

Exploring Public-Private Partnership for the Project Performance of Federal Health Institutions in the South-East, Nigeria

Chika Martha Okafor, Emmanuel K. Agbaeze, Anthony Obiora Ude*,
Akintunde Olayeni and Dare Joseph Enimola

Department of Management, University of Nigeria, Enugu Campus, Enugu State
Department of Business Administration, Prince Abubakar Audu University, Anyigba

Corresponding Author: **Anthony Obiora Ude**

Abstract: *This study aimed to investigate the use of Public-Private Partnership (PPP) to enhance project performance in Federal Health Institutions in South-East Nigeria. The research employed a survey design and collected data through questionnaires from staff members in federal tertiary health institutions in the region that had existing partnerships with private organizations to improve healthcare delivery. The management or administrative team of these health institutions was selected as the sample population, as they are responsible for handling PPP affairs. Structural Equation Modeling was used to perform a Confirmatory Factor Analysis for construct validity, and the Cronbach's alpha coefficient was used for internal consistency analysis. Descriptive statistics and regression techniques were used, including the Satorra-Bentler test and Simultaneous Regression Analysis. Results showed that payment mechanisms and Dispute Resolution Mechanisms (DRM) were significant in improving Project Sustainability Performance (PSP), while contractual control and Service Level Agreements (SLAs) were not. The study also found that partners' trust had a moderating influence on the effect of contractual control on Project Outcome Performance (POP). The study recommended that PPP projects should focus on building collaborative relationships with project stakeholders in Federal Health Institutions in the South-East Nigeria.*

Keywords: *Payment Mechanisms, Dispute Resolution Mechanisms, Project Sustainability Performance, Contractual Control, Service Level Agreements, Project Outcome Performance*

1. Introduction

Private Public Partnership (PPP) has become a popular means of engendering collaborations between the public and the private sectors for the purpose of providing public goods and services. The rationale for the adoption of PPP by various governments lies in its ability to facilitate innovations, minimize financial risks, and improve the quality of public goods and services through production efficiency (Almarri & Abuhijleh, 2017; Babatunde, Ekundayo, Udeaja, & Abubakar, 2022; Mathew, Nayar, & Sathyapal, 2021). Establishing viable PPPs may require the development of contractual agreements that serve to regulate the activities of the partners in line with the expectations of the partnership. Formal business relationships are usually kick-started with formal contracts that delineate the roles and responsibilities of each party to the contract. This is especially important due to the highly uncertain environments, complex organizational settings, long cooperation cycles, and the tendency for self-seeking and opportunism among partners (Cheng, Liu, & Xu, 2021; Hodge & Greve, 2007). In developing economies, other issues such as political instability, policy summersaults, volatile institutions, weak governance structures, lack of resources, environmental issues, and stakeholder problems have further reinforced the need for contracts in PPP settings (Babatunde *et al.*, 2022; Cheng, Liu, & Xu, 2021; Heravi & Hajihosseini, 2012).

Conventional contracts have been reported to produce negative outcomes in real partnerships such as PPP because it limits flexibility and scope adjustment of goals and objectives (de Bettignies & Ross, 2009; Wuyts & Geyskens, 2005). Hence, contract theory suggests that contractual forms within partnerships should assume the multiple functions of control, coordination, and adaptation (Cheng, Liu, & Xu, 2021; Cheng, Liu, Xu, & Chi, 2021; Gao, Chen, Wang, & Wang, 2018; Schepker, Oh, Martynov, & Poppo, 2014). Partnerships and other joint contracts that assume a combination of these three functions have the potential to maximize their benefits and outcomes. Contractual control helps to delimit partners' actions and ensure that they exhibit goal congruent behaviours; contractual coordination helps to define the roles and responsibilities of the partners; while contractual adaptation enables partners to respond or adapt to uncertainties within their environmental contexts. However, the establishment of these contracts may not automatically translate to improved performance for the partnership (Mwesigwa, Ntayi, Bagire, & Munene, 2018). In fact, extant literature has shown that just because economic exchanges within PPPs are embedded in innovative contractual forms does not necessarily mean that the PPP would succeed. For instance, findings from Herold (2010) and Lumineau (2014) suggest that contractual agreements may be an indication that at least a party has the potential to renege from their obligations and thus require another mechanism to compel compliance. Unfortunately, such compulsive commitment may stifle relationship development, breed hostility among partners, and ultimately impede performance. Moreover, issues such as the politicization of projects, lack of transparency, and the outright failure of many PPPs have questioned the veracity of contracts in providing long-lasting solutions to the inherent problems associated with partnerships (Christina, Loosemore, & Newton, 2016)

There is the tendency that other relational norms such as partners' trust may serve to cushion to negative implications of contractual frameworks on PPP performance (Abdullah & Khadaroo, 2020; Nie, Feng, Zhao, Fan, & Wang, 2021). Trust - "a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behavior of another" - may serve to improve the coordination, cooperation and flexibility, and performance of PPPs (Rousseau, Sitkin, Burt, & Camerer, 1998:395). Also, partners' contributions - defined as the degree of investments that parties make into the partnership - may help to minimize the opportunistic tendencies characteristic of PPPs and increase the level of resource exchanges between partners which are capable of improving the output of the collaboration. This study therefore seeks to investigate the moderating influence of trust and partners' contributions on the effect of contractual functions on PPP performance. While the effect of contractual characteristics (Klijn & Koppenjan, 2016), contractual governance (Faems, Janssens, Madhok, & Van Looy, 2008; Ke, Cui, Govindan, & Zavadskas, 2015), and contractual provisions (Argyres, Bercovitz, & Mayer, 2007) on performance has been investigated, little is known about the effects of contractual functions on PPP performance. Studies that investigated this effect seem to disagree on the definition of performance in PPP settings (Brogaard, 2019; Cheng, Liu, & Xu, 2021; Gao *et al.*, 2018). Whereas the mediating roles of trust and partners' contribution have been considered in extant studies (Benítez-Ávila, Hartmann, Dewulf, & Henseler, 2018), little or nothing has been done to investigate their moderating role on the contract-performance effect in PPP, especially within a developing context.

This study makes three main contributions: First, it contributes to the burgeoning literature on contract formation within PPPs by providing a model which captures the interaction effect of partners' trust, partners' contribution, and the three main contractual functions on PPP performance with the view to offer solutions that would facilitate PPP sustainability in highly volatile and uncertain environments. Second, the study provides a conceptualization of performance that adequately reflects the peculiarities of PPPs within developing contexts. This is important because the definition of performance and the pursuance of divergent interests by partners usually emanate from the need for them to retain their identity and independence while in the partnership (English & Baxter, 2010; Zhang, Jia, & Wan, 2009; Zhang, Wan, Jia, & Gu, 2009). Third, and more apparently, is the context within which this study was conducted - Federal Health Institutions in Nigeria. Studies on PPP in the country have focused mainly on housing and basic infrastructural development while ignoring other sectors of the economy (Babatunde *et al.*, 2022; Ibem, 2011; Opawole & Jagboro, 2016).

This research study is organized into four main parts. It begins with the conceptual framework, the theoretical framing, theoretical model, and hypotheses development. The second section contains the research design and data analysis. The third section presents the results from the hypothesized model. The fourth section provides findings, discussions, theoretical, and managerial implications, as well as concluding remarks on the study.

