

Public Procurement Principles and Value for Money in Works: The Roles of Trust and Ethical Codes

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Abstract

This research assesses the influence of the public procurement principles on value for money. The study further determines how trust and ethical procurement practices jointly and separately mediate the relationship between principles of procurement and value for money. The main objective is to determine the procurement principles impacting value for money, highlighting the gaps in effective and efficient adherence to trust and ethical practices in the procurement of works. The study adopted a mono-quantitative method with a structured questionnaire to gather data from a total sample of 244 respondents. The purposive sampling technique was used. The study findings revealed that compliance with procurement principles significantly and positively influences value for money. Results also indicated that adherence to procurement principles and ethical practices is significant and positive, and leads to trust in procurement activities at local government institutions. However, findings show an inverse relationship between citizens' trust and value for money. The study is limited to quantitative analysis that focuses on numerical data, which might overlook subjective experiences. Lastly, the study outcome shows procurement officers are skilled and play crucial roles in ensuring that metropolitan, municipal, and district assemblies (MMDAs) deliver projects to communities, resulting in value for money. The study recommends that procurement officers and managers in the assemblies must reinforce the implementation of principles and ethical procurement practices and provide periodic training for staff to enhance their understanding of the importance of ethical procurement and its impact on value for money.

Keywords: Public Procurement, Value for Money, Ethics, Trust, Ghana.

Introduction

Public procurement often contributes to the largest domestic market (Fazekas & Blum, 2021) in both developed and developing countries (Ishak & Thiruchelvam, 2024). Depending on how procurement systems is managed, it contributes to countries economic growth and development (Swensson & Tartanac, 2021). Many governments also use public procurement to support the development of domestic projects production (Howlett *et al.*, 2025) and support minorities or vulnerable communities (Troje & Andersson, 2021) to improve their standard of living.

The public procurement principle (PPP) is a single dominant determinant (SDDs) that provides foundation for innovation, policies, legislation, regulation and guidance in the

formulation and implementation of procurement activities in a country (Attarpour *et al.*, 2024; Mchopa *et al.*, 2024). The principle and ethical procurement practices are the basic requirements for all procurement activities in both the developed and developing countries (DeAses, 2004; Fourie, & Malan, 2021; Ogugua *et al.*, 2024). The procurement principles (PP) provide environment that controls and monitors the manner upon which public funds and resources are used for projects procurement and the associated benefits the citizens and societies/communities within a country enjoy. Public procurement principle encompass transparency, fairness, accountability, competition, efficiency, effectiveness, sustainability, engagement, rule of law and equal treatment (Adebayo *et al.*, 2024). These principles advance strategic objectives of public entities (Odongo & Kazungu, 2023) when addressing the requirements of the citizens and taxpayers in general projects needs in a country. The adherence of each of these PP is a requisite and major determinant to focus on with assurance of achieving value for money in the procurement of works at the public institutions. Meanwhile, ethical procurement is an entities' code of conduct that measures and controls the behaviour and conduct of procurement stakeholders and impacts decisions during procurement process and activities (Nguyen & Hoai, 2023; David *et al.*, 2024). Ethical procurement practices and conduct ensures that procurement processes and practices are fair, transparent, free from corruption and favoritism (Munzhedzi, 2016; Iwerebor *et al.*, 2024). Entities uphold to ethical practices and conduct builds trust with procurement stakeholders that helps to contribute to brand reputation (David *et al.*, 2024; Pirinen & Mikkonen, 2024; Challender, 2019; Greenwood & Van Buren, 2010).

The principles and ethical procurement operate '*sine quan non*' to determine exclusive achievement of value for money in construction procurement at the public institutions (Mbazor *et al.*, 2025). Studies also highlights ethics and integrity as fundamental prerequisites fostering a robust procurement system. According to Adorkor (2022), ethics play a pivotal role in ensuring value for money, which serves as the cornerstone principle of public procurement. Onyekwelu *et al.*, (2024) contends that ethical conduct not only enhances the reputation of procuring entities but also fosters trust thus facilitating positive partnerships among business stakeholders (Towo & Jonasi, 2024; Adebayo *et al.*, 2024). Maintaining ethical standards among contractors, suppliers or consultants increases the likelihood of successfully completing assignments/contracts. Thus, fostering an ethical environment and establishing ethical safeguards are crucial drivers for enhancing public procurement practices (Fourie & Malan, 2021). Integrity, achieved through accountability and transparency, ideally forms an integral component of a sound public procurement framework. Public institutions expenditure on project procurement is enormous, hence, effort to comply with the principles and ethical procurement practices inures benefits of achieving value or money. Value for money seeks to ensure optimal balance between benefits and costs of projects procurement considering the total cost of ownership (Nshimyumuremyi, 2018; Burger & Hawkesworth, 2011). Awarding the lowest tender does not necessarily equate to achieving value for money (Civil Service College, 2010; Ellis *et al.* 2021). Nonetheless, the lowest evaluated bidder among competitors guarantees fairness

and compliance of integrity in procurement principles. Entities bid to protect public purse from fraudulent expenditure on projects is guided by the value for money determinants such as economy, efficiency, effectiveness (Ishawu et al, 2020; Hasibuan, 2023; Nusron et al.,2022; Barr & Christie, 2015). Conversely, quality or fitness for purpose procurement is fostered by the approach to enhance PPP and ethical procurement. Attaining value for money in public procurement involves striving for maximum project lifetime value, clearly delineating relevant benefits, and ensuring timely delivery of citizens interest projects (Sorenson et al.,2008). Contemporary organizations strive to attain value for money across all facets of procurement endeavors (Osei-Tutu et al, 2010). Consequently, VfM determinants such as quality/fit for purpose, economy/cost which rarely researchers focus is indispensable in every stage of the procurement process (Indrasakti & Wicaksono, 2024). Early consideration of value for money during cost analysis, category definition, complexity assessment to establish analysis of foundational value benchmark provides context for project worth (Miles, 2015).

Thus, the study seeks to address the following key specific objectives; Assessing the influence of PPP on value for money; to determine the influence of trust on VfM; to assess the influence of ethics on VfM; to ascertain the mediating effect of trust on the relationship between PPP and VfM; to assess the mediating effect of ethics on the relationship between PPP and VfM; to investigate the moderating effect of trust on the relationship between PPP and VfM.

Statement of the Problem

Public procurement plays significant role in a country's economic development. Meanwhile, these countries still grapple with adherence of the principles and ethical procurement practices. The procurement irregularities and infractions emanate from unethical and misconduct result to corruption, biasness, collusion, secrecy, discrimination and unfair treatment during the process and implementation of projects procurement for economic development (Georgieva & Georgieva, 2017; Lyra et al.,2022; Essel, 2021) pervades procurement environment. Meanwhile, the principles and ethical procurement practices plays crucial part in the procurement process because it results to cost effectiveness and efficiency of procurement outcome (Fourie & Malan, 2020). The noncompliance of procurement principles and ethical practices results to high costs, project quality compromise, delayed and wastage of public resources that undermines the achievement of value for money (Ochieng'-Springer & Odhiambo, 2022; Alavudeen et al.,2008; Tukamuhabwa, 2012; Fourie, 2018).

Despite the establishment of regulatory institutions such as auditor general, economic and organised crime organisation (EOCO), Public Accounts Committee (PAC), Commission on Human Rights and Administrative Justice (CHRAJ) aimed at improving sound procurement practices, compliance of principles and ethical procurement standards remains unsatisfactory across Africa (Cebekhulu, 2022). The menace of influencing procurement

procedures through gifts, collusion and threats, undermining compliance with ethical standards (Ethics and Anti-Corruption Commission in 2018 ([EACC, 2015]) is pervasive. Conflict of interest among stakeholders further exacerbates the danger of ill compliance of principles and ethical procurement practices as individuals prioritize personal gain over the group interest in the use of taxpayer's funds. Walker and Brammer (2011) and Sam (2024) put it that public procurement must be guided by principles of transparency, accountability, and achieving value for money for citizens and tax payers. Despite efforts public institutions put in to implement codes of ethics, sound compliance with ethical standards still remains a challenge. Procurement audits consistently reveal instances of non-compliance with regulations emanating from inflated procurement costs and substandard works procurement (Office of Auditor General, 2018). Addressing these challenges and fostering the culture of adherence to the principles of ethical procurement practices is the driving force for effective resource allocation and spending on project procurement. This study seeks to investigate better alternatives to implementation and enforcement of PPP, trust, code of conduct and ethical procurement practices to warrant VfM in the procurement of works. Despite the trending discourse on how public institutions pursue value for money in the implementation of works procurement, few empirical PLS-SEM tests public procurement principles and value for money relationships and incorporates trust and ethics in African contexts (Dadzie *et al.*, 2024; Asaduzzaman *et al.*, 2025)

Public Procurement Principles (PPP) and Ethical Practices (EP)

Public procurement entails comprehensive description of steps aimed at obtaining materials, works, and services (Pouikli, 2021). The identification of needs, invitation, selection of contractors, award and management of contracts implementation of project/work majorly constitute stages of public procurement (Josefsen, 2019). Public procurement is a continuous process rather than an event, through which organizations utilize public funds to acquire projects. Ameyaw *et al.* (2012) add that, the process is comprehensive, involving proper procurement planning, budget allocation, invitation and evaluation of bids, contract award, contract management, performance measurement, monitoring, auditing, and reporting. Public acquisition invariably requires careful adherence of PPP and ethical practices (Adow, 2020). Ayoyi (2017) suggest that ethics and principles are conduct governing individual or a group in their social or business environment relations. Thus, the principle requires to identify what is right or wrong, good or bad (Komakech, 2016) with regards to values or moral principles guiding the behaviour of procurement personnels day-to-day activities and procedures within the organisation (Laaser, & Bolton, 2017). Falola and Oludayo (2015) also put it that ethics constitutes 'the collection of values and norms, functioning as standards or yardstick for assessing the integrity of individuals (public officials) conduct in discharging their duties. Millerson (2013) contends that public officials should possess the skills based on theoretical knowledge; training and education; demonstration of competence, maintenance of integrity through adherence to code of conduct based upon which professionals operate.

