coordination of trades/resource allocation, working conditions among others are additional contributing factors to relational conflict in project delivery in the South African construction industry. In other to mitigate these contributing factors, control mechanisms can be adopted with the purpose of motivating, or deterring certain behaviours for the goal of aligning the interest of the stakeholders with the project. Also, one important factor for mitigating relational conflict in construction project delivery is good communication. By communication, it means a project team's desire to provide

information willingly at all times, either through formal or informal means. These have been found to mitigate relational conflicts. The findings of this study provides information to project stakeholders in the country on the contributing factors to relational conflicts and necessary steps to take during project planning to ensure these conflicts do not occur during project delivery. Doing this will contribute significantly to project success in the country.

## References

- Abidin, N. Z. (2010). Investigating the awareness and application of sustainable construction concept by Malaysian developers. *Habitat international*, 34(4), 421-426.
- Aghimien, D., Aigbavboa, C., & Thwala, W. (2019). Managing Construction Stakeholders in South Africa—The Construction Professionals' Perspective. In *14th international conference organization, technology and management in construction and 7th international project* (p. 51).
- Atkin, B., & Skitmore, M. (2008). Stakeholder management in construction. *Construction management and economics*, 26(6), 549-552.
- Barza, A. V., & Galanakis, M. (2022). The Big Five Personality Theory and Organizational Commitment. *Psychology*, 13, 413-419. <https://doi.org/10.4236/psych.2022.133027>
- Blustein, D. L. (2011). A relational theory of working. *Journal of Vocational Behavior*, 79(1), 1-17.
- Brockman, J. L. (2014). Interpersonal conflict in construction: Cost, cause, and consequence. *Journal of Construction Engineering and Management*, 140(2), 04013050
- Chen, Y., McCabe, B., & Hyatt, D. (2017). Relationship between individual resilience, interpersonal conflicts atwork, and safety outcomes of construction workers. *Journal of Construction Engineering and Management*, 143(8), 04017042.
- Danja, M., Gandu, Y. J., & Muhammed, A. (2021). Determining the Dominant Personality Traits of Construction Teams for Proactive Dispute Management. *Open Access Library Journal*, 8, e7162. <https://doi.org/10.4236/oalib.1107162>
- Davis, K. (2016). A method to measure success dimensions relating to individual stakeholder groups. *International Journal of Project Management*, 34(3), 480-493.
- Dumfart, B., & Neubauer, A. C. (2016). Conscientiousness is the most powerful noncognitive predictor of school achievement in adolescents. *Journal of individual Differences*. 37, 8– 15
- Eriksson, P. E. (2006). Procurement and governmentance management: Development of a conceptual model based on different types of control. *Management Revue*, 17 (1), 30-49.
- Eyiah-Botwe, E., Aigbavboa, C., & Thwala, W. D. (2016). Mega Construction Projects: using stakeholder management for enhanced sustainable construction. *American Journal of Engineering Research*, 5(5), 80-86.
- Field, A. 2005. *Discovering statistics, using SPSS for windows*. London: Sage Publications.
- Gardiner, P. D., & Simmons, J. E. L. (1998). Conflict in small-and medium-sized projects: Case of partnering to the rescue. *Journal of Management in Engineering*, 14(1), 35–40.
- Gunarathna, C., Yang, R. J., & Fernando, N. (2018). Conflicts and management styles in the Sri Lankan commercial building sector. *Engineering, Construction and Architectural Management*, 25(2), 178–201.
- Jaffar, N., Tharim, A. A., & Shuib, M. N. (2011). Factors of conflict in construction industry: A literature review. *Procedia Engineering*, 20, 193–202
- Leung, M. Y., Chong, A., Ng, S. T., & Cheung, M. C. (2004). Demystifying stakeholders' commitment and its impacts on construction projects. *Construction Management & Economics*, 22(7), 701-715.
- Lu, W., Zhang, L., & Zhang, L. (2016). Effect of contract completeness on contractors' opportunistic behavior and the moderating role of interdependence. *Journal of Construction Engineering and Management*, 142(6), 04016004.
- PMI (2017), *A Guide to the Project Management Body of Knowledge*, Newtown Square, PA.
- Ogbeifun, E., Mbohwa, C., & Pretorius, J. H. C. (2018). The influence of stakeholders' relationship on project success. In *Proceedings of the International Conference on Industrial Engineering and Operations Management* (pp. 185-194).
- Olander, S. (2007). Stakeholder impact analysis in construction project management. *Construction management and economics*, 25(3), 277-287.

- Otasowie, O.K. & Oke, A.E. 2022. "Drivers of mentoring practices in construction related firms: Nigerian quantity surveying firms' perspective", *Engineering, Construction and Architectural Management*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/ECAM-09-2020-0679>
- Otasowie, K. & Oke, A. 2022. An assessment of exhibited drivers of mentoring in construction professional firms: A case of Nigerian quantity surveying firms. *Journal of Construction in Developing Countries*, 27(2): 63–86. <https://doi.org/10.21315/jcdc-10-20-0225>
- Oteng, A. (2016). Agency: A review of the agency relationship concept cost problems and strategies to solving agency problems. Unpublished Work, Ghana Institute of Management and Public Administration, School of Technology, Greenhill.
- Pinto, J. K., Slevin, D. P., & English, B. (2009). Trust in projects: An empirical assessment of owner/contractor relationships. *International Journal of project management*, 27(6), 638-648.
- Sinesilassie, E. G., Tabish, S. Z. S., & Jha, K. N. (2017). Critical factors affecting schedule performance: A case of Ethiopian public construction projects—Engineers' perspective. *Engineering, Construction and Architectural Management*, 24(5), 757–773
- Tavakol, M. & Dennick, R. 2011. Making sense of Cronbach's Alpha, *International Journal of Medical Education*. Volume 2, pp. 53-55.
- Vaux, J. S., & Dority, B. (2020). Relationship conflict in construction: A literature review. *Conflict Resolution Quarterly*, 38(1-2), 47-72.
- Vaux, J. S., & Kirk, W. M. (2018). Relationship conflict in construction management: Performance and productivity problem. *Journal of Construction Engineering and Management*, 144(6), 04018032.
- Williamson, O. (1975). *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.
- Wu, G., Zhao, X., & Zuo, J. (2017). Relationship between project's added value and the trust–conflict interaction among project teams. *Journal of management in Engineering*, 33(4), 04017011.
- Yallew, A., Juusola, H., Ahmad, I., & Törmälä, S. (2018). Exploring principal-agent theory in higher education research. *Higher Education Studies*, 3, 78-98.