2. Conceptual Review

2.1. Contractual Control

The control function within PPP contexts is a tool adopted by contractual parties to ensure that actions are within the boundaries of behaviour as stipulated within the contractual agreement (Appuhami & Perera, 2016). It is used to delimit the behaviour of partners to ensure that their actions are in congruent with the goals and objectives of the partnership. Due to the differences in motivation and interest, control minimizes the tendencies for partners to engage in opportunistic behaviours burgeoned by complex PPP projects and blurred lines of responsibilities between partners (Cheng, Liu, Xu, *et al.*, 2021; Lumineau & Henderson, 2012). Contractual control includes stipulating rights, prescribing sanctions, prescribing punitive measures for breaches, and engaging third parties for dispute resolutions (Gao *et al.*, 2018).

2.2. Contractual Coordination

Contractual coordination within PPP contracts is warranted by the cognitive inadequacies of the transaction parties. The essence of coordination is to ensure that each partner is aware of, and understands clearly their roles and responsibilities so that the expectations of the partners are aligned, honest mistakes emanating from misunderstandings are avoided, and collaboration efficiency is improved (Lumineau & Henderson, 2012; Schepker *et al.*, 2014). Hence, contractual coordination includes functions such as delineating tasks, specifying responsibilities, designing a communication plan, stipulating the framework for information sharing and feedback, explaining the meaning of the contract, and fostering the right perception of the tasks, schedules, and accomplishments of each partner (Cheng, Liu, & Xu, 2021; Gao *et al.*, 2018).

2.3. Contractual Adaptation

Contractual adaptation is designed to determine how the transaction parties would manage the vagaries and inconsistencies associated with the contextual environment wherein the PPP contract is perpetuated. It entails a mutual agreement on the guidelines and procedures for responding or reacting to uncertainties in the transaction environment (Argyres *et al.*, 2007). Specific issues to deal with include how swift or slow partners should respond to unexpected policy changes, price alterations, exchange rate fluctuations, and even vis major clauses. By stipulating adaptation clauses, the partners are empowered to both identify and also adapt to environmental changes when they occur (Gao *et al.*, 2018; Gulati, Lawrence, & Puranam, 2005).

2.4. PPP Trust

Trust is a psychological state of mind wherein PPP partners are willing to be vulnerable to each other in anticipation that each one would fulfill their contractual obligations and not renege from their responsibilities (Benítez-Ávila *et al.*, 2018). It is also the process whereby transaction partners exchange resources for the purpose of achieving mutual benefits (Hénaff, 2010). Partners' trust is founded on the norm of reciprocity, which stipulates that people should treat others the same way they have been treated. Thus, partners' trust implies the confidence that a partner has that the other party would make equal sacrifices and commitments towards the partnership goals and objectives (Cheng, Liu, Xu, *et al.*, 2021; Abdullah & Khadaroo, 2020).

2.5. PPP Contribution

Partners' contribution refers to the extent that the behaviours and actions of the partners contribute to the partnership objectives especially at the implementation phase of the partnership irrespective of the way or manner through which such commitments were obtained – force, trust, or economic incentives (Blois & Ivens, 2007; Procaccino, Verner, Shelfer, & Gefen, 2005). It is the degree that partners are willing to coordinate themselves, align their individual interests to suit the collective goal, cooperate with each other, and manage any conflicts that may arise in the course of project implementation (Benítez-Ávila *et al.*, 2018).

2.5. Performance

PPP performance can be conceptualized in two main ways: Contract-based performance and broad-based performance (Warsen, Nederhand, Klijn, Grotenbreg, & Koppenjan, 2018). Contract-based performance is the achievement of specific goals and targets as stipulated in the PPP contracts, such as improved efficiency, timely completion of projects, and general project optimization. But this perspective only provides a myopic and insufficient evaluation of performance. Hence, the broad-based view, in addition to evaluating the contractual goals, also includes nature and usefulness of solutions offered, solution attributes, cost efficiency, durability of solutions offered (robustness), and project support. This study assumes the broad-based view of performance in line with previous studies (Ross & Yan, 2015; Skelcher & Sullivan, 2008; Steijn, Klijn, & Edelenbos, 2011).

3. Theoretical Framing and Hypotheses Development

3.1. Theoretical Framing

Transaction cost theory has remained a prominent theory in the study of joint ventures over the years. This theory relates to the organization of joint venture transactions within or between organizations. The basic nature of transaction costs is the allocation of resources among partners through authority relations within the partnership. It is based on the assumption of bounded rationality, and that each partner has opportunistic tendencies which drives them to seek their own interest at the expense of the collective goals (Meyer & Wang, 2015; Tsang, 2000). The essence of transaction cost theory, however, is to choose an appropriate governance structure that enables the parties to economize on transaction costs (especially with regard to make-or-buy decisions) and minimize opportunism in joint ventures. One of the major setbacks of the transaction cost theory is its overemphasis on the cost minimization and the neglect for value creation. This makes economizing, rather than strategizing the core strategy for engendering optimum performance within joint ventures (Tsang, 2000). This study suggests that the core PPP contractual strategies of coordinating, controlling, and adapting the parties to their environmental contexts may provide better outcomes than mere economizing of resources would have achieved. More so, the trust and contributions of partners may further minimize the opportunistic inclinations of partners which usually impede performance.

3.2. PPP Control and Performance

Apart from the role of monitoring the actions of partners, control within PPP contracts help to motivate partners towards goal attainment. The effective use of controls may help the partnership to minimize risks especially when risk transfer between the public and private partners are irksome due to the inability to pre-empt environmental uncertainties and manage them (Appuhami & Perera, 2016). Also, control protects the partnership from relationship risks associated with conflict of interests and contract breaches among partners (Cheng, Liu, Xu, *et al.*, 2021; Kivilä, Martinsuo, & Vuorinen, 2017). Indeed, the technical complexities associated with PPP projects may exacerbate opportunistic behaviours among partners. But control would help to define grey areas within the PPP contract, and ensure that any attempt to exploit project inconsistencies and impede collective performance is checked (Gao *et al.*, 2018). In this study, the proxies considered for contractual controls are Service Level Agreements (SLA), payment mechanisms, Dispute Resolution Mechanism (DRM), and Monitoring And Reporting Requirements (MRRs).

According to a 2020 report by the World Bank Group, SLAs are important contractual controls that establish measurable performance standards for PPP projects (World Bank Group, 2020). SLAs can cover a range of areas, such as quality, timeliness, and cost. By setting SLAs, both parties have a clear understanding of what is expected and can monitor performance against these metrics. Hou and Chan (2020) note that SLAs can be used to establish clear performance targets and to ensure that private sector partners are held accountable for meeting those targets. PPP contracts often include payment mechanisms that tie payments to the delivery of specific milestones or the achievement of performance targets. Wang et al. (2021) emphasizes the importance of payment mechanisms in ensuring the performance of private sector partners in PPP projects. International Finance Corporation (IFC) (2021) notes that payment mechanisms can be used to incentivize private sector performance in PPP projects.

