

## Accountability and Transparency in Project Procurement in the Public Sector: A Qualitative Study

Bett Kiprotich Emmanuel\*

School of Business, Kenyatta University, Kenya

**\*Corresponding author**

*Bett Kiprotich Emmanuel*

**Article History**

*Received: 02.02.2018*

*Accepted: 10.02.2018*

*Published: 20.02.2018*

**DOI:**

10.21276/sb.2018.4.2.3



**Abstract:** Managing public sector projects is a challenge because of the ethical issues involved during the project procurement process which may ultimately impact the quality, cost and time of the project itself. This review sought to assess the influence of accountability and transparency on ethical decision making in project procurement. A descriptive cross-sectional survey design was used. Population for this study comprised of project managers and internal and external stakeholders. Content analysis and thematic analysis of collected data was conducted. The study established that Disregard to existing systems and procedures compounded by inadequate transparency and accountability mechanisms means that progress in many public projects did not translate into better outcomes. The enhancement of transparency and accountability in contract awarding mechanisms as well as fair and adequate regulations may contribute to the efficiency of tendering practices.

**Keywords:** Public projects, accountability, transparency, project management ethics.

### INTRODUCTION

#### Background Information

Public sector projects are undertaken as a means of implementing national policies and development plans. They are identified as part of national planning processes based on government's broad political philosophies, agenda and development objectives [1].

In Kenya, long-term objectives are currently specified within the Vision 2030 framework, with rolling five-year medium term plans which identify the key policy actions and reforms as well as programmes and projects that the government intends to implement over the specified period [2]. This therefore calls for ensuring that public sector projects, like other projects in the private sector, are implemented and completed within the specified time frames if the goals identified in the national plans are to be achieved. Although the basic project management principles and processes are the same, public sector project managers face a number of challenges. There are environmental constraints that the projects must operate within, which include bureaucracy, budget rigidity, and stakeholder diversity.

Bureaucracy, which is a tendency of government agencies [3], can produce some dysfunctional effects including inflexibility, red tape, indifference, insensitivity, officiousness and blockage of information flow [4]. Project procurement management includes the processes needed to purchase or acquire products, services or results needed to attain project scope, from outside the project team [5]. According to Lysons and Farrington [6], project managers are responsible for the overall direction and control of a particular project and the staff involved.

One of the most important contributions to be made by the purchasing function in a project in order to guarantee that the project will be 'finished on time, to specification and within budget' is through ensuring that materials and equipment are on site as needed to obviate delays in meeting the scheduled times for completion of each part of the project. Therefore, where procurement has to be undertaken as part of project implementation, procurement cycle time can be critical in delivery of the entire project, since, as with any other processes, procurement processes are susceptible to variation.

According to Rashid *et al.*, [7] project procurement has been described as an organized method or process and procedure for clients to obtain or acquire goods or services. The kind of procurement method used in securing a project is vital to the success of a given project. In considering the procurement method to adopt, the organization ought to have a clear understanding of project objectives and constraints, define the roles of the various contracting parties and consider the fair allocation of risks and obligations between the contracting parties. Procurement of public projects often constitutes the largest domestic market in developing countries. Depending on how it is managed, the public project procurement system can thus

contribute to the economic development of these countries [8]. Indeed, public project procurement is the principal means through which governments meet developmental needs such as the provision of physical infrastructure and the supply of essential medicines [9]. It is also important to note that, in the past the quality of service delivery in Public entities was wanting. According to the World Bank Group's [10] country assessment report, the quality of service in the Kenya Public Sector was very low due to inadequate accountability and responsibility, as well as poor governance. Poor management of the public assets in projects led to an almost total collapse of infrastructure, decline in productivity and an increase in poverty.

Ethical decision-making is increasingly becoming imperative as individuals in modern organizations encounter a plethora of ethical challenges that require them to engage in decision-making processes [11]. According to Carlson, Kacmar, and Wadsworth [12] ethical decision-making is the process by which individuals use their moral base to determine whether an issue is right or wrong. Many of the well-known scandals have been traced back to ethical issues and questionable decision making by managers, enabled by lack of transparency emanating from the corporate governance structure [13]. Corporate governance encompasses all work done in an organization, and thus governs the work in traditional line organizations, plus the work done in temporary organizations, such as projects. Corporate governance, therefore, interfaces and overlaps with project management governance [14] and sets the boundaries for the governance of projects [13]. The governance of projects is a major influence for ethical decision making at the project level. The ways in which projects are governed by their related governance institutions (for instance, steering committees, program and portfolio managers, project management offices) have an impact on ethical decision making in projects. Decisions on ethical issues should therefore be understood within the context of project governance [13].

