

ENHANCING PUBLIC SERVICE DELIVERY: EVALUATING THE IMPACT OF PERFORMANCE-BASED CONTRACTING ON GOVERNMENT-FUNDED PRIVATE SCHOOLS

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ABSTRACT

Enhancing public service performance is a global imperative. In education, partnering with the private sector not only addresses financial constraints but also enhances overall performance. This study examines the impact of contracting on the performance of government-contracted schools in Punjab, Pakistan, taking into account the mediating role of organizational culture and moderating influence of monitoring. This study was conducted on the Punjab Education Foundation, the largest private-sector contracting model in public sector in South Asia. Data were collected from 217 officers and analyzed using PLS-SEM. The results unveiled a significant influence of contractibility on partner schools' performance. Moreover, a result-oriented culture significantly mediated the connection between contractibility and performance. Furthermore, impact of monitoring as a moderator was also found significant. To the authors' knowledge, this study pioneers the assessment of partner schools' comprehensive performance, covering service goal attainment, excellence, efficiency, and quality/quantity of work output. The current study offers fresh insights by testing a model, relying on agency theory, in South Asia's largest educational context. The study also developed an inimitable affiliation with agency theory in a new perspective. This study provides practical guidance by emphasizing the importance of performance based contracts and result-based culture while refining contracting strategies, monitoring mechanisms for effective oversight, and benefiting both practitioners and policymakers across various disciplines involving public service contracting.

Keywords: Contractibility, Monitoring, Performance, Result-oriented culture, School Education

INTRODUCTION

Education is an important and powerful instrument of economic growth and well-being (Hanushek & Woessmann, 2020). To provide basic school education, governments are a major source of

funding in many countries (Friedman, 1955). Like other sectors, Governments allocate sufficient resources in budget to ensure provision of basic education. But considering competing needs for

government funding, it is essential that education services are administered as efficiently as possible (Johnes et al., 2017).

Despite government supporting basic education in many countries, situation of basic education is alarming (Rose, 2006). Statistics show that globally 258 million youths and children are still out-of-school (UNESCO, 2018). In case of Pakistan, 22.5 million children and youth were out of school, and Punjab alone accounting for 9.2 million (Ali, 2020). Unfortunately, in Pakistan less priority was given to education in the past which is evident from low budgetary allocations (Khushik & Diemer, 2020). One of the major factor of low allocations is shortage of funding and shifting most of the resources towards other sectors like health and security as per government's priorities.

To fill the fiscal gap, the government adopted new innovative models like PPP or contracted out basic services to private sector. In Punjab, low cost school education services are contracted out to private sector schools by Punjab Education Foundation (PEF). As official statistics informed, PEF is educating 2.5 million children in Punjab province under PPP (Punjab Education Foundation, 2022). Alam et al. (2021) reported that regional variations in educational institution performance in Pakistan stem from factors like resource disparities, facility discrepancies, and the impact of school location on local motivation, literacy rates, and awareness levels.

Despite contracting model adopted by the government, performance of school education sector in Punjab is not satisfactory while considering substantial population out of school. Irfan (2021) highlighted PEF's cautious approach towards trusting school partners due to international donor funds, emphasizing the need for effective oversight to combat fraud and maintain credibility with both government and donors.

Nabi & Nazir (2020) also highlighted that Pakistan's education sector grapples with many challenges, notably irregularities outlined in education policy and insufficient financial resources. Despite PEF playing a major role, many challenges are posed to PEF partner schools affecting their performance (Aurangzeb Malik, 2023) like delays in funding resulting in inability

to cover operational expenses (The News International, 2023) and disrupt the process of admitting new students (Aown Muhammad Shah, 2021).

Organizational performance has always been focused by many researchers (DeNisi & Smith, 2014; DFID, 2011; Gao, 2015; United Nations Development Programme, 2002; Wang, 2023). Gao (2015) examined the public sector reforms with prominent slogans like "value for money," "result-oriented management," "performance measurement," and "customer-centric administration." Song & Meier (2018) also found that measuring performance in the public sector presents challenges due to the ambiguity of the concept and developing valid measures. Laury et al. (2020) emphasized that while performance measurement may appear simple, its complexity requires strategic thinking, especially in public sector organizations. Given the significance of monitoring performance to ensure efficiency in the public sector (Prowle et al., 2016; Akhtar et al., 2022), this study directs its attention to evaluating the performance of contracted school education services by PEF.

As governments have limited fiscal space and can't afford to provide all kinds of services to the public, outsourcing or contracting helps government in acquiring essential public services from the market. Isaksson et al. (2018) found that government outsourcing aims to maintain public financing, ensuring access while making public services more cost-efficient through private entrepreneurship and competition. Contractibility as a variable has been used as it takes into account goal clarity and the capacity to choose objective performance measures (Spekle & Verbeeten, 2014).

For getting desired or improved performance, a positive organizational culture plays important role in organizations. Researchers have emphasized the importance of organizational culture for business competitiveness, effectiveness of employees, and performance (Victoria Garibaldi de Hilal et al., 2009; Azeem et al., 2021; Tannady & Budi, 2023). Result-oriented culture is also influenced by NPM theory when considering organizational performance (CHAU et al., 2021) including public

sector reinforcing financial accountability (Nitzl et al., 2019).