Getnet (2014) observed that "in accordance with sections 92 (3) and (4) of the Civil Service Law of 1993, PNDC Law 327, ethics describes behaviour, attitudes, and character exhibited within and outside the working environment. The expected standards of conduct include selflessness, competence, integrity, impartiality, fairness, and honesty on matters concerning work towards societal standards. Additionally, section 86 of Act 2003 (Act 663) mandated Public Procurement Board (PPB) compile and publish code of conduct, subject to approval by the Minister. This code applies to all officials of procurement entity, tender evaluation and Review Boards, as well as contractors and collaborators."

Conversely, procurement ethics constitutes values, beliefs, and moral principles that govern the behaviour of procurement stakeholders (Musyoka, 2017). Adherence to codes of conduct is a measure to regulate personal conduct ensures unbiased, transparency and equitable delivery of duties (Asare *et al.*, 2025). Code of conduct emanates from procurement entities making procurement decisions based on principles of integrity, honesty, fairness, and responsibility, (Jazil & Fobiri, 2025) ensuring that all parties involved, including suppliers, customers, and procurement environment, treated with respect, dignity and that no harm is caused. The code of conduct does not only ensure, measures and support the best evaluated bidder (Vee & Skitmore, 2003; Jeong *et al.*, 2025) but contract with suppliers and contractors to building a strong and trustworthy relationships within the supply chain.

Procurement entities ethical status generates code of conduct resulting to commitment to social, environmental and legal ethics. The application of ethics in procurement requires a thorough understanding of entity's social responsibility, societal obligations and expectations (Yornu & Akushie, 2025). The successful implementation of code of conduct depends and requires adoption of a practical approach to eradicate unethical practices from the procurement processes. Unethical behaviour of individuals in the procurement process in committing offenses for personal enrichment betraying the trust placed on them, violating moral principles and values guiding procurement behaviour (Basheka & Tumutegyreize, 2010). Ferrell *et al.* (2019) highlighted that widespread and easily detectable managerial wrongdoing, exemplified by scandals like Enron and WorldCom in the United States, has underscored the need to uphold ethical practices in organisations. The study focuses on dimensions of ethical practices such as accountability, transparency, honesty, integrity, dedication to serving the public interest, professionalism, respect for suppliers, adherence to laws, and upholding ethical standards established by professional ethics (Sahoo, 2017). Improving and adopting ethical practices in procurement processes reduces costs associated with contractors' selection, thereby enhancing project chain management and entities performance (Hardaker & Graham, 2000).

Public Procurement Principles

Transparency and Accountability

Public officials at the public entities are expected to render stewardship on their responsibilities of tasks in the project procurement. Participants in the procurement process are responsible for their commitments and responsibilities. Public officers must deliver responsibilities within the required time and cost in relation to the required quality standards (Osuizugbo, 2025; Siahaan & Esther, 2025). Accountability centres on the components of goals and result evaluation, explanation of outcomes to internal or external monitors and stakeholders, and consequences for poor performance or dishonest behaviour (Yanuarisa *et al.*, 2025; Farrington & Lysons, 2020). It is argued that accountability reflects the protection of entities and community interests in the use of public funds (Barret, 2000). To improve procurement, accountability is required to establish internal controls, create sanctions for non-compliance, reward compliance and establish value thresholds (Sibanda *et al.*, 2020; Nalukenge *et al.*, 2022).

Similarly, transparency seeks to make information about the project procurement and activities available, visible, understanding in an open and honest manner (Osei-Afoakwa, 2014; Marumo, 2022). Thus, where stakeholders can have access to information, it allows them to voice their opinion and access decision on project procurement process (Abu Hassim, 2012). Again, public institutions require disclosure of relevant information to make informed decision. Transparency is a key principle to public procurement as it helps to identify inefficiencies and bottlenecks in procurement process because it allows fairness and disciplined behavior, bringing visibility in procurement activities (Osei-Afoakwa, 2014). All information related to procurement procedures should be made available to all parties concerned, including the general public, unless there are legal restrictions in place. Enough information must be included in tender notices to inform the supplier that they are eligible to submit a proposal. Tender documents must be succinct and contain details about expectations, standards for assessments, and deadlines (Writer, 2021).

In addition, transparency in the public procurement minimizes the risk of fraud, corruption, and mismanagement of public funds (Alves Batista, 2024). According to Sanchez-Graells, (2019) transparency promotes competition by leveling the playing field for procurement/contracting organisations. The Commonwealth Procurement Rules (2017) state that, transparency requires relevant firms to take measures enabling scrutiny of their procurement activities. Given that procurement involves the expenditure and accountability of public funds, transparency is crucial in all acquisition activities, directly linked to accountability. However, in an event of limited progress in upholding transparency management, it results to malfunctions of procurement entities (Paraskeva & Tsoulfas, 2025; Sussha *et al.*, 2025). Transparency enables documentation and dissemination of information on the scope and consequences of corruption (Ngugi & Mugo, 2011). Effective strategies to enhance accountability include information systems for measuring inputs' contribution to outcomes, oversight bodies, public organizations demanding result justifications, performance incentives for rewarding good performance, and penalties for

poor performance (Segal & Summers, 2002). It's worth noting that the absence of accountability creates a corruption loophole for all procurement process participants (Brinkerhoff, 2004). All choices made during the procurement procedure ought to be held responsible. Any infractions of the institution's rules ought to be investigated, and appropriate action taken.

Honesty and Integrity

Honesty signifies quality of being truthful and sincere in the relationship with others either business or social interactions associates (Vivekananda & Meenakshi, 2024). The principle of honesty holds that "saying what you mean" fosters authentic communication characterised by 'transparency, sincerity and truthfulness' that form basis of integrity (Vivekananda & Meenakshi, 2024. p. 1). In the procurement process, emphasizing honesty, fairness and integrity set up commitment to conduct procurement in a manner yielding to VfM. Meanwhile, integrity is the instance of quality of being honest and consistently observing and adhering to the strong moral and ethical principles of an entity. It centers on interaction devoid of lies, deception and misdirection of stakeholders and relationships in the organisation. Upholding integrity of the procurement system instills confidence in both public and private acquisition processes, ensuring reliability (Thai, 2009; Atiga & Tanzubil, 2023). Bidders rely on the integrity and credibility of information disseminated by the procuring entity, formally or informally, to make informed decisions (Hall & Matos, 2010). Procurement professionals required to display honesty and integrity as an intertwine requirement in their way of discharging responsibilities to exemplifies ethical conduct constituting unwavering commitment to underscore fundamental virtue. Bidders, contractors and suppliers require to demonstrate honesty and responsiveness to their information (experience, ability to fulfil obligations and relevance) in fulfillment of ethical conduct and trust with procurement entities and business partners (De Vries, 2002; Abdulazeez *et al.*, 2021) submitted that could help build better relationship with an entity, the institutions must prove its values. Workers must always respect organization's code of ethics; without acting selfishly or in a way that would benefit them personally direct indirectly. Employees are expected to report any unethical behaviour they witness before, during, or following the procurement process (Writer, 2021). According to CIPS (2006), procurement officials in both public and private sectors must uphold personal and external integrity, demonstrate honesty, dependability, and accountability while understand procurement needs and promoting communal interests. Further, the public procurement officers are responsible for managing procurement processes within existing legal frameworks and public procurement principles (Bailey, 2006). Kothari (2004) stresses on the importance of employees' honesty and integrity in procurement to safeguard against corruption or fraud, while elevating ethical standards within organizations. The Public Procurement and Asset Disposal Act (2015) mandates that procurement professionals maintain honesty and unquestionable integrity.

Serving Public Interest

Procurement officers and other stakeholders are mandated to prioritize the public interest in their actions, ensuring that every decision they make directly aligns with community interests. Ethically, procurement officials adhere to professional ethical policies and standards by refraining from accepting gifts or hospitality from contractors, and resist unethical influences from project contractors (Eltantawy *et al.*, 2009) as the best way to fulfil citizens' interest. High levels of transparency and openness are essential, with minimal exceptions to serve the public interest and ensure thorough documentation of all transactions. Proper procedures and processes must be followed for any changes made to regulations (Arasa & Ochriri, 2011).