Accountability entails the procedures and processes by which one party justifies and takes responsibility for its activities [15]. According to Kotwani [16] accountability can be defined as the requirement that officials answer to stakeholders on the disposal of their powers and duties, act on criticisms or requirements made of them and accept responsibility for failure, incompetence or deceit. The accountable person is the individual who is ultimately answerable for the activity or decision. Accountability is critical to every project's success. Mercy Corps [17] indicate that an accountable procurement process must be in line with all relevant laws and regulations when identifying procurement needs, evaluating and selecting bids, monitoring and implementing the bidding process. According to Asare and Prempeh [18] accountability is at once a key inducement to individual and institutional

probity, a key deterrent to collusion and corruption, and a key pre-requisite for procurement credibility. Roberts [19] indicates that while the project manager has the important responsibility of establishing an environment of accountability, project team members have the responsibilities to hold themselves and each other accountable.

Park and Blenkinsopp [20] define transparency as the open flow of information. The principle of transparency implies that a project is open about its policies, decisions and actions, including the effects of those actions and policies. This implies that project management provides timely, clear and relevant information to their stakeholders so that the stakeholders can evaluate the organization's actions and can address potential issues with these actions. Kenny [21] identifies transparency in public procurement as a key practice for fighting corruption. Asis *et al.* [22] report that reforms to strengthen user rights, enhance stakeholder participation, and increase transparency in utility budgeting and decision making can significantly improve utility performance and reduce corruption. However, Ingram [23] concedes that transparency has proven difficult to measure and results assessing its impacts are mixed.

#### **Statement of the Problem**

Project Decision-making is difficult enough without context challenges. Project managers constantly encounter the classic trade-offs of time versus cost; or of time and cost, versus quality. They often must make decisions to act to prevent likely risks, or to ignore them. The difficulty increases with poor project planning, poor status tracking or change control, slow reporting of open issues, or failure to make essential decisions quickly. The general problem is that there is an unacceptably high failure rate of projects among project professionals. The tasks of keeping projects on track (scope), on time (schedule), and within budget (cost) to satisfy customers are increasing, despite technological breakthroughs [24].

Managing public sector projects is a unique challenge because of the ethical issues involved during the project procurement process which may ultimately impact the quality, cost and time of the project itself. Ethical issues include conflict of interest, bid shopping, collusive tendering, bid cutting, corruption and payment game. Therefore, it is critical to govern the project procurement processes, especially plan procurement, to ensure the accountability and transparency of the decision making process and ensure that potential ethical issues are avoided. In 2003 the GOK began implementing reforms to address inefficiency in the use of public resources and weak institutions of governance. The aim was to make the procurement process more transparent, ensure accountability and reduce wastage of public resources among others.

Currently, there are weak oversights institutions, lack of transparency, poor linkages between procurements and expenditures, delays and inefficiencies, poor records management, bureaucracy, rampant corruption and political interests. Bureaucracy has been identified as the leading factor contributing to time and cost overruns in projects in Kenya [25], limiting the latitude of public sector employees in making timely and relevant decisions on projects, which require much greater flexibility for the achievement of results. Previous research on project governance, ethical decision making and project procurement is scanty and the extant literature was carried out in the context of developed countries.

### **Purpose of the Study**

To assess the effect of Accountability and Transparency in project procurement in the public sector.

### **Objectives of the Study**

- To examine the extent to which accountability influence ethical decision making in project procurement
- To find out the effects of transparency on ethical decision making in project procurement

## **LITERATURE REVIEW**

### **Theoretical Review**

One of the theories that describe the principal agent relationship is the agency theory; this section describes this theory and highlight insights from different authors. Agency theory has been the subject of extensive research since its introduction in modern form by Jensen and Meckling [26]. The generality of the theory of Agency appears unquestionable and it has been widely adopted. According to Nurcan [27] the model correctly predicts particular phenomena under investigation in only the simplest of instances, and even in the simplest of instances there are cases where the simple agency model has limited success. An agency relationship arises when one or more principals (for example an owner) engage another person as their agent (or steward) to perform a service on their behalf. A principal and an agent form an agency relationship because they each expect to receive some net benefit. The parties expect that the relationship will lead to an efficient division of labor. Performance of this service results in the delegation of some decision-making authority to the agent. This delegation of responsibility by the principal and the resulting division of labour are helpful in promoting an efficient and productive economy. However, such delegation also means that the principal needs to place trust in an agent to act in the principal's best interests [28].