Monitoring is another important variable in the context of public sector contracting as government, being a principal, needs to monitor agent (service provider) and confirm program outcomes. Irfan (2021) suggests that PEF's vigilant oversight of partner schools reflects a classic principal-agent dynamic rooted in distrust and concern over potential opportunistic behavior by agent. Various institutions have emphasized creating standardized indicators to offer local authorities and policymakers a common framework for monitoring SDGs (Ciambra et al., 2023). Prowle et al. (2016) have also found that tracking the public sector organizations' performance is important to ensure value for money. Lindquist & Huse (2017) emphasize the need for increased data and real-time monitoring in policy-making for enhanced accountability.

This study is novel due to PEF's status as one of the largest low-cost school education models in the South Asian public sector (Punjab Education Foundation, 2022). Despite its significance, the existing literature lacks exploration of the impact of contractibility on overall performance, encompassing aspects like economy, efficiency, and effectiveness. Therefore this study seeks to investigate whether PEF model is contributing in achieving performance related areas such as attainment of service goals, work excellence, efficiency, and quality and quantity of work produced, as highlighted by Verbeeten & Speklé (2015) by conducting studies in public sector in various countries. The examination of the overall performance of the PEF model remains an overlooked area, as past researchers focused on other facets such as students' learning outcomes (Amjad & MacLeod, 2014), increased enrollment (Andrabi et al., 2018), access to education for marginalized populations in Punjab (Habib, 2013), and the linkage between collaborative inter-organizational relationships and synergistic outcomes in PEF partnerships (Irfan, 2021). Therefore, this study fills a notable research gap and encourages empirical investigation into the relationship between contractibility and the performance of PEF partner schools. Given the paramount importance of monitoring under agency

theory, another research gap emerges calling to further investigate the moderating effect of monitoring on the relationship between contractibility and performance. Result-oriented culture and accountability are also crucial for organizational performance in the public sector (Nitzl et al., 2019; Y. Thi Tran et al., 2022; Verbeeten & Speklé, 2015), therefore, the inclusion of result-oriented culture in the current study was deemed significant. Hence, there is a notable gap in comprehending the intricate dynamics between variables of contractibility, performance, result-oriented culture and monitoring underscoring the need for further empirical inquiry.

This study makes a significant theoretical contribution by investigating the dynamics of government-contracted services within South Asia's largest school education model operated by PEF. The investigation into the impact of contracting on the overall performance of PEF was initiated with a consideration that no such study could be conducted. Assessing overall performance is also important keeping in mind value for money. It empirically explores the connections among organizational performance, contractibility, monitoring, and a culture focused on results, thereby enhancing our comprehension of agency theory in the public sector. Given the significance of a results-oriented culture, examining its mediating role within PEF would further expand our understanding of agency theory in a developing country like Pakistan facing major issues of shortage of funds. Considering the value of vigilant oversight of partner schools within the context of classic principal-agent dynamics characterized by distrust and the potential for opportunistic behavior by agents, examining the moderating influence of monitoring on performance would hold both theoretical and practical significance. In nutshell, the study provides new dimensions for further research considering contracting out of public services while relying on interplay between principal and agent under agency theory.

The findings offer valuable practical insights for partner schools, PEF management, and policymakers guiding them how to be more accountable and enhance performance. Insights are

also important for other developing countries facing similar areas. Furthermore, it informs international donors on strategic funding initiatives and aids policymakers and planners in designing effective contracting models with robust monitoring mechanisms tailored to diverse cultural and contextual settings. The study's insights can also serve as valuable input aiding in the implementation of similar models to enhance education access and quality. Thus, the recent research aimed to investigate the research question: "What is the effect of contractibility on performance, mediated by 'result-oriented culture,' and moderated by monitoring within the PEF model in Punjab, Pakistan?" Considering the above premise, the current study has following objectives:

1. To examine the relationship between contractibility and the performance of the school.
2. To determine the mediating role of result-oriented culture between contractibility and the performance of the school.
3. To highlight the moderating role of Monitoring between result-oriented culture and the performance of the school.

2. LITERATURE REVIEW AND RESEARCH HYPOTHESES

2.1 Theoretical foundation

The present study employs Agency Theory, introduced by Mitnick (1975), which focuses on optimizing contracts and behavior between principal and agent. Principal-agent theorists typically investigate dyadic situations involving one principal and one agent (Voorn et al., 2019; Obermann et al., 2020). The agent, whether an individual, group, state administration, or enterprise operates on behalf of the principal (Chrisidu-Budnik & Przedańska, 2017). Maestrini et al. (2018) found that the buyer's acceptance of monitoring led to improved operational performance by reducing information asymmetry within the principal-agent framework. For current study, the Agency Theory provided a theoretical basis to examine the connection between contractibility, monitoring, and performance within contractual relationships.