Conformity to Professional Laws and Ethical Standards

Compliance with Supplies Practitioners Management Act of 2007 and the Public Procurement and Disposal Act of 2015 legislations necessitates a focus on high-risk areas to understand suppliers' activities better. This understanding enables the provision of appropriate guidance and support to minimize risks associated with unethical practices within manufacturing firms (Awuor & Muthoni, 2014). Both public and private entities have established ethical standards for the procurement of goods and services through the introduction of the Public Procurement Act 663 (2003) as amended Act 914 (2016). Adherence to ethical standards requires unbiasedness to guarantee equity in procurement procedures because bias toward specific suppliers, coworkers and contractors creates fertile ground to promote organisational hostility. For instance, suppliers should be informed about changes to procurement document or specification, and choices should be made fairly. Again, confidentiality maintained otherwise revealing financial or personal information about a bidder or entity could endanger procurement processes. Nonetheless, employees and business partners usually are required to sign non-disclosure agreements to guarantee the privacy of the procurement process (Writer, 2021).

Value for Money (VFM)

Value for money (VFM) centers on achieving the optimal balance of cost, quality, and sustainability to surpass society expectations (Okoli *et al.*, 2014; UK Department of Finance, 2018; Manta & Mansi, 2024) in the delivery of projects. Some scholars have described VFM as the "heart" of procurement (Bowles and Morgan, 2016; Panga, 2021), or the center of procurement in the strategic management of public funds (OECD, 2011). Meanwhile, other academics position VFM as the most essential principle of procurement (Raymond, 2008; Dimitri, 2013; Manta *et al.*, 2022). Cost, in this context, encompasses the overall monetary value of the project throughout its lifespan, while quality refers to the specifications that best serve its purpose. Sustainability entails delivering economic, social, and environmental benefits to the citizens.

Concept of Value for Money

Barton *et al.*, (2019) notes that VFM has broader scope beyond cost savings. Value for money better manage entities financial performance which is essential for organizations to prioritize efficiency, effectiveness while ensuring optimal quality project execution (Hasibuan, 2023). Baker *et al.*, (2013) and Bidne *et al.*, (2012) both assert the widespread adoption of the VFM concept across various sectors and industries over the years. The VfM concept has become a key driver in any procurement engagement (Arrow-smith *et al.*, 2011). Contrastingly, Cox and Townsend (1998) contend that the construction sector exhibits relatively low quality-price ratios, productivity levels, and overall citizens satisfaction (Garcia & Molloy, 2023). In the realm of the public sector, VfM entails not only optimizing financial resources but also contributing to the advancement of government policies and priorities, thereby maximizing returns and performance (Bauld & McGuinness, 2006). Given the limited resources available to government, ensuring VFM in procurement is key to ensuring the optimum utilization of scarce budgetary resources. Moreover, VfM should be looked at from the lens of the "whole life costs of the project or service" and not necessarily seen in terms of "the lowest bid price" (Panya and Awuor, 2023, p.1435). Meanwhile, VfM should not only be closely connected to procurement processes and management level, but to the entire objectives of procurement policies/laws (Chikwere *et al.*, 2023) at the public sector organisations in Africa and other countries. Significantly, Value for Money aids public agencies to determine whether to pursue a project or not (Almarri & Boussabaine, 2025). Because it is crucial for public officials to account for the costs and savings throughout the lifetime of the project. Fitzgerald's (2004) reveals that governments Public Private Partnerships (PPPs) such as Australia keenly follow the guideline of VFM concept in delivering projects through risk transfer, innovation, greater asset utilization, and integrated whole-of-life management. Meanwhile, VfM is a crucial criterion by which procuring entities can justify their procurement decisions. It reflects the value derived (output) relative to the specific cost incurred from the users' or targeted public's perspective (input). Karanja (2021) and Gatari (2023) also supported this view, broadly defining value for money by linking it to the economy, effectiveness, and efficiency and equity of the work produced. Chikwere *et al.*, (2023) noted that a rural district council's ability to deliver services cost-effectively and provide value for money depends significantly on how these principles are applied in the procurement process, management, and ultimate works delivery.

Challenges of Ensuring Value for Money

Mkhize *et al.*, (2022) and National Treasury (2005) highlights the problem of non-compliance with policies and regulations. Van Phan *et al.*, (2024) and Akmal, (2025) identify practices such as failure to use a competitive process for quotations, bids, and incorrect utilization of the preference points system, as examples of non-compliance. Văn Zyl (2006) also highlights lack of appropriate bid committees, engagement with unqualified

contractors/suppliers, rejection of bids for incorrect reasons, improper procurement process utilization concerning thresholds, extension of validity periods, and misapplication of the limited bidding process. Panya & Awuor (2023) recognized VfM as prospects/opportunities with its application challenges/constraints in Africa is due to difficulties of compliance with public procurement contract agreements as well as timelines and their effects on the achievement of VfM. Additionally, Ambe & Badenhorst-Weiss (2011) observed inadequate controls and procedures for bid handling not aligned with policy requirements, and insufficient motivation for deviations from supply chain management procedures. In developing countries, ministerial interference with the tender process poses a significant obstacle to the procurement system, where ministers intervene and influence tender awards (Masoud, 2023; Kipo-Sunyehzi, *et al.*, 2024; Abubakari *et al.*, 2025; Toku *et al.*, 2025).

Value for Money in the Procurement of Works

Value for money is very essential when giving out contracts to contractors. Achieving value for money (VfM) in the procurement of construction projects involves several critical strategies. Research indicates that implementing transparent and competitive bidding processes, ensuring accountability and integrity in procurement practices, and selecting capable contractors and consultants are pivotal (URT, 2013; Ibrahim *et al.*, 2017; Nyanyofio *et al.*, 2022) in project procurement process. Effective project planning, timely execution, and rigorous monitoring by regulatory authorities such as the Public Procurement Regulatory Authority (PPRA) further enhance the likelihood of achieving VfM (URT, 2013; Brito & Miguel, 2017). These measures not only mitigate the risks of corruption, enhancing ethical conduct, but also optimize project efficiency and effectiveness (Botlhale, 2017; Mrope *et al.*, 2017). Thus, integrating these principles into project procurement processes is essential for maximizing the value derived from public-funded construction Projects. The procurement of works is assessed based on cost-effectiveness over their entire lifecycle, quality standards and timely delivery, all of which contribute to the measurement of VfM (Sayi & Monko, 2022; McArdle & Gunning, 2018). Mungu's (2021) studied on the impact of local contractors' capabilities on road construction project performance in Kenya highlighted insufficient procurement skills and incompetence among public procurement managers and staff as barriers to achieving VfM.

Achieving the desired value for money requires effective procurement management to ensure that both contractors fulfill their contractual obligations regarding time, cost, and quality (Naoum, 1994; Vilkonis *et al.*, 2023). Procurement entities can fulfill these obligations by systematically and effectively planning, executing, monitoring, and evaluating their procurement processes (Adi & Dutil, 2018). This confirms the earlier findings of Asare & Prempeh (2016) on the measures of ensuring VfM in public procurement in Ghana, which revealed that inadequate monitoring, procurement evaluation, and lack of senior management support compromise VfM.

Principal-Agent Theory (PAT)

The principal-agent theory details situations in which one party (*principal*: owners, managers, government) delegates responsibility/duty to another (*agent*; employees, contractors, suppliers) (Laryš & Svoboda; Namyenya *et al.*, 2024). The PAT stress on the significant of monitoring, performance-based and governance reward mechanism (Kim, 2024; Pylkkönen, 2025). Mainly, the agents acting in their own self-interest may not put best interest of the principal first which leads to conflict-of-interest attributing to principal disadvantage, resulting in cost or poor performance. The agent selfish interest directly or indirectly affects objective outcome of contract. The parties have varying goals where the agent possess information not known to the principal (Al-Faryan, 2024). The theory mainly seeks to design contract that spell out duties, responsibilities and incentives aligned to principal and agent adopting measures to mitigate negative effects of information disparity (Savio *et al.*, 2024). Moreso, PAT emphasis that there could be concealed actions of the agent that can result in moral hazard (Salman, 2023). Similarly, hidden information (Guggenberger *et al.*, 2023) leads to adverse selection of agent (Liu *et al.*, 2021) that defeat contract purpose and creates inefficiencies on the part of the agent. The agent champion on in-depth knowledge of contract environment than the principal (Matinheikki *et al.*, 2022). In this study, local government constituting employees (officials of the MMDAs) undertaking procurement of works to the benefit of local communities/citizens align with the theory of PAT. Personnel at MMDAs are mandated to undertake procurement of works under the guidance of the procurement principles to obtain VfM to benefit citizens (principal). It is expected that the more public officials at the local government pursue procurement principles, guided by responsibility and ethical behaviour, trust is eminent containing in their actions. The public or citizens would be assured and convinced of agents (officials) exercising judicious use of resources (taxes. loans and grants).