PPP contracts often include provisions for resolving disputes that may arise during the course of the project. These mechanisms may include arbitration, mediation, or other forms of dispute resolution. United Nations Conference on Trade and Development (UNCTAD) (2020) highlights the importance of effective DRM in PPP contracts. UNCTAD notes that PPP contracts should include clear and enforceable dispute resolution clauses to ensure that disputes can be resolved in a timely and efficient manner. Brown & Wilson (2020) emphasizes that DRM must be designed to reduce the likelihood of disputes and to ensure that disputes are resolved in a timely and cost-effective manner. PPP contracts may require private company to provide regular reports on the progress of the project and to allow for regular monitoring and inspection of the work. This allows the government entity to keep track of progress and to ensure that the private company is meeting their obligations under the contract. A report by the International Finance Corporation (IFC) (2021) emphasizes the importance of MRRs in PPP contracts. Pourhassan et al. (2019) notes that effective MRRs are critical to ensuring the success of Project Activity Performance (PAP). MRRs may provide timely and accurate information on project progress and PAP. We therefore suggest that:

H_{1a}: Contractual controls have significant effects on the performance of PPP.

H_{1b}: SLAs have significant effects on the performance of PPP.

H_{1c}: Payment mechanisms have significant effects on the performance of PPP.

H_{1d}: DRM have significant effects on the performance of PPP.

H_{1e}: MRRs have significant effects on the performance of PPP

3.3. PPP Coordination and Performance

The relationships that exist within PPP frameworks are usually complex and includes many stakeholders. It requires that the activities of these stakeholders should be properly coordinated in order to achieve the intended purposes of the partnership (Osei-Kyei, Chan, Javed, & Ameyaw, 2017). Contractual coordination helps to facilitate quality interactions and communication between stakeholders so that they can exchange information and minimize misunderstandings. There is no doubt that conflict of interests is imminent within partnerships and have the capacity to obviate performance. However, with coordination, the collaboration efficiency would be improved by synchronizing the various interests of the stakeholders to fit into the activities of the partnership; while late adjustment problems emanating from unstructured information flows would be reduced (Faems *et al.*, 2008). We therefore suggest that:

H₂: There is a positive effect of contractual coordination on the performance of PPP

3.4. PPP Adaptation and Performance

Managing the vagaries associated with the internal and external transaction environment is critical to the performance of PPP projects. With many risk factors imbedded in partnership projects, flexible contracting is required to cope with environmental uncertainties especially during project implementation. In fact, contractual adaption includes procedures that would enable the partnership deal with technical changes during the life cycle of PPP projects, thereby ensuring that there is efficiency in output (Cheng, Liu, & Xu, 2021; Gao *et al.*, 2018). Adaptability also promises to ensure stability in the operations (espe-

cially with regard to fluctuating supplies) of the partnership so that there would be less incidences performance delays. It is therefore suggested that:

H₃: There is a positive effect of contractual adaptation on the performance of PPP

3.5. The Moderating Role of PPP Trust

There are four main dimensions of trust that may help to explain its moderating role on the influence of contractual functions on performance. They are ability, benevolence, integrity, and interactions (Mayer, Davis, & Schoorman, 1995). Ability is the perception that other partners have the required skills and competencies with which to perform their roles and responsibilities. Benevolence is the extent that other partners are believed to cater only for their self-interests in the partnership. Integrity is the degree that other parties are believed to stick to the contractual agreements of the partnership. Interactions suggest the degree that partners are willing to collaborate and dialogue with each other to achieve partnership goals and objectives. Where trust is high, then control functions aimed at facilitating collective interests would yield the desired outcomes. High incidences of trust would ensure that no partner withholds any vital resource from the partnership, and also help to facilitate the synchronization of skills and technical resources needed to advance collective performance. Trust would help to minimize the opportunistic tendencies that characterize PPP contracts by improving collaboration through knowledge sharing. Since PPP contracts are embedded in highly volatile contexts (Klijn & Koppenjan, 2016), the integrity dimension of trust would ensure that each partner remains committed to the implementation of the initial project plans despite changes in the implementation process. Even when mutual understanding and prior ties are lacking due to different sectorial backgrounds of partners, high level of trust would provide the minimal ambience needed to steer the partnership towards success amidst austere and unfavourable contexts (Brogaard, 2019; Rufin & Rivera-Santos, 2012). Hence:

H4a: Partners' trust would moderate the influence of contractual control on the performance of PPP;

H4b: Partners' trust would moderate the influence of contractual coordination on the performance of PPP;

H4c: Partners' trust would moderate the influence of contractual adaptation on the performance of PPP.

3.5. The Moderating Role of PPP Contribution

The success of any PPP is hugely dependent on the contributions made by the parties to the contractual agreement. Partners are expected to contribute based on their capabilities as well as the expectations stipulated in the PPP contract (Benítez-Ávila *et al.*, 2018). Thus, where such contributions are high, then the financial and human resources needed to coordinate the activities of the partners and engender project performance would be available. Contributions make it easier to monitor partners' behaviours to ensure that they align with the demands of the projects at hand. Knowledge contributions would improve innovative products and services delivered by the PPP as well as provide better ways of eliciting the cooperation and coordination of all parties. They further improve the ability of partners to adapt to environmental changes, solve problems during project implementation, and maximize performance outputs. Partners' contributions would increase the rate and efficiency with which PPP projects are fulfilled and increase the veracity of such projects in satisfying the needs of the society. Partners' contribution would lead to an earlier detection or identification of non-feasible ideas and prevent wastages associated with investing in unreasonable projects. Thus:

H5a: Partners' contribution would moderate the influence of contractual control on the performance of PPP

H5b: Partners' contribution would moderate the influence of contractual coordination on the performance of PPP

H5c: Partners' contribution would moderate the influence of contractual adaptation on the performance of PPP