2.2 Performance

Given the constraints of public funding scarcity, it becomes imperative to evaluate the performance of PEF model schools effectively. It is essential to utilize scarce resources in an efficient manner while achieving the objectives of public service performance. Performance assessment may vary based on the sector type and the diverse perspectives present in both the public and private sectors. United Nations Development Programme (2002) defined performance as progress towards achieving the results while DFID (2011) as optimal use of resources for achieving envisioned outcomes. When analyzing performance in government organizations, the Value for Money (VFM) concept is crucial, emphasizing economy, efficiency, and effectiveness as key criteria (Prowle et al., 2016; Blyton et al., 2001). As per Ferry et al. (2022), performance audits assess the economy, efficiency, and effectiveness of the audited entity in conducting its activities and are commonly referred to as "value for money audits." Buder & Felden (2012) take quality as "effectiveness" and required effort as "efficiency". Wilson et al. (2018) found "effectiveness" to be the power for producing the desired results and "efficiency" as the capability to produce something without energy wastage, materials, and time. The performance takes into account areas such as attainment of service goals, work excellence, efficiency, and quality and quantity of work produced, as highlighted by Verbeeten & Speklé (2015) in studies conducted in public sector in various countries. Thus, the present study takes performance as a prime factor considering public service delivery.

2.3 Monitoring

'What you measure is what you get' and balanced scorecard uses four perspectives viz. financial, customers, internal business processes, and innovation & learning (Kaplan, 1992) which provides a good and balanced solution to face performance challenges (Chavan, 2009). UNDP (2002) defined 'monitoring' as a continuous function aiming to provide information or early indications to decision-makers regarding progress or achievement of results, or any lacking thereof. Fama & Jensen (1983) principal-agent theory

posits that monitoring and steering progress are vital mechanisms of good governance that incentivize agents to perform in the greater interest of principal. Dijkstra et al. (2017) after examining the evaluation of school effectiveness in the social realm emphasized the need to consider factors such as context, input, process, and output and thereby the role of school inspections and monitoring in fostering accountability and improvements. While contracting out services to some private actor(s), public sector entities need to confirm that the quality of contracted-out services is provided as per satisfaction which requires monitoring outputs (Isaksson et al., 2018). Maestrini et al. (2018) found that buyers' acceptance of monitoring within the principal-agent framework led to improved operational performance. In the public sphere, data quality assumes added significance by fostering citizens' trust in governments, underpinning decisions, policies, and performance assessment, beyond its established role in private sector market functionality (Agostino et al., 2022).

2.4 Contractibility

Contracting out, often referred to as "contracting," has been extensively employed as a strategy to reform the provision of public-sector services involving the private sector through competitive tendering (Domberger & Jensen, 1997). Contractibility pertains to the extent to which anticipated offerings to the organization may be defined beforehand through a reasonably comprehensive contract between the principal and the agent (Spekle et al., 2022). The principal-agent theory highlights information asymmetry in government (principal) - vendor (agent) relationships (Brown et al., 2006). Contractibility involves meeting three simultaneous conditions: clear and unambiguous goals specified in advance, factual performance measures, and actors' knowledge to control production and foresee outcomes (Hofstede et al., 1990; Spekle & Verbeeten, 2014). According to Martin (1999), performance-based contracting emphasizes service quality, outputs, and outcomes and links some part of the payment to be given to contractor, along with contract extension, with achieving agreed targets. Contractibility pertains to the extent to which anticipated offerings to the organization may be

defined beforehand through a reasonably comprehensive contract between the principal and the agent (Spekle et al., 2022). Contracting involves opening economic activities to competition (Domberger & Jensen, 1997).

2.5 Result-Oriented Culture

A results-driven public sector culture emphasizes accountability, dedication, and individual recognition, aligning with the new NPM philosophy (Verbeeten & Speklé, 2015). Culture encompasses shared ways of thinking and behaving (Daryoush et al., 2013), and organizational culture comprising values and beliefs shared by members that influence their behaviors (Reilley et al., 2020; Schein, 1996). According to Demuzere et al. (2008), organizational culture means social phenomena in an organization including beliefs, values, behavior, and language. Organizational culture is equally important in both the public sector and private sector. Organizational culture is considered crucial for driving change and improving public services (Chia & Koh, 2007) and processes of change to get targeted results (Demuzere et al., 2008).

2.6 Hypothesis Development

2.6.1 Contractibility and Result-Oriented Culture

Public service contracting involves the delegation of essential government tasks to private entities, aiming to enhance efficiency and service quality. In the public sector, easily measurable tasks such as garbage collection, possess well-defined metrics, whereas intricate areas of service exhibit lower measurability like child protection (Spekle & Verbeeten, 2014). Performance evaluation in contracting follows the principle of 'what gets measured gets done,' fostering a performance-oriented culture in the public sector (Obong'o, 2009), thus, managers are accountable for efficiently utilizing resources. Introducing results-based integrated contracts is changing the contracting culture, shifting government practices from micro-management to an approach having focuses on trust based on client relations (Pomeroy, 2007). Such an approach focuses on cultivating a results-oriented culture for enhancing performance and financial accountability within Vietnam's

public sector (Tran et al., 2022). Popoli (2017) discovered strategic motives behind outsourcing decisions and explored how organizational culture influences outsourcing choices. The theory of NPM highlights the significance of fostering a culture focused on results and enhancing performance along with financial accountability in the public sector (Nitzl et al., 2019). Cheung et al. (2011) found stable cultures with clear goals. The importance of organizational culture is found crucial in construction sector, having complex activities and interdependencies (Ankrah & Langford, 2005; Liu & Fellows, 2008). Sanderson (2001) explored importance of performance-based culture in local government across OECD countries. In education, Boitier & Rivière (2013) found that in long-term contracts, new negotiation for funding of projects in universities is required which thereby helps in supporting a result-oriented culture. Based on the literature highlighting the connection between contracting, organizational culture, and result-oriented approaches, we formulated the following hypothesis.