Theoretical Review**Utilitarian Ethical Theory (UET)**

According to unilateralism, the only way to be moral is to maximise what is beneficial for everyone. Additionally, it makes the case that moral judgements are made easier by reducing them to a single aspect of righteousness and value optimisation (Savulescu *et al.*, 2020). According to the well-known moral theory of utilitarianism, the ethical course of action is one which is expected to provide the most benefit and value for the majority of people, not putting personal gain first. Employees and staff of different institutions must operate in a way that helps the organisation as a whole and its clients, according to its defined operationalizable principles (Savulescu *et al.*, 2020). Therefore, utilitarianism contends that all consequences of decisions, whether immediate and long-term, direct and indirect, should be taken into account. Therefore, it is crucial that staff members and employees of public institutions think about the benefits to the general public who depend on these organizations as against their own personal gain from their work. As the

fundamental principles and commitment, "what makes a choice right is its continuity with moral norms." "If an act is not in conformity with the right, it may not be conducted regardless of the good that it would produce," according to utilitarian ethical theory. This ethical approach evaluates the rules of correctness rather than its outcome.

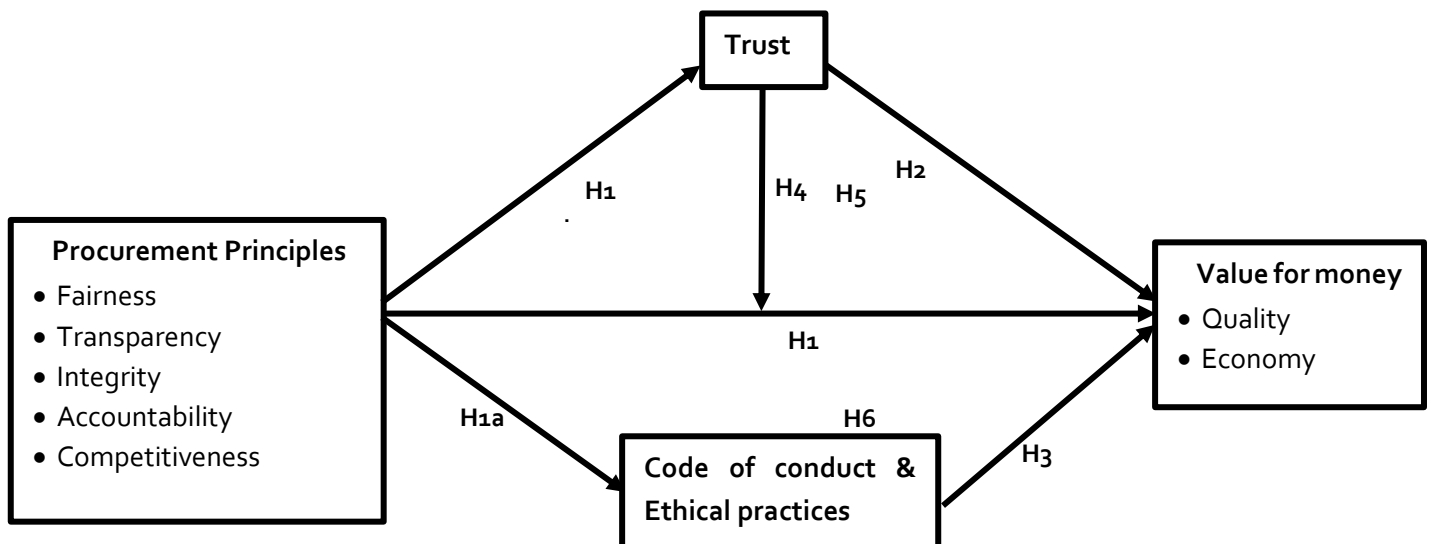


Figure 1: Research Model

Hypothesis Developments

Public procurement principles (PPP) and Value for money (VfM)

Procurement principles are set of guidelines that helps to ensure that the procurement process is fair, transparent and accountable (Papierz, 2024). These principles innate and characterised in procurement of works. Procurement principle is the dominant environment upon which public sectors operate and follow for expected outcome (Van Assche *et al.*, 2024). These principles foster the relationship of procurement and VfM at public institutions. Its application and usage determine ultimate results of achieving desired outcome at optimum value. The optimisation of relationship between public procurement and VfM depends on adherence of procurement principles application of fairness, transparency and accountability (Koang *et al.*, 2024). Public sector procurement achieves VfM through candid implementation of the principles and rules to obtain economy (Sahoo & Jakhar, 2024), efficiency and effectiveness (Chikwere *et al.*, 2023) of procurement of works. Public and private institutions guided by and must embrace accountability, transparency in the administration of procurement activities. Measures to ensure procurement competition as an overriding practice of procurement practitioners is a major way to foster achieving VfM (Giosa, 2023). To get expected results, fairness without bias in the procurement process, granting equal opportunity to the tenders in awarding contract, encouraging cost-effectiveness of public funds is an ultimate way to ascertain VfM. Cost and time significantly impact optimum operational performance because

economic and business environment as long as remain unstable negatively or positively influence value of projects delivery. Encouraging sound procurement practices requires that procurement principles are adhered to to facilitate administration of project delivery as a point of economic development. Value for money can only be achieved when the procurement principles are not compromised (Chikwere *et al.*, 2023). Hence, it is hypothesised that;

H₁: Procurement principles have direct positive influence on value for money

Public procurement principles, trust and ethical practices

The relationship between procurement principles, trust and ethical practices jointly determines success of entities projects procurement. Whiles procurement officials remain guided by the procurement principles, this manifest in commitment to ethical values which citizens, stakeholders and society at large repose trust in the procurement process, implementation and delivery of projects. The enforcement of ethical practices and code of conduct signify adherence of PPP (Nguyen & Hoai, 2023; David *et al.*, 2024) that result to trust. It is hypothesis that:

H_{1a}: Procurement principles have positive effect on trust

H_{1b}: Procurement principles have positive effect on code of conduct & ethical practices

Trust, ethical practices and value for money

Value for money is achieved where procurement entities consciously and cautiously comply with the ethical practices and code of conducts establish public institutions (Okemwa *et al.*, 2021). The more professional procurement stakeholders adhere to ethical values (Essilfie-Baiden, 2020) of institutions, the society also accept to trust the system and public personnels (Christensen & Lægreid, 2005) entrust with public funds for development projects for society betterment. Project procurement quality and economy depend on applying ethical values (Obicci, 2024; Vasileva, 2024) that citizen's judgement and trust leads to achievement of VfM. Hence it is hypothesised that:

H₂: Trust has positive influence on VfM

H₃: Code of conduct & ethical practices have positive influence on VfM

Trust moderates PPP and VfM

The moderating effect of trust performs conditional role of strengthening or weakening the relationship between PPP and VfM. Trust performing conditional boundary role is a dominant variable which citizens and society in general repose on public officials to influence outcome/results, whether VfM can be achieved where procurement officials perceived to abide the PPP. Trusted public officials' role in procurement process leads to achievement of VfM (Makupa, 2022). Because to embrace transparency, accountability, honesty and integrity is the surest way to display and maintain citizen confidence for the use of public funds and tax payers' money for public projects. However, indiscriminately

award of contract, bias in the procurement process and failure to render accounts definitely affect efficiency, economy and effectiveness of projects (Jahani *et al.*, 2021) to obtain VfM. It is hypothesised that:

H₄: Trust moderates the relationship between procurement principles and VfM

Trust and ethical practices mediate PPP and VfM

Trust gives assurance and confidence (Nizette *et al.*, 2025; Liaquat *et al.*, 2025) within the procurement process, encompassing relationships between internal departments, procurement professionals, and suppliers/contractors. This trust is built on integrity, transparency, and a commitment to fair and ethical practices (Bello *et al.*, 2024), leading to better collaboration, smoother processes, and ultimately, better outcomes expected by the citizens. The effect of trust (Masimba *et al.*, 2013) on the relationship between PPP and VfM narrowly studied. Research reveal that PPP has direct effect on VfM (Bilali, 2021; Muturi, 2024). Obviously, procurement entities are expected to comply with the PPP in their operational activities. However, relax of these principles affects the quality and economy of project procurement (Manso and Nikas, 2016) hence VfM. Moreover, procurement officials' failure to be trusted in embracing ethical practices as a panacea to drive value for money (Adow *et al.*, 2020) result to PPP unsuccessfully recognizing critical role of ethical values to complement the achievement of VfM. Therefore, absence of trust breeds misunderstandings, delays and inefficiencies in the procurement process that eventually can damage relationships with contractors negatively impact future collaborations. The study hypothesises that:

H₅: Trust positively mediates the relationship between procurement principles and VfM

H₆: Code of conduct and ethical practices mediates the relationship between procurement principles and VfM

Methodology

The research design of this study is an explanatory in nature, adopted methodology primarily to establish a correlation to determine the relationship between procurement principles, VfM, trust and code of conduct. The research model was tested using data collected from departments of MMDAs in the Greater Accra Region. The study population comprises all the employees currently working at the metropolitan, municipal, and district assemblies (MMDAs) in the Greater Accra Region. These government institutions (MMDAs) derive its mandates from Local Government Act 462 as amended by Act 936, 2016 and Public Procurement Act 2003 (Act 663) as amended in 2016 (Act 914) in their procurement activities. The target population consist of departments that directly participate in the MMDAs procurement process. These departments include procurement, stores, works/engineering, finance, physical planning and budget. The MMDAs under the Local Governmence System performs homogeneous functions to implement institutions procurement activities to serve the citizens.