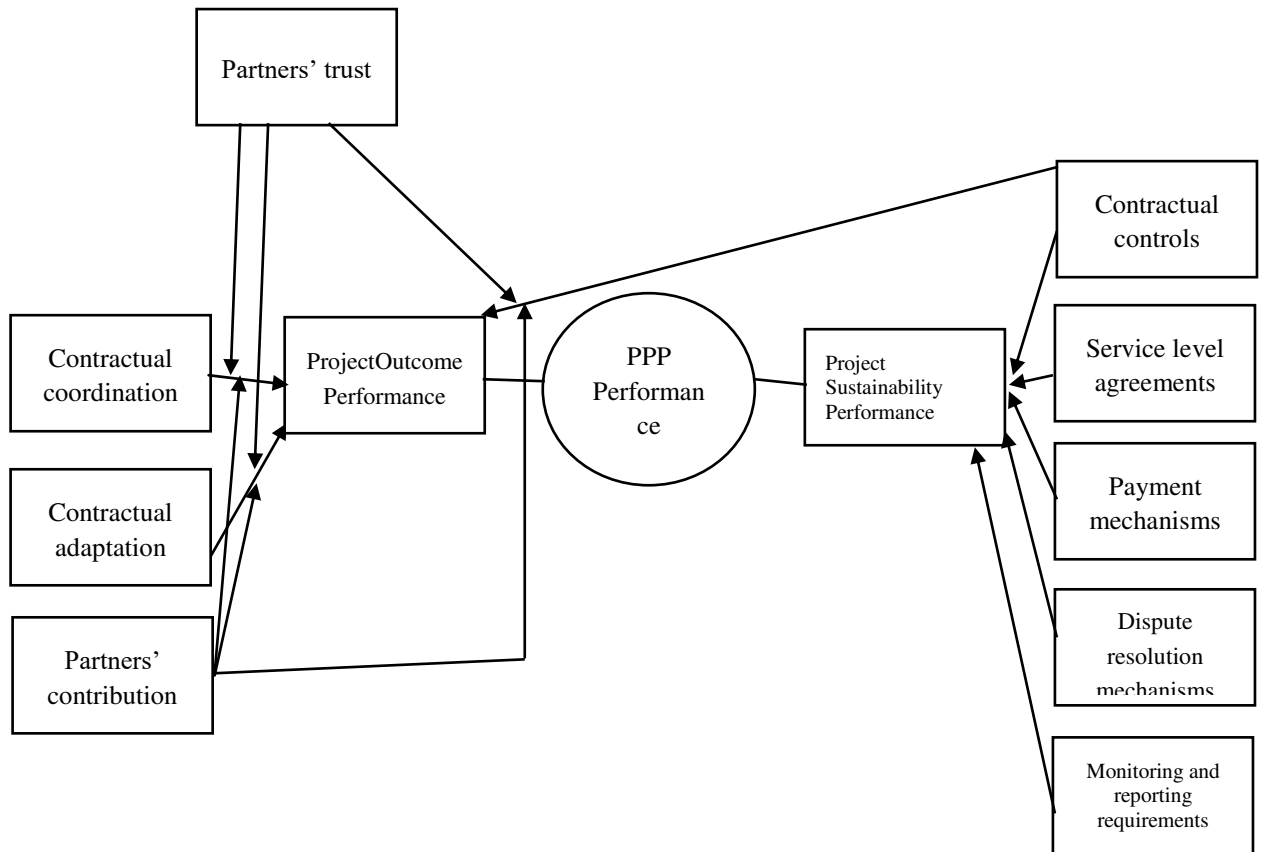


Figure1. Conceptual model showing the performance

4. Materials and Methods

4.1 Participants and Data Collection

In the context of studying the effect of PPP on the performance of Federal Health Institutions in the South-East, Nigeria, a survey research design. In this regard, data were collected using questionnaires to gain insights into the subject of interest. The study targeted tertiary health institutions in South-East Nigeria. Tertiary health institutions in the South-East region of Nigeria have increasingly been partnering with private organizations to improve healthcare delivery. PPP is a collaborative effort between the public and private sectors to provide essential services, and it has been identified as a viable option for bridging the gap in healthcare delivery in Nigeria (Ogundeji & Omoleke, 2015). This partnership has resulted in improved infrastructure, medical equipment, and personnel training, which have all contributed to the enhancement of healthcare services in the region (Ogbuabor et al., 2019). Several tertiary health institutions in the South-East region have benefited from PPP initiatives, including the Federal Medical Centre, Owerri, and the University of Nigeria Teaching Hospital, Enugu. These partnerships have been successful in improving the quality of healthcare services, reducing waiting times, and increasing access to specialized medical care (Ogbuabor et al., 2019). The population of this study comprised of staff cutting across all the federal tertiary health institutions located in South-East Nigeria. The rationale for this choice is that these institutions have the capacity for collaborating with private sector partners. Thus, 539 staff was purposively sampled. The study selected the management or administrative team of the health

institutions because the responsibility for handling PPP affairs falls under them. The study ensured a representation by adopting the Stratified Random Sampling technique which allows researchers to group or stratify populations into subpopulations or subgroups independently.

Between January and December 2022, data was gathered for this study. To collect the data, health workers were requested to volunteer to assist in administering the questionnaire due to the nature of their work in health institutions. The volunteers were given prior training on the best way to obtain responses, which was conducted by three members of the research team. The health workers explained the questions in the native dialect to ensure comprehension and responses were gathered immediately. Table 1 displays the participant profile alongside their respective means and standard deviations. After careful follow up through the research assistants within the survey period, 539 responses (100%) were retrieved. Table 1 shows the profile of the respondents.

Table 1. Participant profile

| Profile | Response | No. | Percent |
|------------------------|-----------------------------------|-----|---------|
| Highest Qualifications | Doctor of Medicine | 104 | 19.3 |
| | Master of Business Administration | 104 | 19.3 |
| | Master of Health Administration | 105 | 19.5 |
| | Master of Public Health | 105 | 19.5 |
| | Bachelor's Degree in Nursing | 95 | 17.6 |
| | Master of Science in Nursing | 13 | 2.4 |
| | Master of Social Work | 13 | 2.4 |
| Gender | Male | 185 | 34.3 |
| | Female | 354 | 65.7 |
| Managerial Experience | 5-10 years | 74 | 13.7 |
| | 6-11 years | 212 | 39.3 |
| | 12-17 years | 168 | 31.2 |
| | 18 years and above | 85 | 15.8 |
| Age Distribution | 30 - 40 years | 67 | 12.4 |
| | 41-50 years | 248 | 46.0 |
| | 51 years and above | 224 | 41.6 |

4.2 Measures of Variables

The measures for all the variables (both dependent and independent) that were used in this study were adopted from extant literature. Given the peculiarity of this study little adjustments were made to the measures to ensure that they suit this study context. Partners’ contribution measured the extent that all the partners contribute to the partnership and perform the roles and responsibilities assigned to them according to the contract. The measures were adapted from Benítez-Ávila et al., (2018). Partners’ Trust measured the degree that the public and private partners trust each other to perform their roles in the partnership. The measures were adapted from Benítez-Ávila et al., (2018). Project Activity Performance was measured using the scale designed and developed by Benítez-Ávila et al., (2018). The scale contains six items which measures the extent that the specific activities in the projects implemented by the partnership were timely and sufficiently completed. Project Outcome Performance

(POP) was measured using the scale designed and developed by Hu, Li, Liu, Wang, & Cheng (2021). The scale contains four items which measure the extent that the specific targets of time, quality, cost, and other parameters with regard to the partnership projects were met. Project Sustainability Performance (PSP) was measured using the scale designed and developed by Cheng, Liu, & Xu (2021). The scale contains eight items which measure the extent that the project is safe, durable, sustainable, and able to meet the needs of the public. Other constructs were measured using the 5 point likert scale.

4.3 Validity and Reliability Check

For construct validity, the Structural Equation Modelling (SEM) was used to perform a Confirmatory Factor Analysis (CFA) in order to show the assumptions of convergent and discriminant validity. The internal consistency analysis of the instrument was ascertained using the Cronbach’s alpha coefficient. All the reliability scores were above the 0.7 threshold (see table 2).