H1: *Contractibility significantly affects Result-oriented culture.*

2.6.2 Contractibility and Performance

Many researchers found that organizations use various kinds of tools to track performance (Alipour et al., 2019; Kaplan, 1992; Kaplan & Norton, 1995, 2005). Contracting requires cost-effective service acquisition, control, and performance monitoring for governments (Domberger & Jensen, 1997) aiding the achievement of public service goals. Some researchers emphasized on concept of performance-based contracting which connects some portion of payment to be made to supplier based on actual outcomes or performance (Haslag et al., 2012; Martin, 2007; Selviaridis & Norrman, 2014). Contracting is widely used in various sectors, including education in Pakistan, for achieving strategic objectives and operational efficiency (Muhammad et al., 2019) and reducing costs by using better plans and innovative technologies by the supplier (Anwar et al., 2016). Charterina et al. (2018) analyzed the mediating effect of using contracts as well as trust in buyer-supplier and knowledge-sharing relationships and

the performance of product innovation. Hartmann & Dewulf (2009) identified challenges in implementing new infrastructure maintenance procurement strategies in public agencies, emphasizing the role of contract-based arrangements as instruments mediating organization-individual interactions for infrastructure performance. New public management involves partnerships between public and private organizations to provide efficient services and reduce costs through contracting (Saeed & Zubair, 2019). In Pakistan, studies were conducted on public-private partnerships, known as long-term contracting, that have shown improved learning outcomes and enrollment impacts (Amjad & MacLeod, 2014; Andrabi et al., 2018; Crawford, 2018) or benefiting underprivileged parents by providing access to high-quality education and ensuring efficient resource utilization (Habib, 2013). Considering importance of contractibility for performance, we were motivated to formulate the following hypothesis.

H2: *Contracting significantly and positively impacts performance.*

2.6.3 Result-Oriented Culture and Performance

Many researchers have found a positive impact of results-oriented culture on organizational performance (Rizzi et al., 2018; Thi Tran et al., 2022; Tran & Nguyen, 2020; Verbeeten & Speklé, 2015). For organizations in the public sector aiming to enhance their results, the transformation of culture is vital (Thi Tran et al., 2022). Hofstede et al. (1990) are of the view that organizations having result-oriented cultures are more flexible to complex situations and can adapt to unexpected situations and are ready to face challenges. Governments having results-oriented culture are considered better in performance, accountability, and transparency (Ouda, 2015). A culture prioritizing outcomes has a better focus on effectiveness, efficiency, task completion, timely delivery of products or services, and managing expenses faster than competitors (Miron et al., 2004). Result-oriented culture acts as a moderating influence, fostering a framework where cultural orientations can mutually reinforce each other (Daryoush et al., 2013). Nitzl et al. (2019) have

found a positively moderating impact of results-oriented and NPM-oriented cultures on the performance of Italy's public sector entities. When examining the result-oriented culture and its connection to performance of organizational in the context of Pakistan we found limited notable studies. For instance, Shahzad et al. (2013) studied overall impact of organizational culture on job performance of employees in software houses. So, there is a research gap to study the impact of result-oriented culture on performance of organizations. Taking into account the research gap identified, we were motivated to establish the following hypotheses.

H3: *Result-oriented culture significantly and positively impacts performance.*

2.6.4 Mediating Role of Result-Oriented Culture

Dean (2002) emphasizes that contracts necessitate customers to monitor service performance, ensuring efficiency and effectiveness in achieving the intended outcomes. Numerous researchers have explored the mediating impact of a results-oriented culture on organizational performance, like Garnett et al. (2008) found a direct correlation between a culture focused on achieving results and the overall performance of the organization and showed a mediation effect by feedback information and task instructions, Verbeeten & Speklé (2015) found that OECD-NPM culture mediated the association between performance and performance information. In their studies, CHAU et al. (2021), Tang (2018) and Tseng (2011) investigated how results-oriented culture serves as a mediating factor between performance and transformational leadership in public service organizations.

Using NPM theory, Thi Tran et al. (2022) explored the mediating role of accountability relating financial matters between results-oriented culture and performance in Vietnam's public sector. In addition, Thi Tran et al. (2022) also proposed the exploration of different models to examine the mediating influence of diverse factors, similar to the approaches adopted by prior researchers like Verbeeten & Speklé (2015) explored performance-measurement system uses or management control systems (Verbeeten, 2008). In our study of public sector organizations, we have taken a slightly

different approach to extend previous research concerning the contracting out of public services and positioned result-oriented culture as the mediator between performance of organization and contractibility, adding monitoring as a moderator. Thus we hypothesized as follows.