Sampling Technique

A purposive sampling technique was adopted to select all the departmental heads and assistant or subordinates from the MMDAs. This sampling technique helped gather data from department officers who are directly involved in procurement process and decision-making at the MMDAs. The purposive sampling method is efficient and flexible process as it is based on characteristics of research questions as compared to randomly selected process. Through purposive sampling technique, a total of 348 sample size was selected to obtain suitable respondents for the study. According to Creswell (2014) and Chali *et al.*, 2022), sampling techniques provides a wide range of methods that helps researcher determine amount of data to be collected based on selected respondents representing entire population.

Two Item Relevance

We measured trust with two theoretically relevant two items adopted from validated scales (Pavlou & Gefen, (2004)). Short but focused scales are acceptable in PLS SEM when items have strong theoretical justification and demonstrate adequate psychometric properties that is high indicator loadings, acceptable composite reliability and convergent validity. We followed a recommendation for short scales and two item measures (Hair *et al.*, 2022; Eisinga *et al.*, 2013) and reported composite reliability to check against a global item adapted from the same construct to establish convergent validity (Cheah *et al.*, 20218). Trust was specified as a two-indicator reflective construct. Although three or more indicators are generally recommended, recent methodological literature confirms that constructs with only two items are acceptable when the indicators exhibit high standardized loadings and are theoretically well-grounded (Hair *et al.*, 2021; Henseler, 2021; Sarstedt *et al.*, 2022). In this study, both trust indicators loaded above 0.80, demonstrating strong convergent validity. Identification of two-indicator reflective constructs is theoretically feasible, as the covariance between the two indicators provides sufficient information for estimation (Bollen, 1989). Within the full SEM, the construct is part of an identified system, ensuring stable and interpretable parameter estimates.

Measurement Development

A total of 348 questionnaires administered while 261 questionnaires were received from respondents. These respondents' officers were procurement, finance, stores, works, budget and policy planning. However, 7 questionnaires were found to be incomplete with 4 others having multiple responses. A total of 17 faulty questionnaires were removed from the lot before further analysis was carried out. In all, 244 valid data was finally used for data analysis which constitute valid response rate of 70%.

Meanwhile, a 5-point Likert scale was used for descriptive statistics where 1=strongly disagree, 2=disagree, 3=neutral, 4= agree and 5=strongly agree. This scale was used to measure procurement principles of fairness-4items, transparency-4items, integrity-4itmes

and ethical code-8 items were all adopted from Baiden (2020). The Quality/FFP comprised 9-items adopted from Gallarza *et al.* (2013), economy/cost comprised 6-items adopted from Frimpong (2019), and trust, comprised 4-items adopted Pavlou and Gefen, (2004). The study adopted smart partial least squares (PLS) structural equation modeling to analysis the data. The identity of the respondents was concealed to the researchers as questionnaires received were all put together without recourse to any specific identity of respondents to any particular categories.

Table 4.1: Survey Administration (Overview of Respondents)

Profile	Variables	Frequency	Percentage (%)
Gender	Male	150	61%
	Female	94	39%
		244	100%
Age	20 – 25 years	36	15%
	26 – 30 years	74	31%
	31 - 35 years	57	23%
	36 – 40 years	57	23%
	Above 40	20	8%
		244	100%
Experience of Respondents	1-5years	98	40%
	6-10years	77	32%
	11-15years	65	27%
	16-20years	4	1%
		244	100%
Education Background	HND	28	11%
	Degree	163	67%
	Professionals	49	20%
	PhD	4	2%
		244	100%
Department	Procurement	56	23%
	Stores	49	20%
	Policy Planning	32	13%
	Finance	32	13%
	Budget	46	19%
	Engineer/Works	29	12%
		244	100%

Table 4.2: Construct and Instrument Items

Construct	Items	Alpha(a)
Public Procurement Fairness (PPF)	1.there is equality in treatment 3.there is openness in the procurement processes and decisions 4.There is impartiality of officials involved in the procurement process	0.776
Public Procurement Transparency (PPT)	2.there is existence of procurement audits (internal and external) 3.bidders are treated with the same rules 4.unsuccessful bidders are notified of the decisions made	0.764
Public Procurement Integrity (PPI)	1.there is compliance with procurement rules and regulations 2.resources are used for the intended purpose 3.there is adherence to procurement professionalism	0.901
Code of Ethical Practices (CCEP)	1.accountability and transparency 2.compliance with legal framework 3.impartiality and fairness 4.monitoring and evaluation 5.existence of Code of Ethics 6.clear job description 7.adherence to the existing code of ethics 8.code of ethics is applicable to all employees in the organization	0.933
Quality of Procurement (QP)	1.the assembly provide projects in a timely manner 2.the assembly officials are competent in providing projects 3.the projects assembly provides is easy to use 4.the assembly make effort to understand the citizens and provide projects that conform to citizens' needs 5.I found the assembly project convenient/suitable 6.I always accept the assembly procured projects because it meets my desire 7.citizen's needs are largely catered for at all times in the procurement of works 8.monitoring and evaluation influence the procurement of works quality 9.monitoring and evaluation do not always influence the procurement of works cost	0.928
Economy of Procurement (EP)	1.price of works is not the only determinant of the total cost 2.cost of installation of the projects and other additional 3. costs are considered as part of the total cost of the works contract 4.cost of running a facility in terms of maintenance, repairs etc. are considered when determining the total cost of a 5. contract in the procurement of works 6.duration of the contract of works execution and handing	0.801
Trust in procurement (TP)	1.trust is based on honesty 2.trust is based on dependability	0.832

Moreover, those reflective items that did not load adequately as such showing insignificant loadings within the construct were eliminated from the analysis. Because of the reflective

nature of the data, all those items that fails loading below the recommended level (0.7) although removed from data analysis but did not have any effect on managing the constructs (Diamantopoulos & Winklhofer, 2001). As such, items (PPF2, PPT1, PPI4, TP1 and TP2) were found to be lower than the threshold indicator loadings (less than 0.7) and were removed from further analysis.

Table 4.3: Cross loadings

	CCEP	EP	PP	PPF	PPI	QP	TP
CCEP1	0.751						
CCEP2	0.842						
CCEP3	0.757						
CCEP4	0.820						
CCEP5	0.899						
CCEP6	0.881						
CCEP7	0.836						
CCEP8	0.806						
EP1		0.712					
EP2		0.720					
EP3		0.711					
EP4		0.856					
EP5		0.499					
EP6		0.729					
PPF1			0.679				
PPF3			0.892				
PPF4			0.894				
PPI1				0.881			
PPI2				0.933			
PPI3				0.927			
PPT2					0.796		
PPT3					0.882		
PPT4					0.791		
QP1						0.376	
QP2						0.700	
QP3						0.895	
QP4						0.891	
QP5						0.886	
QP6						0.871	
QP7						0.887	
QP8						0.833	
QP9						0.807	
TPo3							0.919
TPo4							0.931

Control Variables

Although in research, control variables are not of interest to the study's objectives, however, are kept constant or limited to prevent influencing the results (Whited *et al.*, 2022; Sturman *et al.*, 2022). The analysis of control variables assists to enhance the internal validity of the research as it reduces the confounding and bias. The current study highlighted information of control variables such as age of the assembly, officials work experience and educational qualification. Moreso, other features of the respondents and their competencies was included in the measurement instrument.

Discussions of Results

Test of Convergent and discriminant Validity

Convergent and discriminant validity describes the extent that "multiple measures of a construct relate highly to each other and less highly to measures of other constructs" (Lehmann, 1988 p.1; Cheung *et al.*, 2024). Convergent and discriminant validity indicates the degree of relationship that exist between the observed variable and latent construct (Lim, 2024). Hence, the construct validity presupposes that measurement items that determines the same construct suggests high correlation with items (Shrestha, 2021). High correlations demonstrate high convergent validity (Koch *et al.*, 2020), that shows preferred measure of latent variable. The thresholds of composite reliability (>0.70), Average Variance Extracted (AVE >0.50) (Hair *et al.*, 2021) and factor loadings (>0.70) (Hair & Alamer, 2022) is significant determinant to have ascertained convergent and discriminant validity. The Cronbach Alpha Value of 0.70 is recommended as a threshold to have ascertained internal and external consistency of the constructs (Cronbach, 1951; Cronbach & Meehl, 1955; Dijkstra & Henseler, 2015; Hair *et al.*, 2022). The reflective items that load below threshold indicate insignificant loadings of the construct were deleted from the analysis. Moreover, because constructs were reflective, all items that did not loaded well were all eliminated (<0.7) because it did not have significant effect on managing the constructs (Diamantopoulos & Winklhofer, 2001).