Table 2. Validity and Reliability Instrument

| | Question Items | PC | PT | PAP | POP | PSP | SP | C.R |
|------|---|-------|-------|-------|-----|-----|----|-------|
| | Partner’s Contribution (Benítez-Ávila et al., 2018) | | | | | | | 0.917 |
| PC1 | Activities of the involved parties are coordinated (aligned) | 0.914 | | | | | | |
| PC2 | The involved contract partners have contributed to the completion of the project in an accurate way | 0.902 | | | | | | |
| PC3 | The involved organizations in the network have adequate ways to command mutual disagreements and conflicts successfully | 0.815 | | | | | | |
| PC4 | During the past years, parties have improved their collaboration | 0.811 | | | | | | |
| | Partners’ Trust (Benítez-Ávila et al., 2018) | | | | | | | 0.811 |
| PT1 | There is no trust between the public and private parties | | 0.798 | | | | | |
| PT2 | There is much trust between the public and private parties | | 0.790 | | | | | |
| | Project Activity Performance (Benítez-Ávila et al., 2018) | | | | | | | 0.808 |
| PAP1 | The project solutions are sufficiently supported by the organizations involved | | | 0.951 | | | | |

| | | | |
|------|---|-------|-------|
| PAP2 | Different environmental functions have been connected sufficiently | 0.936 | |
| PAP3 | Solutions developed in the project really deal with the problems at hand | 0.927 | |
| PAP4 | Developed solutions in the project are durable for the future | 0.918 | |
| PAP5 | The cost of the project stays within the limits that have been set | 0.885 | |
| PAP6 | In general, the benefits exceed the costs | 0.836 | |
| | POP (Hu et al., 2020) | | 0.907 |
| POP1 | The project has achieved the target of construction period, quality and cost | 0.889 | |
| POP2 | The financing cost and financing risk of the project are reduced | 0.862 | |
| POP3 | The level of public goods or services provided by the project has increased | 0.851 | |
| POP4 | Compared with the traditional construction mode, the government's fiscal expenditure is obviously reduced | 0.837 | |
| | PSP (Cheng et al., 2020) | | 0.899 |
| PSP1 | The project has high input-output efficiency in cost | 0.904 | |
| PSP2 | The project has achieved the expected quality | 0.901 | |
| PSP3 | The project has delivered on schedule | 0.843 | |
| PSP4 | The project has met health and safety | 0.839 | |
| | Expectations | | |
| PSP5 | Willing to cooperate with the other party in future | 0.827 | |
| | Projects | | |
| PSP6 | The project was successful in providing motives for other projects in the future | 0.818 | |
| PSP7 | The project has brought many positive social impacts (e.g. establishing a new regional/national image and promoting the | 0.814 | |

| | | | |
|------|--|-------|-------|
| | country's economic development) | | |
| PSP8 | The project has not caused adverse environmental issues (e.g. soil, water and air quality) | 0.804 | |
| | Social Performance (Zhang et al., 2009) | | 0.896 |
| SP1 | Through cooperation, more new partners have come to participate and engage in this project | 0.911 | |
| SP2 | Through cooperation, this project has acquired stronger influence and power in the industry | 0.902 | |
| SP3 | Through cooperation, this project has obtained more care and support from other organizations | 0.888 | |
| SP4 | Through cooperation, this project has received a large amount of approval and praise in the industry | 0.813 | |

Source: SPSS 24

4.4 Data Analysis Techniques

The descriptive statistics and regression technique were employed. Regression technique was used for test of hypotheses. The Satorra-Bentler test was used for hypotheses (a, b, c, d & e). Simultaneous Regression Analysis was used for the test of other hypotheses. Correlation and Covariance are used for multi Collinearity analysis.

4.5 Hypotheses Testing.

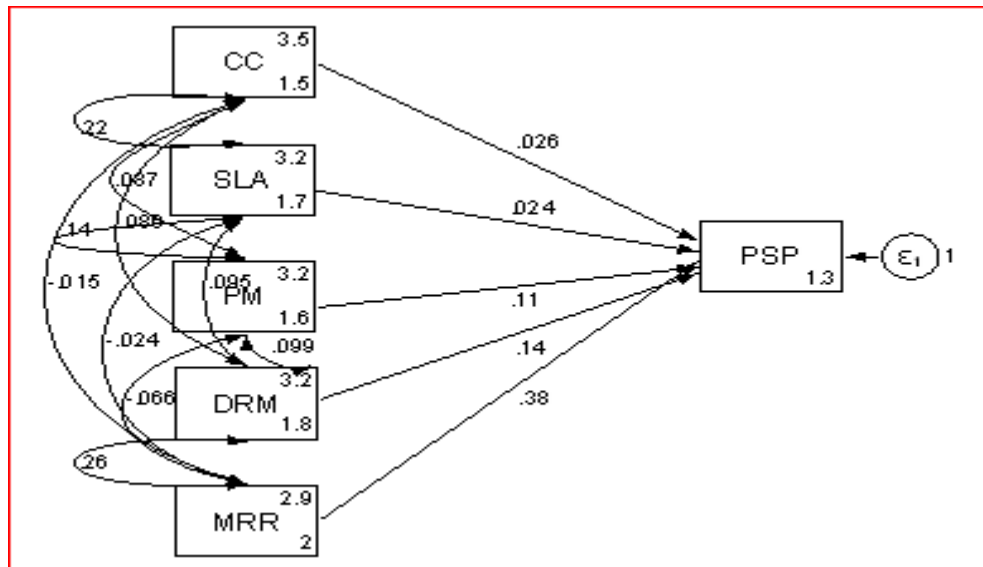


Fig 1 Structural Equation Model

Note: Exogenous variables are CC- Contractual control; SLA- SLAs; PM- Payment Mechanisms; DRM; MRRs

The figure 1 shows that contractual control, SLAs, payment mechanisms, DRM, MRRs have positive effects on PSP. Table 2 reveals that the effects of contractual control ($\beta_{CC} = .0262702$; p-value > 0.05) and SLAs ($\beta_{SLA} = .0242356$; p-value > 0.05) on PSP are insignificant. Payment mechanisms ($\beta_{PM} = .1140178$; p-value < 0.01), DRM ($\beta_{DRM} = .1382596$; p-value < 0.01), MRRs ($\beta_{MRR} = .3792936$; p-value < 0.01) have significant effects on PSP. The R²-value of .2621109 shows that the overall 26.1% variation in PSP is explained by the variables.

Table 3 Satorra-Bentler Test

| Structural (PSP) | Coef. | Std. Err. | Z | p-val | R-squared (Overall) |
|------------------|----------|-----------|-------|-------|---------------------|
| CC -> PSP | .0262702 | .0373465 | 0.70 | 0.482 | .2621109 |
| SLA -> PSP | .0242356 | .0342935 | 0.71 | 0.480 | |
| PM -> PSP | .1140178 | .0352695 | 3.23 | 0.001 | |
| DRM -> PSP | .1382596 | .0382625 | 3.61 | 0.001 | |
| MRR -> PSP | .3792936 | .0377388 | 10.05 | 0.001 | |
| _cons | 1.345964 | .2496284 | 5.39 | 0.001 | |
| mean(CC) | 3.471243 | .0529266 | 65.59 | 0.000 | |
| mean(SLA) | 3.194805 | .0570119 | 56.04 | 0.000 | |
| mean(PM) | 3.205937 | .0538898 | 59.49 | 0.000 | |
| mean(DRM) | 3.246753 | .0573026 | 56.66 | 0.000 | |
| mean(MRR) | 2.93321 | .0603913 | 48.57 | 0.000 | |
| cov(CC,SLA) | .2161771 | .0707811 | 3.05 | 0.002 | |
| cov(CC,PM) | .0866271 | .0674212 | 1.28 | 0.199 | |
| cov(CC,DRM) | .0859456 | .07276 | 1.18 | 0.238 | |

| | | | | |
|---------------------|-----------|----------|-------|-------|
| cov(CC,MRR) | -.0149077 | .075407 | -0.20 | 0.843 |
| cov(SLA,PM) | .1398453 | .0728082 | 1.92 | 0.055 |
| cov(SLA,DRM) | .0947883 | .0758854 | 1.25 | 0.212 |
| cov(SLA,MRR) | -.0240946 | .0798618 | -0.30 | 0.763 |
| cov(PM,DRM) | .0994627 | .0726985 | 1.37 | 0.171 |
| cov(PM,MRR) | -.0660228 | .0753648 | -0.88 | 0.381 |
| cov(DRM,MRR) | .2595234 | .0865213 | 3.00 | 0.003 |