H4: *Result-oriented Culture mediates significantly in the relationship between Contracting and Performance.*

2.6.5 Moderating Role of Monitoring

Monitoring & evaluation is important for controlling performance against predefined standards and reference value (Carver & Scheier, 1982; Powers, 1973). Monitoring, according to Wholey & Hatry (1992), is vital for informed public administration and improving public sector performance by assessing program outcomes. In developing countries, monitoring and evaluation are usually centralized within ministries, while NGOs prioritize qualitative evaluations to ensure project impacts on beneficiaries (Bamberger, 1991). Siti-Nabiha & Jurnal (2020) found that performance monitoring in local governments helped in achieving targets and training staff. Maestrini et al. (2018) also found monitoring and incentives to positively impact the operational performance of suppliers. Huang & Keskar (2007) also discussed that monitoring is helpful for the sourcing process. Ştefan & Brezoi (2021) are of the view that tracking performance requires analysis against three 'Es' viz. evaluating economy, efficiency, and effectiveness. In contracting mode, organizations must monitor service performance to ensure the effectiveness and efficiency of intended outcomes (Dean, 2002).

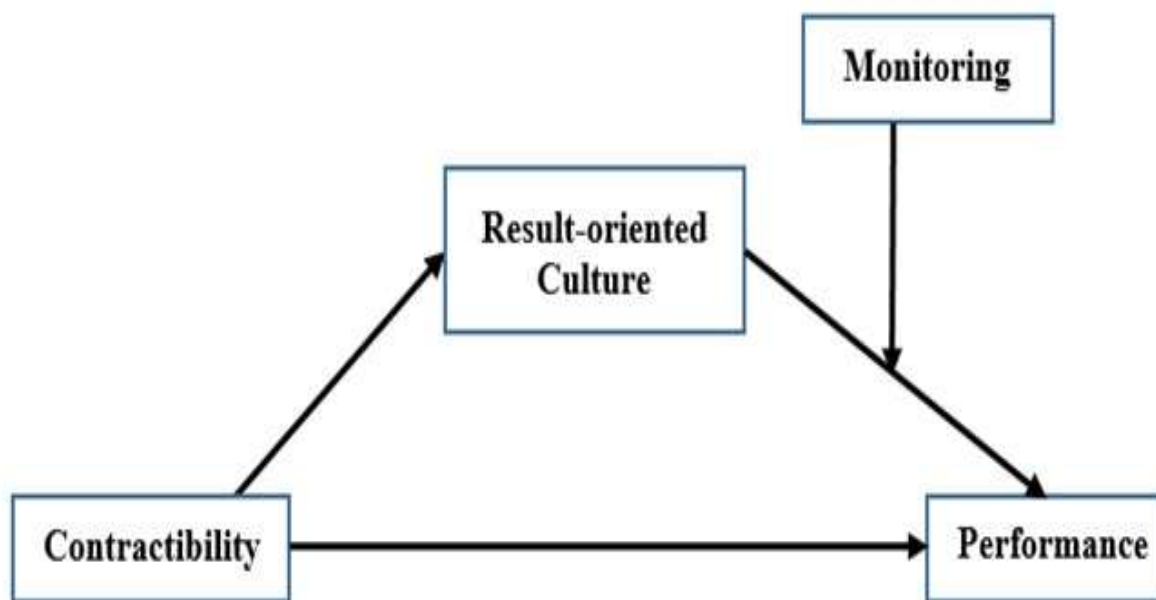
To address the difficulty of defining and assessing service quality, contracts should be drafted to enable effective monitoring of outsourced services by public entities (Isaksson et al., 2018). In their research on local governments in Netherlands, Verbeeten & Speklé (2015) found that performance measures focusing on monitoring have a direct impact on organizational performance. Nitzl et al. (2019) found that feedback and monitoring performance-related information in Italian public managers correlates with organizational performance. Gatimu et al. (2021) discovered that in Kenyan maternal health

programs, contextual factors, including the M&E structure, moderate the relationship between M&E practices and performance. Nitzl et al. (2019) argued that an orientation towards New Public Management demonstrates a favorable moderating correlation between monitoring and organizational performance, potentially due to the alignment of goal-setting and outcome comparisons with NPM principles. Spekle & Verbeeten (2014) examined the direct relationship between contractibility and performance and suggested to investigate the

moderating effect of monitoring. Considering significance of monitoring and evaluation for performance, further research was considered. Accordingly, following hypotheses are developed. **H5: Monitoring significantly affects performance.** **H6: Monitoring significantly moderates the relationship between Result-oriented Culture and performance.**

After discussion of the earlier study as well as support with agency theory, the study proposed the following theoretical framework:

Figure 1. Theoretical Framework



Source: Author proposed

3. METHODOLOGY

3.1 Sampling and data collection

The current research followed a positivist paradigm, employing a primary, descriptive, cross-sectional, and quantitative methodology as recommended by (Cohen & Borsoi, 1996). Positivist researchers typically use closed-ended questionnaires in survey instruments to collect quantitative data for answering research questions (Rehman & Alharthi, 2016). The population for sample selection included employees working in the Punjab Education Foundation. The population frame consists of 289 employees having program-related experience. Since the population frame was fewer than 500, a sampling technique was deemed

unnecessary and a complete census was carried out following the table recommended by Ruane (2005). Data were collected using self-administered questionnaires distributed. PEF management was cooperative and encouraged their employees to participate in the survey. Moreover, we made a follow-up and kept reminding management and employees to send back filled responses. Out of the 289 questionnaires distributed, 221 were returned, yet only 217 of these responses were deemed valid and subsequently utilized for the final analysis through PLS-SEM.