Table 4.4: Construct reliability and validity (Validity Measurement)

Constructs	Measurement Items	Cronbach's alpha	Composite reliability (rho_A)	Composite reliability	Average variance extracted (AVE)
Code of conduct & Ethical practices	CCEP	0.933	0.940	0.945	0.682
Economic Procurement	EP	0.801	0.824	0.858	0.507
Procurement Principle	PP	0.876	0.879	0.905	0.580
Procurement Principle Fairness	PPF	0.776	0.850	0.865	0.685
Procurement Principle Integrity	PPI	0.923	0.924	0.946	0.813
Procurement Principle Transparency	PPT	0.764	0.774	0.863	0.679
Quality Procurement	QP	0.928	0.948	0.943	0.656
Public Trust	TP	0.832	0.836	0.922	0.856
Value for money	VfM	0.922	0.931	0.936	0.624

Testing of Discriminant Validity

Table 4.5: Hetrotait-monotrait ratio (HTMT) - Matrix

	CCEP	EP	PP	PPF	PPI	PPT	QP	TP	VfM	TP x PP
CCEP										
EP	0.415									
PP	0.723	0.391								
PPF	0.431	0.216	0.760							
PPI	0.720	0.305	0.468	0.453						
PPT	0.426	0.392	0.380	0.845	0.563					
QP	0.615	0.801	0.379	0.158	0.398	0.269				
TP	0.580	0.437	0.723	0.658	0.531	0.738	0.461			
VfM	0.585	0.652	0.394	0.148	0.402	0.282	0.040	0.429		
TP x PP	0.182	0.285	0.341	0.315	0.243	0.383	0.078	0.551	0.123	

CCEP=Code of conduct & ethical practices; EP=Economic procurement; PPP=Public Procurement principles; PPF=Procurement principal fairness; PPI=procurement principal integrity; PPT=procurement principal transparency; QP=Quality procurement; TP= Public Trust; VfM=Value for money.

Hetrotait-monotrait (HTMT)

The HTMT criterion is used to authenticate discriminant validity. In the literature, there are varying HTMT ratio ranging from minimum of >0.7 to maximum of <0.85 which indicates that there is discriminant validity showing that constructs are clearly distinct from each other. Hence, the HTMT ratio of 0.80 (Hoque, 2025), 0.90 (Ambarwati *et al.*, 2025; Sipon *et al.*, 2025), 0.85 (Wu & Kim, 2025; Kim *et al.*, 2025; Cheung *et al.*, 2024; Henseler *et al.*, 2015) and 0.70 (Hauwa *et al.*, 2025; Anggoro *et al.*, 2025) all indicate threshold that constructs measures sufficiently and uniquely distinct from the other. In this study, HTMT values are all less than 0.85 acceptable to show that discriminant validity is established.

Table 4.6: Fornell Lacker Criteria

	CCEP	EP	PP	PPF	PPI	PPT	QP	TP	VfM
CCEP	0.826								
EP	0.360	0.712							
PPP	0.661	0.290	0.762						
PPF	0.367	0.060	0.650	0.828					
PPI	0.674	0.250	0.924	0.413	0.902				
PPT	0.374	0.298	0.749	0.673	0.478	0.824			
QP	0.578	0.717	0.310	0.032	0.350	0.101	0.810		
TP	0.514	0.358	0.612	0.541	0.464	0.598	0.394	0.925	
VfM	0.563	0.527	0.335	0.034	0.367	0.153	0.777	0.379	0.790

CCEP=Code of conduct & ethical practices; EP=Economic procurement; PPP=Public Procurement principles; PPF=Procurement principal fairness; PPI=procurement principal integrity; PPT=procurement principal transparency; QP=Quality procurement; TP=Public Trust; VfM=Value for money

Fornell Lacker

Discriminant validity can be verified using Fornell and Larcker criterion (1981). According to this criterion, discriminant validity is ascertained where the value of square root of AVE for a variable is greater than its correlation with all other variables (Rasoolimanesh, 2022; Hilkenmeier *et al.*, 2020). In this study, the square root of the construct of AVE is higher than its adjoining other constructs, hence the discriminant validity is strongly supported.

Multicollinearity

According to Shrestha (2020) and Fornell & Bookstein (1982), variance inflation factor (VIF) statistic is used to measure multicollinearity in the indicators. According to Hair *et al.* (2019), when the VIF value is less than 5 (Kalnins & Praitis, 2025; Suhartini *et al.* 2024), shows absence significance of multicollinearity. **Table iv** exhibit the VIF values lower than the recommended threshold.

Table 4.7: VIV and F²

Paths	VIF	F ²
CCEP -> VfM	1.959	0.117
PP -> CCEP	1.000	0.942
PP -> PPF	1.000	1.492
PP -> PPI	1.000	1.526
PP -> PPT	1.000	2.845
PP -> TPO	1.000	0.697
PP -> VfM	2.499	0.024
TPO -> VfM	1.713	0.076

The R² and Q²

The coefficient of determination (R-squared/R²) indicated the proportion of the variance in how VfM and other dependent variables are explained by public procurement principle and other independent variables in a regression model (Gao, 2024). Table 4 depicts that all the R² values significantly explain the model fitness of the data. Similarly, the statistical model shows predictive relevance (Q²) of the dependent variables (VfM, TP, CCEP). Also, according to Irfan *et al.* (2016) and Liu *et al.* (2020), all the values in the Table 4 shows medium to large predictive relevance as indicated in the threshold values of 0.15 and 0.35.

Table 4.8: R² and Q²

Constructs	R ²	Q ² (=1-SSE/SSO)
CCEP	0.485	0.334
EP	0.760	0.438
PPF	0.599	0.000
PPI	0.604	0.396
PPT	0.740	0.500

Constructs	R ²	Q ² (=1-SSE/SSO)
QP	0.866	0.493
TPO	0.411	0.617
VfM	0.351	0.337

Structural Model Results

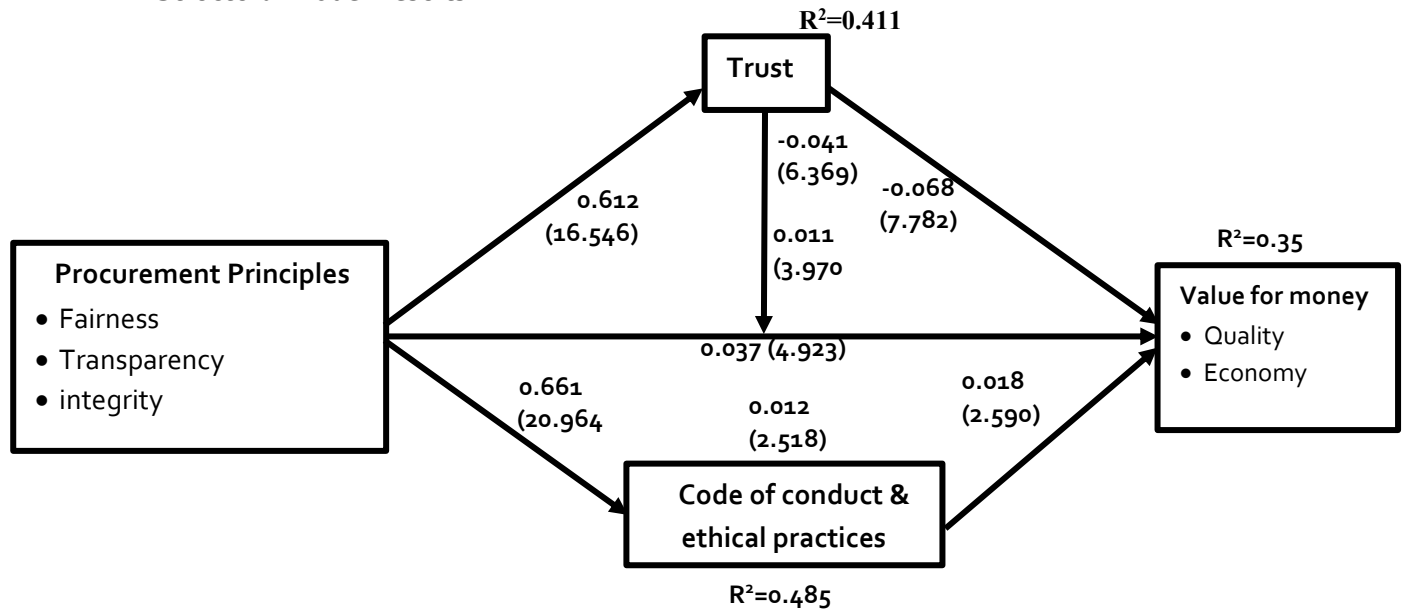


Figure 2: Structural Model

Our study objectives improve the knowledge in the value for money in project procurement at the public sector organisations. The study based on empirical testing model framework investigates the effect of public procurement principles (PPP), public trust (PT), code of conduct and ethical practices (CCEP) and value for money (VfM) in the project's procurement at Local Government Institutions (Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana.