The relationship between the principal and the agent is called the "agency," and the law of agency establishes guidelines for such a relationship. The formal terms of a specific principal-agent relationship

are often described in a contract. An agent must obey reasonable instructions given by the Principal. The Agent must not do acts that have not been expressly or impliedly authorized by the Principal. The Agent must use reasonable care and skill in performing the duties. Most importantly, the Agent must be loyal to the Principal. The Agent must refrain from putting herself in a position that would ordinarily encourage a conflict between the agent's own interests and those of the principal. The Agent must keep the Principal informed as to all facts that materially affect the agency relationship [29].

Agency theory is concerned with resolving problems that can exist in agency relationships; that is, between principals and agents of the principals. The two problems that agency theory addresses; the problems that arise when the desires or goals of the principal and agent are in conflict, and the principal is unable to verify (because it difficult and/or expensive to do so) what the agent is actually doing [30] Agency theory seeks to explain the relationship in order to recommend the appropriate incentives for both parties to behave the same way, or more specifically, for the agent to have the incentive to follow the principal's direction. Agency theory also seeks to reduce costs in disagreements between the two [31].

Agency theory is relevant to this study because it appreciates the role of the agent in achieving a greater goal. According to the theory the delegation of responsibility by the principal and the resulting division of labor are helpful in promoting an efficient and productive economy. The delegation of responsibility in the context of this study is the principal-agent relationship between the project owner and manager, where the principal (project owner) depends on the agent (contractor or project manager) to undertake a task on the principal's behalf.

### **Empirical Review**

#### ***Accountability in Project Procurement***

A study by K-Monitor Public Association [32] tried to provide a comprehensive picture on the public procurement systems in the Visegrad countries by seeking to reveal the legal and institutional framework and practice of public procurements as well as to map the key elements in national systems. The study found that that a shift to proactive publishing systems as well as more open and transparent procedures – especially in electronic methods – can significantly repel the misuse of public funds, and may also lead to more effective and cheaper procurements. Moses [33] study sought to establish the relationship between management of stakeholders' expectations, political influence, accountability and project performance in Uganda. A cross – section survey and correlation design was used to collect data. The study concluded that the greatest predictor of the variation in relation to the magnitude of

the standardized beta coefficient is accountability in the realized sample.

Mwaura [34] sought to establish the effects of financial accountability on the performance of non-governmental organizations in Kenya. The study found that the NGOs that applied financial standards in ensuring accountability of finances in the organizations boosted Donor support which resulted in improved performance. The study also established a significant relationship between financial performance of NGOs in Kenya and the independent variable financial accountability. Angokho *et al.*, [35] focused on challenges in achieving transparency and accountability in public procurement procedures in Sabatia Sub-County public secondary schools by looking at internal and external factors, and how they affect transparency and accountability achievement in public procurement procedure. Using the step-wise regression model, the external factors contribute most in the variance in challenges facing transparency and accountability in procurement procedures while internal factors contribute least to change in variance in challenges facing transparency and accountability in procurement procedures. In another study, Ngugi and Mugo [36] adopted a descriptive research design to analyze the purchasing process in the Health-Care industry. The findings revealed that accountability, ICT adoption and ethics affected procurement process of health care supplies in the public sector to a great extent.

#### ***Transparency in Project Procurement***

A study by Park and Blenkinsopp (2011) focused on the roles played by transparency and trust in the relationship between governmental corruption and citizen satisfaction with public services. The data indicated that the relationship between corruption and satisfaction were moderated by transparency and partially mediated by trust. Ochelle [37] investigated determinants of sustainability of community water projects in semi-arid areas in Kenya with a focus in Mulala division. It was found out that the accountability and transparency among the committee members who manage the water resources is also a key factor which influences sustainability. If there is a perceived lack of transparency and accountability, community members tend to withdraw their support for the water projects. Kinoti [38] explored factors that influence ownership of development projects by communities in Kiambaa constituency. The findings showed that accountability and transparency of leadership influences ownership of development projects to a great extent, indicated by 79.2% of the total respondents.