3.2 Questionnaire and pre-test

The scales utilized in the current study were derived from relevant past research. Data

collection involved utilizing a survey questionnaire with closed-ended questions having 21 items to measure four variables, and measured using a 5-point Likert scale. For 'Performance', 7 items adapted (Spekle & Verbeeten, 2014) and measured using scale having range from "Far Below Average" (1) to "Far Above Average" (5). A likert scale having a range from "Strongly Agree" (1) to "Strongly Disagree" (5) used for other three variables including 'Contractibility' with 6 items adapted (Spekle & Verbeeten, 2014); 'Monitoring', with 4 items adapted (Nitzl et al., 2019); and 'Result-oriented Culture' with 4 items were adapted (Verbeeten & Speklé, 2015). The instrument underwent content validation, with input taken from two PEF Directors, two contracting experts in the government, and two well-known academicians having subject knowledge. Before the actual survey, a pre-testing was done and adjustments were made to the instrument using feedback to improve question comprehension.

4. EMPIRICAL FINDINGS

For making data analysis, PLS-SEM is chosen as it is flexible in building models (Ringle et al., 2005)

and it is suitable for employing a two-step modeling approach to describe and predict constructs using structural modeling (Hair et al., 2016).

4.1 Demographics

Out of 217 valid responses, 55.8% of respondents were male and 44.2% were females. Similarly, 52.5% participants experience related to Foundation assisted schools (FAS), 37.3% Education voucher scheme (EVS) and 10.1% new school programs (NSP) experience. Likewise, 14.3%, 58.1%, 25.3%, and 2.3% of employees were in age groups 21-30, 31-40, 41-50, and 51-60 respectively. Descriptive statistics regarding their roles and position in PEF show that 1.8%, 3.7%, 18%, 41.9%, and 24% were working as Director, Additional Director, Deputy Director, Assistant Director, and Officer/Monitor respectively. Whereas, 10.6% of employees were employed in 'Other' roles. Table 1 is briefly described the demographic profile below:

Table 1: Demographic profile

Variables	Particulars	Frequency	Percent
Gender of respondent	Male	121	55.8
	Female	96	44.2
	Total	217	100.0
Program experience	FAS	114	52.5
	EVS	81	37.3
	NSP	22	10.1
	Total	217	100.0
Age of respondents	21-30 Years	31	14.3
	31-40 Years	126	58.1
	41-50 Years	55	25.3
	51-60 Years	5	2.3
	Total	217	100.0
Role of respondent	Director	4	1.8
	Adl. Director	8	3.7
	Dy. Director	39	18.0
	Asst. Director	91	41.9
	Officer, Monitor	52	24.0
	Other	23	10.6
	Total	217	100.0

Source: Author calculated by using SPSS

4.2 Common Method Bias (CMB)

Using a single survey-based questionnaire for all scale items in a study may lead to CMB, distorting tested relationships among variables and impacting research validity (Spector et al., 2019). Kock (2015) discussed CMB under SEM using partial least squares (PLS). In this study, VIF values for each construct were below 5, acceptable according to the threshold by Hair et al. (2011). A robust method for mitigating CMB is to acquire measures from diverse sources, as suggested by Jordan & Troth (2020), whereas (Podsakoff et al., 2012) suggested obtaining either the predictor measure(s) from one source or the criterion measure(s) from another, serving as one of the two primary strategies to address this issue.

4.3 Data normality and descriptive statistics

Usually, PLS-SEM is seen as a non-parametric tool, paying less attention to data normality. Hair et al. (2007) highlighted the need for descriptive statistical testing to assess data normality, which can be done through methods like kurtosis, histogram plots, and skewness (Munro, 2005). The criterion for normality of data ranges between -2 to 2, indicating a normal distribution. Likewise, study further also clarified the descriptive statistics like mean value, standard deviation as well as minimum and maximum values of each construct. (Godfrey, 1980). This led to further application of inferential statistics through PLS-SEM. Table 2 in briefly elaborated the descriptive statistics as well as data normality in detail:

Table 2: Descriptive Statistics & Data Normality

Variables	Mean	Standard deviation	Minimum	Maximum	Kurtosis	Skewness
Gender	1.359	0.480	1	2	-1.667	0.590
Age	2.548	0.779	1	4	-0.349	-0.192
Role	4.899	1.131	1	6	1.787	-1.337
Program Experience	1.636	0.700	1	3	-0.762	0.643
Performance	3.995	1.007	2	5	-0.924	-0.575
Contractibility	3.859	0.918	1	5	-0.061	-0.585
Monitoring	3.674	1.019	1	5	-0.506	-0.409
Result oriented culture	3.859	1.124	1	5	-0.360	-0.590