Table 4.9: Hypothesised Paths

Hypothesised	Paths	Original sample (O) (β)	T statistics (O/STDEV)	P values	Decision
H ₁	PP -> VfM	0.037	4.933	0.000	Supported
H _{1a}	PP -> CCEP	0.661	20.938	0.000	Supported
H _{1b}	PP -> TP	0.612	16.551	0.000	Supported
H ₂	TP -> VfM	-0.068	7.793	0.000	Supported
H ₃	CCEP -> VfM	0.018	2.593	0.010	Supported
H ₄	TP x PP -> VfM	0.011	3.959	0.000	Supported
H ₅	PP -> TP -> VfM	-0.041	6.369	0.000	Supported
H ₆	PP -> CCEP -> VfM	0.012	2.518	0.012	Supported

Test of Hypothesis with regards to Procurement Principles and Value for money (H_1)

The outcome analysis indicates positive significant relationship between public procurement principles and value for money ($\beta=0.037$; $t= 4.933$; $p <0.000$) as revealed in Table 4. These procurement principles (fairness, transparent and integrity) demonstrate statistically significant effect on value for money. The results led to acceptance of the first hypothesis (H_1). The outcome analysis shown the effort of public sectors adheres to procurement principles such as fairness, honesty, transparency, accountability and ethics in the procurement of works processes, ultimately a panacea to achieve value for money in works procurement. Although it is essential for organizations to prioritize efficiency, effectiveness, albeit implementation of economy and quality/fitness for purpose minimize costs (misapplication of resources) while ensuring optimal project execution and value for money. The study reveals that public sector institutions guided by the procurement principles as intrinsic requirement states that transparency and accountability in project procurement as a hallmark for optimum funds allocation and utilization. The outcome results confirm Asaduzzaman et al. (2025) findings that to achieve value for money, the procurement is conducted in an environment only when the principles of procurement are adhere to and implement.

Test of Hypothesis with regards to public procurement principles and code of conduct & ethical practices (H_{1a})

The second hypothesis also postulates that there is positive relationship between procurement principles and procurement ethical practices. The path analysis shows that procurement principles influence, has a positive significant effect on institutions procurement conduct and ethical practices ($\beta=0.661$; $t= 20.938$; $p <0.000$) as depicts in Table 4, which implies that procurement principles drive value for money in the public sector organisations project procurement. The results confirm a study of Bilali Ademun (2021) that procurement principles such as transparency, accountability, competition and confidentiality directly influence ethical practices. However, the misapplication and nonadherence to these principles is a major cause of a huge waste of resources in project procurement at the public sector (Matunga, 2023). Moreover, where public institution lacks effective compliance and enforcement of the procurement principles, procurement practitioners, lose code of conducts and abandonment of ethical practices would be a sigh of misappropriation and misapplication of funds. Reference to this study is the strong link between adherence of procurement principles and upholding ethical practices is better way for public institutions appropriately utilizing public funds.

Test of Hypothesis with regards to public procurement principle and Trust (H_{1b})

In a related hypothesis of this study seeks to investigate the relationship between procurement principles and public trust in the procurement interactions. The results in Table 4 shows a positive significant relationship between procurement principles and public

trust in procurement interaction on project delivery at public institutions ($\beta=0.612$; $t=16.551$; $p<0.000$). Therefore, public procurement principles statistically show significant effect on trust in public project procurement and delivery. This research indicates that procurement principles directly influence public trust in the delivery of projects for the citizens in the local communities. The positive relationship of procurement principles and public trust is due to public officials' honest discharge of procurement duties, emanates from adherence of procurement principles attributes such as application of fairness, accountability and indiscrimination leads to diligent management and expenditure of public funds for the betterment of the society.

Test of Hypothesis with regards to Trust and Value for money (H_2)

The second hypothesis of the study establish relationship between public trust and value for money in the procurement of works. Table 4 above shows negative but significant relationship between public trust and value for money ($\beta=-0.068$; $t=7.793$; $p<0.000$) of public institutions procurement activities. The negative beta value suggests inverse relationship between citizens trust and VfM. Thus, the more citizens mistrust public institutions performance in the procurement activities inversely nullify achievement of VfM. The results indicates that the more the society repose trust on the public official's competency, adopts fair, equitable, nondiscriminatory and competitive manner in procurement process, assures achievement of value for money. Quality/fitness for purpose and economy is the hallmark of VfM criteria which is dependent on trust the society perceive on the government institutions. The principles regulating procurement activities contribute to creation of competitive environment facilitates country's development and growth. The principles of transparency, efficiency and fairness (Radanliev, 2025) seek to uphold better delivery of project procurement to stimulates trust on VfM. Trust in institutional procurement activities emanates from good management of public funds for project delivery and to satisfy public interest. Trusting public institutions, a panacea to VfM project delivery. Trustworthiness reflects the belief and reliance of the society on the government institutions application and procedures on procurement of projects that stimulates collaboration of citizens and government roles to implement developmental projects. Value for money can only be achieved where the entrusted public officials maintain the dignity of ensuring that ethical principles of procurement adhered to foster institutional goals. Citizens trust in the public system demand denial of discrimination, corruption, unfairness devoid of unequal opportunity of bidders and appropriation of public funds for intended projects that imperfect purpose for VfM. Without public trust, VfM as an indispensable criterion to measure application of public funds, yielding to intended purpose/fit for purpose project is mirage or rarely achieved. Trust in procurement process is the basis government officials displace innocence of engaging corruption and inefficient procurement practices that decreases the gains of VfM of public resources(funds) that would have inured to boost up trust and confidence of citizens in public sector institutions (Unaam & Mark, 2015; Putra *et al.*, 2025) procurement.

Test of Hypothesis with regards to code of conduct & ethical practices and Value for Money (H₃)

The ethical behaviour of public sector officials directly influences achievement of VfM in the procurement of works. The table 4 depicts the results that code of conduct and ethical practices positively and significantly influence value for money ($\beta=0.018$; $t=2.593$; $p<0.010$) in the project procurement at public institutions. The study findings indicate joint adherence to public institutions code of conduct and ethical practices on procurement guidelines drives and directs implementations of projects that fit for purpose and satisfy conditions of economy on projects management expenditure. This study support (Rotich *et al.*, 2021; Abul Hassan *et al.*, 2021) findings suggests that procurement professional conduct is regulated by the guiding principles and convictions of organisations as employees' characters influenced by the ethical practices of professional conduct and performance of duties at rightful conscience. The management, regulatory bodies (auditors), society and other stakeholders expect that procurement practitioners conduct themselves in a manner worthy to maximise better appropriation of public funds to foster value of projects for the community. The findings signify that citizens anticipate good conduct and better ethical practices instill in the behaviour of procurement officials is a better way to influence project value. Ethical practices provide acceptable standards for procurement officials behaviour or moral principles that guides procurement professionals (Mullins, 2002). Being ethical and guided by the code of conduct increases the chances of successful delivery of projects to fit for purpose. While nurturing ethical environment guarantee code of conduct fosters delivery of VfM project as a critical incentive for improving public sector procurement (McCann *et al.*, 2014).

Test of Hypothesis with regards to Trust moderates' relationship between procurement principles and Value for money (H₄)

Another objective of this study was to investigate the effects of trust in the relationship between procurement principles and value for money. Our study findings support this hypothesis, as it suggests that citizens trusting public officials' duties provides moderating relationship between public procurement principle and VfM in the project procurement at the public institutions. Empirical studies demonstrate that, trust positively and significantly moderates appropriately the relationship between public procurement principles and value for money ($\beta= 0.011$; $t=3.959$; $p<0.000$) which statistically shows in the table 4 and figure 2. The trust principal role of strengthening the relationship between public procurement principles and value for money depicted from the outcome analysis. Thus, the findings portray that public official's effort to deliver what is expected from them by showing professionalism, fulfill duties on time and maintaining reputation (Kaizer, 2022) is a sign to foster achievement of VfM while adhering to procurement principles. In this study, trust remain positive and significant construct moderating PPP and VfM and it is adduced probably due to the influence of external factors such as perceive value, belief, confidence,

absence of political interference, goodwill and repute the society repose on procurement practitioners in the procurement of works in the communities. The track records of what the assemblies stand for and officials of the institution effort to display high integrity, discharging their duties to the interest of the community helped maintains the trust enhancing achievement of VfM.

Test of Hypothesis with regards to Trust mediate the relationship between procurement principles and Value for money (H₅)

Likewise, the fifth objective of the study is the mediating effect of trust of PPP and VfM. In this hypothesis, the study findings indicate there is indirect effect of trust having negative and significant consequence of strengthening the relationship between PPP and VfM ($\beta = -0.041$; $t = 6.369$; $p < 0.000$) in the project procurement for the communities (Table 4 and figure 2). The indirect influence of PPP and VfM through trust statistically suggest that PPP effectively mediates trust and VfM. In determining the mediating effect based on Preacher and Hayes (2008) and Hair et al. (2013) such that, there is direct effect of relationship established by bootstrapping without the trust variable (mediator) in the model (PPP and VfM). Again, there is significant indirect effect of trust ($t = 6.369$) using path coefficient when the mediator (PPP) is introduced into the model. According to Hair *et al.*, (2014) and Irimia-Diéguez (2023) upon calculation of the variance accounted for (VAF) and it is greater than 80% indicates partial mediation while value less than 20% means no mediation effect on the model, but where the value is approximately 35% of VAF, shows that there is partial mediation effect in the link between PPP and VfM. Since the direct and indirect sign of both direct and indirect effects are positive, the practical mediation could be referred to as complementary mediation (Irimia-Diéguez *et al.*, 2023). The study findings therefore support the fifth hypothesis about the mediation of trust among the public officials' discharge of procurement duties.