The table 3 shows the mean score for contractual control (M=3.471243; SD= .0529266), SLAs (M=3.194805; SD= .0570119), payment mechanisms (M=3.205937; SD= .0538898), DRM (M=3.246753; SD= .0573026), MRRs (M=2.93321; SD= .0603913). the Standard Deviation (SD) indicate less divergence in the data set; that is the spread of the data is closer to the mean. The Satorra-Bentler Test reveals the level of covariance among the exogenous variables. The table 3 shows that the correlation between contractual control and SLAs (given that $r = .2161771$; $p < 0.01$); the correlation between contractual control and payment mechanisms (given that $r = .0866271$; $p > 0.05$); the correlation between contractual control and DRM (given that $r = .0859456$; $p > 0.05$); the correlation between contractual control and MRRs (given that $r = -.0149077$; $p > 0.05$); the correlation between SLAs and payment mechanisms (given that $r = .1398453$; $p > 0.05$); the correlation between SLAs and DRM (given that $r = .0947883$; $p > 0.05$); the correlation between SLAs and payment mechanisms (given that $r = -.0240946$; $p > 0.05$); the correlation between payment mechanisms and DRM (given that $r = .0994627$; $p > 0.05$); the correlation between payment mechanisms and MRRs (given that $r = -.0660228$; $p > 0.05$); and the correlation between payment mechanisms and MRRs (given that $r = .2595234$; $p < 0.01$) are all below 50%. The results show that there were no multicollinearity concerns (Grewal, Cote, & Baumgartner, 2004).

Table 4 Correlation and Covariance

| Variables | Mean | Std. Dev. | 1 | 2 | 3 | 4 | 5 |
|------------------|-------------|------------------|----------|----------|----------|----------|----------|
| PC | 3.510204 | 1.201528 | 1.0000 | | | | |
| PT | 2.640074 | 1.389134 | -0.1069 | 1.0000 | | | |
| CC | 3.471243 | 1.228763 | 0.1491 | -0.0932 | 1.0000 | | |
| CoC | 2.692022 | 1.362588 | -0.0299 | 0.0169 | 0.0402 | 1.0000 | |
| CA | 2.961039 | 1.402455 | 0.0195 | 0.0119 | 0.0312 | -0.0199 | 1.0000 |

The table 3 shows the mean score for partners' contribution (M=3.510204; SD= 1.201528), partners' trust (M=2.640074; SD= 1.389134), contractual control (M=3.471243; SD= 1.228763), contractual coordination (M=2.692022; SD= 1.362588), and contractual adaptation (M=2.961039; SD= 1.402455). A close examination reveals that there is no high correlation; as the exogenous variables were less than 0.5. The relationship between the moderating variables – partners' contribution and partners' trust – was also less than 0.5 ($r = -0.1069$). Therefore, it can be concluded that there were no multicollinearity concerns (Grewal, Cote, & Baumgartner).

Table 5: Results on Simultaneous Regression Analysis

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 | Model 9 | Model 10 | Model 11 |
|-------------|--|--|--|--|---|--|---|---|--|---|---|
| Predictors | | | | | | | | | | | |
| CC | -.127** | | | | | | | | | | |
| CoC | | .021 | | | | | | | | | |
| CA | | | -.062 | | | | | | | | |
| Moderator | | | | | | | | | | | |
| PT | | | | .076* | | -.082** | .016 | .012 | | | |
| PC | | | | | -.096* | | | | .152** | -.034 | .023 |
| Interaction | | | | | | | | | | | |
| PT x CC | | | | | | .023 | | | | | |
| PT x CoC | | | | | | | .291** | | | | |
| PT x CA | | | | | | | | .008 | | | |
| PC x CC | | | | | | | | | .027 | | |
| PC x CoC | | | | | | | | | | .366** | |
| PC x CA | | | | | | | | | | | .008 |
| | R ² = 0.02; F(1,537) = 8.53; p<0.01 | R ² = 0.001; F(1,537)=0.28 ; p>0.05 | R ² = 0.005; F(1,537)=2.61 ; p>0.05 | R ² = 0.007; F(1,537)=3.80 ; p=0.05 | R ² = 0.009; F(1,537) = 4.62; p<0.05 | R ² = 0.008; F(1,537)=4.70 ; p<0.05 | R ² = 0.001; F(1,537) = 0.15; p>0.05 | R ² = 0.001; F(1,537) = 0.08; p>0.05 | R ² = 0.022; F(1,537) = 12.20; p<0.01 | R ² = 0.001; F(1,537) = 0.48; p>0.05 | R ² = 0.001; F(1,537) = 0.21; p>0.05 |

Table 5 shows the simultaneous regression estimates for the tested hypotheses. Model 1 shows a statistically significant negative effect of contractual control on POP ($\beta_{CC} = -.127$; $p < 0.01$). For the tested H2, Model 2 shows a statistically insignificant positive effect of contractual coordination on POP ($\beta_{CoC} = .021$; $p > 0.05$). For the tested H3, Model 3 shows a statistically insignificant negative effect of contractual adaptation on POP ($\beta_{CA} = -.062$; $p > 0.05$).

For the moderating effects, Model 6 showed that there was a statistically significant negative moderating influence of partners' trust on the effect of contractual control on POP; and thus validates H4a ($\beta_{CC \times PT} = -.082$; $p < 0.01$). Our results from Model 7 shows H4b, in that there was no statistically significant moderating influence of partners' trust on the effect of contractual coordination orientation on POP ($\beta_{CoC \times PT} = .016$; $p > 0.01$). This does not support the H4b. Likewise, Model 8 shows that there was no statistically significant moderating role of partners' trust on the effect of contractual adaptation on POP; thus refuting H4c ($\beta_{CA \times PT} = -.012$; $p > 0.05$).

For the tested H5a Model 9 reveals a statistically significant moderating influence of partners' contribution on the effect of contractual control on POP ($\beta_{CC \times PC} = .152$; $p < 0.01$). Model 10 shows a statistically insignificant negative moderating influence of partners' contribution on the effect of contractual coordination on POP, thereby refuting H5b ($\beta_{CoC \times PC} = -.034$; $p < 0.05$). Model 11 shows no moderating role of partners' contribution on the effect of contractual adaptation on POP ($\beta_{CA \times PC} = -.023$; $p > 0.05$).