Source: Author calculated by using SPSS

4.4 Measurement Model Assessment

Measurement Model Assessment is the very first step, running CFA to confirm data reliability, validity, and item-to-latent variable relationships. Convergent validity is checked using Composite Reliability (CR), Factor Loadings (FL), and Average Variance Extracted (AVE) (Hair et al., 2009; Hair et al., 2021). Afthanorhan (2013) suggested a factor loading of 0.50 or greater for newly developed scales. Table 3 shows that for all

the items factor loadings are greater than 0.5 which means that the scales used in this study are valid. Thus no items were removed as all values met this criterion. Results also show that all the values of CR are in the range of 0.817 to 0.928, which is above 0.70 as recommended by Sarstedt et al. (2014). AVE values are in the range between 0.530 to 0.825, which is above 0.50 as recommended by Hair et al. (2016). Alpha values are also in the range of 0.701 to 0.929 and are acceptable (Hair et al., 2014).

Table 3: Convergent Validity

Constructs	Items	FL	Alpha	CR	AVE
Contractibility	C1	0.758	0.907	0.928	0.684
	C2	0.865			
	C3	0.891			
	C4	0.832			
	C5	0.767			
	C6	0.841			
Monitoring	M1	0.888	0.929	0.95	0.825
	M2	0.938			
	M3	0.907			
	M4	0.899			
Result-Oriented Culture	ROC1	0.623	0.701	0.817	0.530
	ROC2	0.706			
	ROC3	0.814			
	ROC4	0.754			
Performance	P1	0.777	0.866	0.896	0.553
	P2	0.753			
	P3	0.687			
	P4	0.719			
	P5	0.742			
	P6	0.814			
	P7	0.703			

Note: AVE=Average Variance Extracts; CR=Composite Reliability; FL=Factor Loadings C= Contractibility; P=Performance; M= Monitoring; ROC=Result-Oriented Culture

Discriminant validity guarantees that constructs captures a distinct phenomenon not duplicated by other constructs with (Hair et al., 2016). We assessed validity with help of Heterotrait-Monotrait (HTMT) Ratio in PLS-SEM as advocated by Henseler et al. (2015) and these values should be below 0.85 (Kline et al., 2012) or 0.90 (Gold et al.,

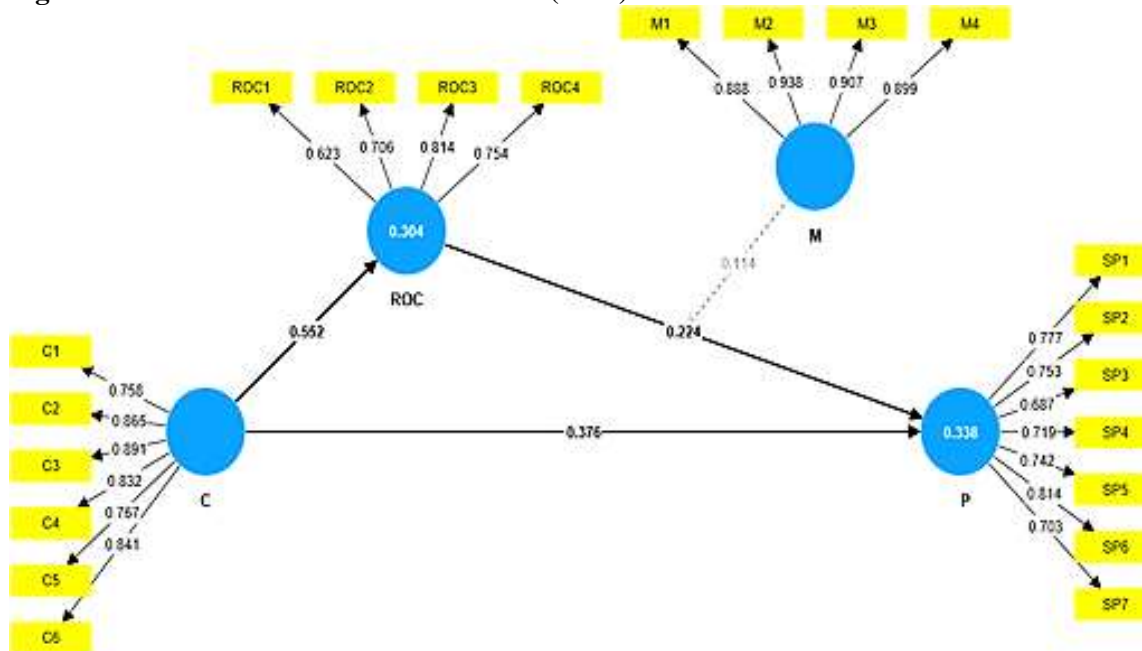
2001; Teo et al., 2008) for confirming discriminant validity. Table 4 shows that all the values are within recommended levels.