Nzamu [39] aimed to determine the implementation of Government funded projects. Government funded projects are globally believed to fail compared to the privately-owned projects. The study found that bureaucracy did not have a significant influence to the implementation of projects but is very

important to public projects for transparency and accountability. Kinyua [40] assessed the influence of Itabua-Muthatari community water projects 'management on sustainability of the community based project in Embu Sub County, Embu County. It was found that active stakeholders influence the management to be accountable and transparent management and make it to use the right procurement procedures. Monitoring and evaluation influence sustainability of community based projects as indicated by 59 % of members who strongly agreed that the monitoring and evaluation enhance sustainability of projects, accountability, transparency and sustainability of projects.

#### **Research Gap**

Various studies have been conducted on accountability in public projects. Majority of these studies agree that accountability leads to better outcomes. A review of current studies however reveals that some studies such as Moses [33] and Angokho *et al.* [35] use transparency and accountability interchangeably despite the two being distinct principles. Majority of available studies also focus on project success and few have focused on the procurement process. There is limited literature on the role of transparency on ethical decision making in project procurement. Majority of studies such as Ochelle [37] and Nzamu [39] that have touched on transparency have bundled transparency and accountability together and have failed to operationalize the latter.

### **RESEARCH METHODOLOGY**

#### **Research design**

A descriptive cross-sectional survey design is best suited for this study. A cross-sectional survey collects data to make inferences about a population of interest (universe) at one point in time. Hall [41] describes cross-sectional surveys as snapshots of the populations about which they gather data. A cross sectional study looks at data collected across a whole population to provide a snapshot of that population at a single point in time. In a descriptive survey research objectives are predetermined which allows data collection to be relevant and sufficient to the study problem. This research design was used successfully by Kinoti [38], Ochelle [37] and Nzamu [39].

#### **Study Population**

Population refers to an entire group of individuals, events or objects having common characteristics that can be observed and measured [42]. According to Sekaran and Boungie [43] population refers to the entire group of people, events or things of interest on which the researcher wishes to investigate. Population for this study comprised of project managers and internal and external stakeholders.



### **Research Instrument**

This study involved primary data. Primary research data collection describes when a researcher conducts his/her own research and controls the data [44]. In this research, the researcher opted for interviews to collect data. Interviews are preferred because they are useful to obtain detailed information about personal feelings, perceptions and opinions. They also allow more detailed questions to be asked.

### **Data Analysis**

Content analysis and thematic analysis of collected data was conducted. Content analysis involved a rigorous and systematic classification process of coding and identifying themes or patterns that emphasize the reliability and replicability of observations and subsequent interpretations. Thematic analysis

### **FINDINGS**

Public procurement is regarded as an area that is particularly vulnerable to corruption and political influence. Disregard to existing systems and procedures compounded by inadequate accountability mechanisms means that progress in many public projects did not translate into better outcomes. Therefore the enhancement of accountability in contract awarding mechanisms as well as fair and adequate regulations may contribute to the efficiency of tendering practices. Transparency ensures that information flows freely to all stakeholders and therefore identification of errors and omissions is made easier. Transparency also ensures greater customer satisfaction and project success. By enabling a transparent project management system, everyone benefits from those working on the project to those sponsoring the project and auditing it.

### **CONCLUSION**

The enhancement of accountability in contract awarding mechanisms as well as fair and adequate regulations may contribute to the efficiency of tendering practices. The study concludes that for proper ethical decision making in project procurement transparency is indispensable. At a very basic level, transparency is often seen as an essential factor for keeping project managers honest and for reducing the extent of corruption

### **REFERENCES**

1. Berhanu, B., & White, M. (2000). War, famine, and female migration in Ethiopia, 1960–1989. *Economic Development and Cultural Change*, 49(1), 91-113.
2. Tuncay, T., Musabak, I., Gok, D. E., & Kutlu, M. (2008). The relationship between anxiety, coping strategies and characteristics of patients with diabetes. *Health and quality of life outcomes*, 6(1), 79.