Discussion

This study investigated the effect of PPP on the performance of PPP. Contractual control, SLAs, payment mechanisms, DRM, MRRs were considered for PPP; while PSP was considered as a proxy for the performance of PPP. Our results showed that contractual control does not substantially improve PSP ($\beta_{CC} = .0262702$; $p\text{-value} > 0.05$). The study found no significant link between contractual control and PSP. The beta coefficient (β_{CC}) value of 0.0262702 indicates that there is a very weak or almost negligible positive relationship between the two variables. The p-value being greater than 0.05 indicates that the link is not statistically significant, and the results are not due to chance. In other words, there is not enough evidence to conclude that contractual control has a substantial effect on PSP. It is important to note that while the study did not find a significant relationship between contractual control and sustainability performance, other factors not included in the study may still have an impact. This finding refutes that of Peng et al. (2022) that the sustainable performance of PPP projects is notably impacted by the degree of control exercised by contractual governance. The study advances the finding of Wang et al. (2019) that contractual control can only complement other variables.

The study revealed that SLAs do not substantially improve PSP ($\beta = .0242356$; $p\text{-value} > 0.05$). This implies that there is no statistically significant relationship between SLAs and PSP. In other words, the data analysis indicates that implementing SLAs does not lead to a significant improvement in PSP. While this finding may be surprising, it is important to note that a single study's results should not be used to make conclusive statements about the effectiveness of SLAs in improving PSP. It is possible that other studies may find different results, and further research may be necessary to confirm or refute this finding. Based on the finding of this study, there could be several reasons why SLAs do not have a substantial impact on PSP. One possibility is that Federal Health Institutions in the South-East Nigeria may not fully prioritize sustainability goals, leading to insufficient focus on sustainability in SLAs. Another possibility is that they may not be effectively monitoring and enforcing SLAs, which could lead to a lack of accountability for sustainability performance. Regardless of the reasons behind the finding, it is important for the Health Institutions to continue to prioritize sustainability in their projects and explore other strategies beyond SLAs that may be more effective in improving sustainability performance.

Payment mechanisms substantially improve PSP ($\beta = .1140178$; $p\text{-value} < 0.01$). This suggests that payment mechanisms have a significant positive impact on PSP. The β value of 0.1140178 suggests that for each unit increase in payment mechanisms, there is a corresponding increase in sustainability performance, holding all other factors constant. The p -value of less than 0.01 indicates that this relationship is statistically significant, and not likely to be due to chance. The finding of this study supports the assertion of Wang et al. (2021) payment mechanisms is inevitable in the performance of PPP. Also, DRM substantially improve PSP ($\beta = .1382596$; $p\text{-value} < 0.01$). This suggests that there is a statistically significant positive relationship between DRM and PSP. The beta coefficient (β) of 0.1382596 indicates a positive relationship between DRM and PSP. The p -value of less than 0.01 indicates that this relationship is statistically significant and suggests that it is unlikely to be due to chance. MRRs substantially improve PSP ($\beta = .3792936$; $p\text{-value} < 0.01$). This suggests that MRRs can significantly improve PSP, as indicated by a beta coefficient of 0.3792936 with a p -value of less than 0.01. A beta coefficient of 0.3792936 indicates a moderately strong positive relationship between MRRs and PSP. The p -value of less than 0.01 suggests that this relationship is statistically significant, meaning that it is unlikely to have occurred by chance. Meanwhile, finding revealed that MRRs can be an effective way to improve PSP. This is supported by Kiani Mavi et al. (2021) who asserted utilizing MRRs has the potential to enhance the sustainability performance of a project. It is important to note that other factors may also influence sustainability performance, and that the specific types of MRRs implemented may vary depending on the project and its goals.

Result shows a statistically significant negative effect of contractual control on POP ($\beta_{CC} = -.127$; $p < 0.01$). This means that the degree of control exercised through contracts has a negative impact on the performance of a project. The value of β_{CC} , which is -0.127, indicates the strength of the relationship between contractual control and POP. The negative sign indicates that as the level of contractual control

increases, the POP decreases. The p-value of less than 0.01 suggests that the results are statistically significant, indicating that the observed relationship is not due to chance. In other words, the negative impact of contractual control on POP is likely to be a real phenomenon, rather than a random occurrence. The finding has important implications for project managers and organizations that rely heavily on contractual control to manage their projects. They may need to reconsider their approach to project management, focusing more on building collaborative relationships with project stakeholders and creating an environment that fosters teamwork and cooperation, rather than relying solely on contractual controls to drive project success.

Finding shows a statistically insignificant positive effect of contractual coordination on POP ($\beta_{CoC}=.021$; $p > 0.05$). This means that the data does not provide enough evidence to support the hypothesis that contractual coordination has a significant impact on POP. A p-value greater than 0.05 indicates that the null hypothesis, which in this case would be that contractual coordination has no effect on POP, cannot be rejected. This finding advances that of Schilke and Lumineau (2016) that contractual coordination can be utilized for alliance performance. However, it is important to note that a non-significant result does not necessarily mean that there is no effect at all. The effect is present but too small to be detected with the sample size or measurement instruments used in the study.

Finding shows a statistically insignificant negative effect of contractual adaptation on POP ($\beta_{CA}=-.062$; $p > 0.05$). The finding indicates that there is a statistically insignificant negative effect of contractual adaptation on POP, which means that there is no significant relationship between the two variables. The value of $\beta_{CA}=-.062$ suggests that there is a negative relationship between contractual adaptation and POP, but it is not strong enough to be considered statistically significant. The p-value of greater than 0.05 indicates that the results are not statistically significant at the 95% confidence level.

The study used a statistical analysis to determine whether the partners' trust had a moderating influence on the relationship between contractual control, coordination orientation, adaptation, and POP. The results of the study indicate that the partners' trust had a statistically significant negative moderating influence on the effect of contractual control on POP. This finding suggests that when partners have a high level of trust, the impact of contractual control on POP is reduced. This result supports the hypothesis, which posits that partners' trust moderates the effect of contractual control on POP. However, the study did not find any statistically significant moderating influence of partners' trust on the effect of contractual coordination orientation on POP. This result indicates that the level of partners' trust did not influence the relationship between contractual coordination orientation and POP. This finding refutes the hypothesis, which posits that partners' trust moderates the effect of contractual coordination orientation on POP. The study also found no statistically significant moderating role of partners' trust on the effect of contractual adaptation on POP. This finding suggests that the level of partners' trust did not influence the relationship between contractual adaptation and POP. This result refutes the hypothesis, which posits that partners' trust moderates the effect of contractual adaptation on POP.

The study investigated the moderating influence of partners' contribution on the relationship between contractual control, coordination, and adaptation, and POP. The study found a statistically significant moderating influence of partners' contribution on the effect of contractual control on POP. Specifically, the interaction between contractual control and partners' contribution was found to be significant. This suggests that the effect of contractual control on POP depends on the level of partners' contribution. The study found a statistically insignificant negative moderating influence of partners' contribution on the effect of contractual coordination on POP. In other words, the interaction between contractual coordination and partners' contribution was not significant, and therefore the hypothesis was refuted. The study also found no moderating role of partners' contribution on the effect of contractual adaptation on POP. The interaction between contractual adaptation and partners' contribution was not significant, suggesting that partners' contribution does not have a significant influence on the relationship between contractual adaptation and POP.