Test of Hypothesis with regards to code of conduct & ethical practices (CC&EP) mediates the relationship between procurement principles and Value for money (H₆)

This study further, assesses the mediating role of CC&EP on the relationship between PPP and VfM. The findings of this study also show a positive significant influence on the relationship of CC&EP on PPP and VfM ($\beta = 0.012$, $t = 2.518$, $p = 0.012$) (< 0.05) in the project's procurement at the public institutions. The effects of the mediator (CC&EP) statistically show relevant boundary condition in strengthening the construct PPP indirectly influencing the outcome variable VfM. The findings signify that improvement of procurement professionals' performance through effective implementation of code of conduct and ethical practices is a demonstration of organizational culture desired to enforce it. This result of the study provides a stream of agreement with other existing studies (Israel *et al.*, 2021) where institutional enforce of policies and adherence of procurement principles of ethical practices has been a general concern for public institutions to embrace it. Ethical procurement practices directly and indirectly dictate the direction of public and private

sector organizations financing project procurement (Israel *et al.*, 2021). Although ethical procurement practices improve good relationship between PPP and VfM, it is expected that public institution strengthen the internal and external legal framework, enhance ethical training and enforcement of professional practices.

Conclusion

The study concludes that, there is positive influence of PT on PPP on VfM at the public institutions' procurement of works. This study again shows the mediation effects PT and CC&EP positively and significantly strengthening the link between PPP and VfM. Notwithstanding public institutions effort to enforce procurement principles through declaring trust in delivery projects to fit for purpose, ethical practice and code of conduct play a significant role to achieve value for money. Moreover, the enforcement of policies to regulate public officials is paramount to guarantee adherence of procurement principles.

Study Implications

Theoretical implications

This study findings contribute to the empirical studies on Public Procurement Principles, trust and code of conduct and ethical practices jointly influence value for money.

This study finding is consistent with utilitarian ethical theory (UET) that indicates that public institutions required to identify the best procurement principles of fairness, indiscriminate and integrity advance in the procurement process. The study is in-line with UET which affirms that public institutions required to uphold the ethical practices and code of conduct to optimize value of projects outcome (Savulescu *et al.*, 2020) beneficial to the citizens in the country. The study supports that the consequence of project procurement decision centers on general public rather than personal gains in the procurement process where fairness, integrity, indiscriminate and accountability is the hallmark of good ethical practices. The study adds up that the idea that VfM from public official perspectives is treated as theoretical however, this study tested empirically to ascertain the importance of PPP relationship with VfM. Because previous studies neither test PPP and VfM nor focus on trust, ethical practice and code of conduct but this study reveal that there is significant relationship between PPP, VfM, PT and EP and CC on project procurement for the communities. The study adds to theory that to optimize PPP, trust and EP and CC, local government policy implementation must ultimately enforce as a measure to gain expected procurement outcome. This our study findings provides alternative avenue to the MMDAs integrating trust and ethical practices and code of conduct into procurement process decision.

Policy implications

Our study reveals that government institutions especially ministry of Local Government and Rural Development accept the study conclusion on trust and ethical procurement

practices in PPP and VfM. These findings serve as policy guidelines to regulate local government institutions procurement practices. However, previous studies policy documentations are silent on enforcement of PPP and ethical practices in achieving VfM to benefit the general public. Again, this policy document will directly improve assurance ethical procurement and ethical practices for VfM and reputations.

Managerial/practical implications

The study findings highlight significant of trust, ethical practices and code of conducts role to influence public institutions (officials of public institutions) decision and operational activities towards achieving VfM. The study findings provide practical guidelines for practitioners at the public sector institutions in their decision to enforcement of principles, ethical practices/conditions. The study suggests that the MMDAs needs to apply and practice ethical behaviour devoid of acts of discrimination against parties in the procurement process based on their ethnic background, gender, political affiliations which could influence sense of judgement on the award of contracts. The study further demonstrates that public if organizations' decision adheres to the procurement principles focus on fairness, integrity, accountability and indiscrimination to attain trust from the public about their service to the society. Moreover, the study suggested that the expected outcome of VfM could only achieve when public institutions consciously recognize and abide by the procurement principles as enshrine in Act 663, regulations, provision and values of local government concept of provision of projects to fit for purpose to benefit society. The study findings highlight a better way procurement entities and practitioners ascertain economy, efficiency and quality/FFP where procurement principles conscientiously applied in the procurement of works process.

Limitations of the study and recommendations for future research

The study might be followed up with qualitative study on accountability and integrity influenced by trust and ethical behaviour to the extent of achieving VfM. Determining these parameters separately or jointly could allow understanding the extend of perception of procurement principles application through trust repose on officials of public to results to improve public life.

Public institutions embracing implications of VfM concept will bring the benefits of economy and fit for purpose in the public procurement of project delivery. Researchers adopting longitudinal study of data collection to explore the relationship between PPP and VfM where trust and ethical behaviour play indispensable role in the conduct of the process of procurement. The study respondents were selected from officials of public institutions from one region; however, it is recommended that, future studies should test our model using data from respondents within the entire sixteen regions of the country to enhance generalizability of the study findings. Further, the study cannot only be limited to MMDAs public officials, other public sector organizations such as educational and parastatal organizations could be laudable to validate findings of the study.

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Table 5.12: Item Cross Loadings

	CCEP	EP	PPF	PPI	PPT	QP	TP
CCEP1	0.751	0.193	0.251	0.584	0.209	0.384	0.446
CCEP2	0.842	0.198	0.325	0.518	0.279	0.371	0.413
CCEP3	0.757	0.125	0.392	0.515	0.280	0.303	0.371
CCEP4	0.820	0.208	0.397	0.427	0.324	0.362	0.379
CCEP5	0.899	0.327	0.367	0.540	0.397	0.503	0.470
CCEP6	0.881	0.338	0.266	0.515	0.360	0.527	0.428
CCEP7	0.836	0.454	0.193	0.535	0.274	0.585	0.359
CCEP8	0.806	0.421	0.282	0.655	0.330	0.661	0.504
EP1	0.406	0.712	0.140	0.313	0.276	0.638	0.354
EP2	0.054	0.720	0.139	-0.038	0.262	0.431	0.371
EP3	-0.045	0.711	0.044	-0.069	0.262	0.364	0.218
EP4	0.425	0.856	0.079	0.271	0.273	0.610	0.342
EP5	0.177	0.499	-0.193	0.019	0.031	0.374	0.041
EP6	0.329	0.729	-0.017	0.299	0.136	0.540	0.144
PPF1	0.229	-0.055	0.609	0.187	0.385	-0.035	0.330
PPF2	0.351	0.143	0.843	0.167	0.213	0.213	0.164
PPF3	0.351	0.143	0.892	0.355	0.608	0.087	0.468
PPF4	0.317	0.020	0.894	0.381	0.629	0.003	0.516
PPI1	0.539	0.211	0.317	0.881	0.459	0.302	0.399
PPI2	0.601	0.238	0.437	0.933	0.411	0.355	0.395
PPI3	0.657	0.179	0.314	0.927	0.369	0.344	0.457
PPI4	0.630	0.269	0.416	0.619	0.482	0.265	0.424
PPT1	0.165	0.202	0.312	0.401	0.612	0.154	0.413
PPT2	0.421	0.385	0.557	0.395	0.796	0.241	0.545
PPT3	0.313	0.228	0.565	0.385	0.882	0.107	0.537
PPT4	0.162	0.091	0.542	0.329	0.791	-0.148	0.373
QP1	0.412	0.391	0.372	0.401	0.208	0.762	0.328
QP2	0.325	0.455	-0.083	0.239	-0.050	0.700	0.016
QP3	0.551	0.672	0.047	0.356	0.118	0.895	0.437
QP4	0.586	0.700	0.010	0.302	0.190	0.891	0.461

	CCEP	EP	PPF	PPI	PPT	QP	TP
QP5	0.530	0.558	0.103	0.348	0.148	0.886	0.516
QP6	0.456	0.650	-0.036	0.292	0.108	0.871	0.181
QP7	0.508	0.706	0.029	0.324	0.091	0.887	0.343
QP8	0.390	0.568	0.013	0.265	-0.066	0.833	0.271
QP9	0.472	0.550	-0.025	0.243	0.039	0.807	0.321
TP01	0.275	0.192	0.234	0.232	0.341	0.253	0.518
TP02	0.361	0.273	0.402	0.302	0.243	0.213	0.518
TP03	0.475	0.291	0.514	0.462	0.532	0.354	0.919
TP04	0.476	0.368	0.489	0.386	0.574	0.374	0.931