3. Blanke, C. D., Rankin, C., Demetri, G. D., Ryan, C. W., Von Mehren, M., Benjamin, R. S., ... & Tanaka, M. (2008). Phase III randomized, intergroup trial assessing imatinib mesylate at two dose levels in patients with unresectable or metastatic gastrointestinal stromal tumors expressing the kit receptor tyrosine kinase: S0033. *Journal of clinical oncology*, 26(4), 626-632.
4. Liu, D. H., Lam, K. M., & Shen, L. S. (2005). Illumination invariant face recognition. *Pattern Recognition*, 38(10), 1705-1716.
5. Cañas, P. I., Romero, E. G., Alonso, S. G., & Herreros, M. P. (2008). Changes in the aromatic composition of Tempranillo wines during spontaneous malolactic fermentation. *Journal of Food Composition and Analysis*, 21(8), 724-730.
6. Naude, M. J., & Badenhorst-Weiss, J. A. (2011). Supply chain management problems at South African automotive component manufacturers. *Southern African Business Review*, 15(1).
7. Rashid, A. M., Ling, K., Tassone, R. D., Resnick, P., Kraut, R., & Riedl, J. (2006, April). Motivating participation by displaying the value of contribution. In *Proceedings of the SIGCHI conference on Human Factors in computing systems* (pp. 955-958). ACM.
8. Thuo, C. W., & Njeru, A. (2014). Effects of public procurement reforms on service delivery at national spinal injury referral hospital, Nairobi. *International Journal of Business and commerce*, 3(8), 70-81.
9. Mithamo, E., Iravo, M., & Mbithi, S. (2013). Effect of procurement regulations adherence on administration of the procurement process in kenyan public entities: a case study of kenya rural roads authority. *Jomo kenyatta university of agriculture and technology*, 505.
10. Kaplan, W., Wirtz, V., Mantel, A., & Béatrice, P. S. U. (2013). Priority Medicines for Europe and the World Update 2013 report. *Methodology*, 2, 7.
11. Methé, B. A., Nelson, K. E., Pop, M., Creasy, H. H., Giglio, M. G., Huttenhower, C., ... & Chinwalla, A. T. (2012). A framework for human microbiome research. *Nature*, 486(7402), 215.
12. Carlson, D. S., Kacmar, K. M., & Wadsworth, L. L. (2002). The impact of moral intensity dimensions on ethical decision making: Assessing the relevance of orientation. *Journal of Managerial Issues*, 15-30.
13. Miller, W. H., Griffin, C. E., Campbell, K. L., & Muller, G. H. (2013). *Muller and Kirk's Small Animal Dermatology7: Muller and Kirk's Small Animal Dermatology*. Elsevier Health Sciences.
14. Caniëls, M. C., & Bakens, R. J. (2012). The effects of Project Management Information Systems on decision making in a multi project environment. *International Journal of Project Management*, 30(2), 162-175.