Conclusion, Implications and Further Research

The study indicates that although contracts can be useful in ensuring sustainability goals are achieved, they may not be effective in considerably enhancing sustainability performance on their own. Nevertheless, it's crucial to note that this lack of a significant relationship between contractual control and sustainability performance does not necessarily imply that contractual control is unimportant or unnecessary. Other factors might also contribute to improving sustainability performance. If payment mechanisms are structured in a manner that rewards sustainable practices, it is reasonable to expect that PSP will improve. It is worth noting that although payment mechanisms may be a significant factor, they are not the only factor that influences PSP. Despite this, the study has determined that payment mechanisms are essential in the development of sustainable projects.

The study's findings suggest that the utilization of DRM in projects has the potential to enhance PSP. However, it is crucial to acknowledge that linear link does not always indicate causation, and further research and analysis may be necessary to fully comprehend the relationship between DRM and PSP. The integration of MRRs is a crucial element of project management, especially concerning sustainability performance. Such requirements enable project managers to monitor progress and pinpoint areas that require improvements. Regular reporting on sustainability performance can also keep stakeholders informed of the project's progress and any necessary changes. Furthermore, the negative impact of contractual control on POP appears to be a genuine phenomenon rather than a chance occurrence. This finding has significant implications for project managers and organizations that rely heavily on contractual control to manage their projects. They may need to rethink their project management approach and emphasize the establishment of collaborative relationships with project stakeholders, fostering teamwork and cooperation, rather than solely relying on contractual controls to ensure project success. The analysis of the data did not furnish proof to back up the theory that there exists a substantial correlation between contractual coordination and POP. Based on the given findings, it is inconclusive

whether there is a significant link between contractual coordination and POP in Federal Health Institutions in the South-East Nigeria. Further investigation may be necessary to examine the relationship between contractual coordination and POP, possibly utilizing a larger sample size, alternative measures or diverse contexts.

The conclusion based on the finding that there is a statistically insignificant negative effect of contractual adaptation on POP is that there is no evidence to support the claim that contractual adaptation has a significant impact on POP. It is important to note that the lack of statistical significance does not necessarily mean that there is no relationship between the variables. It could be due to various factors such as small sample size, measurement errors, or lack of control over confounding variables. Further research with larger sample sizes and better control over confounding variables may be necessary to fully understand the relationship between contractual adaptation and POP. The implication of these findings is that project managers in the healthcare sector in Nigeria need to carefully consider the moderating role of partners' contribution when implementing contractual control mechanisms, but may not need to consider it when implementing contractual adaptation mechanisms.

The study provides insights into the moderating role of partners' trust on the relationship between contractual control, coordination orientation, adaptation, and POP. The findings suggest that the level of partners' trust can impact the effect of contractual control on POP but has no significant influence on the effect of contractual coordination orientation or adaptation. Partners' contribution plays a significant moderating role in the relationship between contractual control and POP in Federal Health Institutions in the South-East Nigeria. This implies that the level of partners' contribution determines the effect of contractual control on POP. However, the study found no significant moderating influence of partners' contribution on the effect of contractual coordination and adaptation on POP, suggesting that partners' contribution does not play a significant role in these relationships. These findings have implications for project management practices in the healthcare sector in Nigeria, highlighting the importance of considering partners' contribution when implementing contractual control mechanisms.

Recommendations

PPP projects should reconsider their approach to project management and focus more on building collaborative relationships with project stakeholders in Federal Health Institutions in the South-East Nigeria. This could involve developing collaborative partnerships with stakeholders, fostering teamwork and cooperation, and prioritizing relationship-building over contractual control. PPP projects in Federal Health Institutions in the South-East Nigeria should explore other strategies beyond SLAs that may be more effective in improving sustainability performance. PPP projects in Federal Health Institutions in the South-East Nigeria should prioritize payment mechanisms as an essential component of their project management strategy. This could include adopting payment structures that incentivize sustainability performance or incorporating sustainability criteria into payment processes. PPP projects should

prioritize implementing effective DRM to address any conflicts that may arise during the project's implementation. This could involve developing clear dispute resolution procedures and mechanisms that are fair, efficient, and effective. PPP projects should prioritize implementing effective monitoring and reporting systems to track sustainability performance and identify areas for improvement. This could involve establishing clear reporting requirements, providing training to project staff on how to collect and analyze sustainability data, and establishing accountability mechanisms to ensure that sustainability goals are met.

It is necessary to review the current contracts and agreements in place to evaluate the level of control over projects in Federal Health Institutions located in the South-East region of Nigeria. The institutions should explore the possibility of revising certain clauses in order to create more flexibility and encourage collaboration with project stakeholders. They should also identify areas where teamwork and collaboration can be improved by establishing regular communication channels with stakeholders and involving them in decision-making processes. To prioritize collaboration and teamwork, the institutions should develop a project management plan that clearly defines goals and objectives, assigns roles and responsibilities, and promotes open communication among team members. Additionally, they should consider providing training and support to project team members to enhance their collaboration and teamwork skills. To monitor progress and identify areas for improvement, the institutions should regularly evaluate the effectiveness of the revised approach to project management by monitoring project performance, assessing stakeholder satisfaction, and gathering feedback. While the data does not provide enough evidence to support the hypothesis that contractual coordination has a significant impact on POP, it is important for the Health Institutions to continue to explore the potential benefits of contractual coordination. It is still important for the Health Institutions to carefully consider the need for contractual adaptation when managing projects. The Health Institutions should weigh the potential benefits and drawbacks of contractual adaptation when making decisions about project management strategies.

When managing projects with partners, Health Institutions should be aware that partners' trust can have a significant moderating influence on the effect of contractual control on POP. Therefore, Health Institutions should focus on building and maintaining trust with their partners to reduce the negative impact of contractual control on POP. This can be achieved by establishing open and transparent communication channels, sharing information, and fostering a collaborative and cooperative relationship. It is still important for Health Institutions to consider the level of trust when choosing their coordination orientation. They should strive to establish a coordination orientation that fosters trust and collaboration with their partners. The finding that partners' trust did not have a significant moderating role on the effect of contractual adaptation on POP indicates that Health Institutions can use contractual adaptation without worrying about the level of trust with their partners. However, it is still important for them to carefully consider the need for contractual adaptation and its potential impact on POP. They should weigh

the potential benefits and drawbacks of contractual adaptation and make informed decisions about its use.

Based on the findings of the study, it is recommended that project managers in Federal Health Institutions in the South-East Nigeria should consider the level of partners' contribution when implementing contractual control mechanisms. Project managers should work with partners to develop a collaborative approach that aligns with the partners' level of contribution. This approach can be based on establishing clear goals, assigning roles and responsibilities, and promoting open communication and collaboration among team members. The study recommends that project managers should not rely solely on contractual coordination to ensure project success. While contractual coordination is important, it may not be enough to ensure project success without the active contribution of partners. Therefore, project managers should develop a culture of collaboration and teamwork that fosters partners' contribution, even if it is not mandated in the contract. The study found no significant moderating role of partners' contribution on the effect of contractual adaptation on POP. However, it is recommended that project managers continue to monitor partners' contribution and adapt the contractual agreements as necessary to promote collaboration and teamwork. This can involve regularly evaluating the success of the approach to project management, assessing partner satisfaction, and gathering feedback to identify areas for improvement.

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Author Contributions:

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Corresponding Email: anthonybioraude01@gmail.com