15. Emanuel, E. J., & Emanuel, L. L. (1996). What is accountability in health care? *Annals of Internal Medicine*, 124(2), 229–39.
16. Jeong, W., Kotwani, M., & Popovski, V. (2013). *U.S. Patent No. 8,527,697*. Washington, DC: U.S. Patent and Trademark Office.
17. Mercy, C. (2017). Principles of the Procurement Process - Accountability in Procurement. Retrieved January 20, 2018, from <http://mercycorps.org.mn/beta/index.php/en/news-mcm/563-principles-of-the-procurement-process-accountability-in-procurement>
18. Asare, E. N., & Prempeh, K. B. (2016). Measures of Ensuring Value for Money in Public Procurement: A Case of Selected Polytechnics in Ghana. *Journal of Logistics Management*, 5(1), 22–31. Retrieved from <http://article.sapub.org/10.5923.j.logistics.20160501.04.html>
19. Roberts, M. (2018). How to Build Accountability into a Project. Retrieved January 20, 2018. from <https://www.thebalance.com/how-to-build-accountability-into-a-project-1669734>
20. Park, H., & Blenkinsopp, J. (2011). The roles of transparency and trust in the relationship between corruption and citizen satisfaction. *International Review of Administrative Sciences*, 77(2), 254–274.
21. Tennessen, J. A., Bigham, A. W., O'Connor, T. D., Fu, W., Kenny, E. E., Gravel, S., ... & Kang, H. M. (2012). Evolution and functional impact of rare coding variation from deep sequencing of human exomes. *science*, 337(6090), 64–69.
22. Asís, M. G., De Leary, D. O., Ljung, P., & Butterworth, J. (2009). *Improving Transparency, Integrity, and Accountability in Water Supply and Sanitation*. *Water Supply*.
23. Ingrams, A. (2017). Transparency for Results: Testing a Model of Performance Management in Open Government Initiatives. *International Journal of Public Administration*, 1–14.
24. Carmeli, A., Gelbard, R., & Reiter-Palmon, R. (2013). Leadership, creative problem-solving capacity, and creative performance: The importance of knowledge sharing. *Human Resource Management*, 52(1), 95–121.
25. Kamau, L. W., & Kagiri, A. W. (2015). Influence of inventory management practices on organizational competitiveness: A case of Safaricom Kenya Ltd. *International Academic Journal of Procurement and Supply Chain Management*, 1(5), 72–98.
26. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305–360.
27. Nurcan, S., Etien, A., Kaabi, R., Zoukar, I., & Rolland, C. (2005). A strategy driven business process modelling approach. *Business Process Management Journal*, 11(6), 628–649.
28. Walker, W. E., Harremoës, P., Rotmans, J., van der Sluijs, J. P., van Asselt, M. B., Janssen, P., & Krayer von Krauss, M. P. (2003). Defining uncertainty: a conceptual basis for uncertainty management in model-based decision support. *Integrated assessment*, 4(1), 5–17.
29. Morice, M. C., Serruys, P. W., Sousa, J. E., Fajadet, J., Ban Hayashi, E., Perin, M., ... & Molnar, F. (2002). A randomized comparison of a sirolimus-eluting stent with a standard stent for coronary revascularization. *New England Journal of Medicine*, 346(23), 1773–1780.
30. Definition, L. R. (2012). Investopedia.(nd). *Investopedia-Educating the world about finance*.
31. Green, M. B., Schwarz, J. H., & Witten, E. (2012). *Superstring theory: volume 2, loop amplitudes, anomalies and phenomenology*. Cambridge university press.
32. K-MonitorPublicAssociation. (2012). Transparency and accountability in public procurements: The case of Visegrad Countries, 1–34.
33. Yan, B., Moses, S. A., Gadway, B., Covey, J. P., Hazzard, K. R., Rey, A. M., ... & Ye, J. (2013). Observation of dipolar spin-exchange interactions with lattice-confined polar molecules. *Nature*, 501(7468), 521.
34. Mwaura, D., Acquaye, D., & Jargal, S. (2013). Marketing implications of the destination image of Mongolia. *Worldwide Hospitality and Tourism Themes*, 5(1), 80–91.
35. Angokho, A. C., Juma, S., & Douglas, M. (2014). Challenges in achieving transparency and accountability in public procurement procedures in secondary schools Sabatia Sub-County, Vihiga County, Kenya. *International Journal of Innovative Research & Development*, 3(5), 324–330.
36. Ngugi, J. K., & Mugo, H. W. (2012). *Internal Factors Affecting Procurement Process Of Supplies In The Public Sector; A Survey Of Kenya Government Ministries*.
37. Ochelle, G. O. (2012). Factors influencing sustainability of community water projects in Kenya: a case of water projects in Mulala Division, Makueni County. Retrieved from <http://erepository.uonbi.ac.ke/handle/11295/8196>
38. Kinoti, E. K. (2011). *Factors influencing ownership of development projects by the communities: a case of Kiambaa Constituency, Kenya*. University of Nairobi, Kenya. Retrieved from <http://erepository.uonbi.ac.ke/handle/11295/4583>
39. Nzamu, J. M. (2016). *Determinants of implementation of government funded projects: case of the judiciary refurbishment of courts in the North Coast region, Kenya*. University of Nairobi. Retrieved from <http://erepository.uonbi.ac.ke/handle/11295/99425>
40. Kinyua, J., Covaci, A., Maho, W., McCall, A. K., Neels, H., & Nuijs, A. L. (2015). Sewage-based

- epidemiology in monitoring the use of new psychoactive substances: Validation and application of an analytical method using LC-MS/MS. *Drug testing and analysis*, 7(9), 812-818.
41. Knapp, M. L., Hall, J. A., & Horgan, T. G. (2013). *Nonverbal communication in human interaction*. Cengage Learning.
42. Xia, Y., Yang, P., Sun, Y., Wu, Y., Mayers, B., Gates, B., ... & Yan, H. (2003). One-dimensional nanostructures: synthesis, characterization, and applications. *Advanced materials*, 15(5), 353-389.
43. Zaid, N. A. M., Ibrahim, W. M. F. W., & Zulqernain, N. S. (2014, February). The Determinants of profitability: Evidence from Malaysian construction companies. In *Proceedings of 5th Asia-Pacific Business Research Conference* (pp. 17-18).
44. Creswell, J. W. (2009). Mapping the field of mixed methods research.