Table 4: HTMT ratio (discriminant validity)

Constructs	C	M	ROC	SP
C				
M	0.514			
ROC	0.679	0.827		
SP	0.559	0.432	0.571	

Note: Contractibility(C), Performance (P), Monitoring (M), Result-Oriented Culture (ROC)

Figure 2: Measurement Model Assessment (CFA)



Source: Author designed by using Smart PLS

4.5 Structural Model Assessment

The process of hypothesis testing in PLS-SEM involves structural model assessment using bootstrapping. A two-stage approach was employed for testing all the hypotheses. Structural Model Assessment demonstrates the validation of

hypotheses and model confirmation (Ringle et al., 2005). The model's validity and the relationships proposed are confirmed based on examination of coefficient values, t-values, and p-values. To confirm a hypothesis, it is advisable to consider a p-value below 0.05 and a t-value greater than 1.645 as the threshold criteria. (Tomczak et al., 2014).

Table 5: SEM Path Analysis

Hypothesis	Relationship	Beta	SD	t-value	P Values	Decision
H1	C -> ROC	0.552	0.049	11.213	0.00	Supported
H2	C -> P	0.376	0.075	4.992	0.00	Supported
H3	ROC -> P	0.224	0.09	2.503	0.006	Supported
H4	C -> ROC -> P	0.124	0.052	2.376	0.009	Mediation Supported
H5	M -> P	0.109	0.079	1.378	0.084	Not supported
H6	M x ROC -> P	0.114	0.042	2.696	0.004	Moderation Supported

Source: Author calculated by using Smart PLS

The results shown in Table 5 and Figure 3 show that except for H5 all hypotheses are supported. Hypothesis H1 is supported as the significant relationship found between Contractibility and Result-Oriented Culture meeting the recommended threshold ($\beta = 0.552$, $t = 11.213$, $p = 0.00$). Hypothesis H2 is supported as the relationship between Contractibility and Performance is found significant ($\beta = 0.376$, $t = 4.992$, $p = 0.00$). Additionally, Hypothesis H3 is supported after

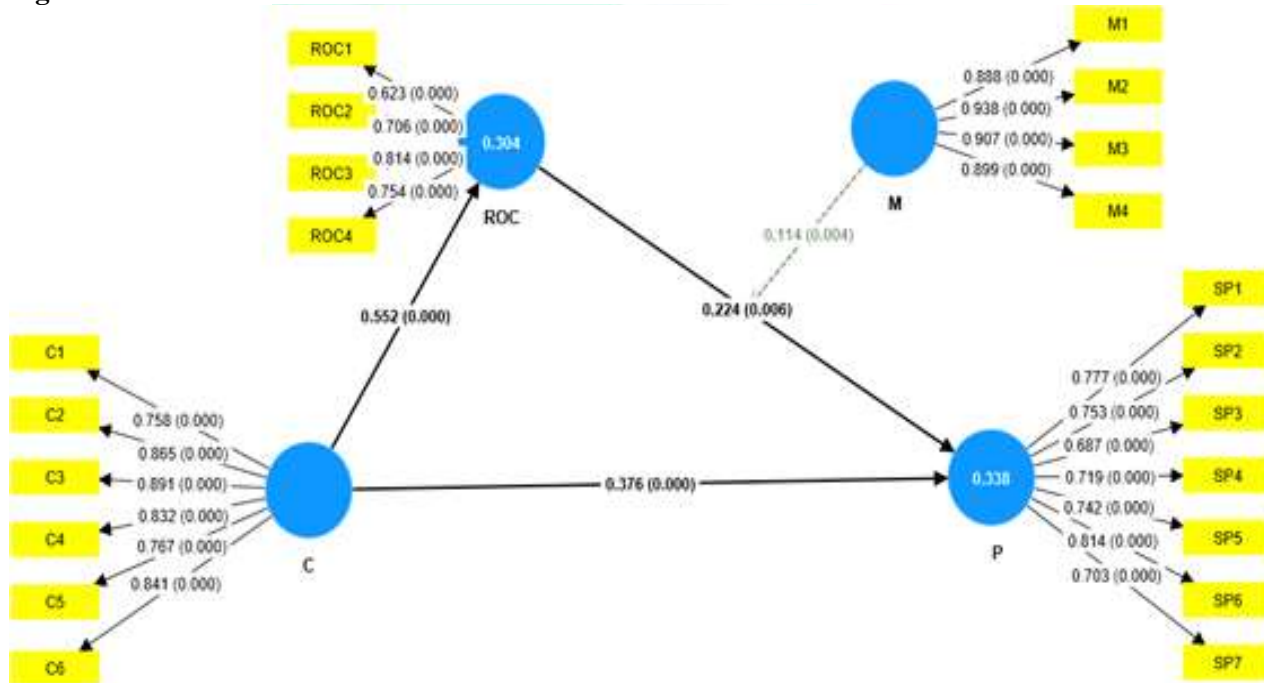
finding a relationship between Result-Oriented Culture and Performance as positive and significant ($\beta = 0.224$, $t = 2.503$, $p = 0.006$). Hypothesis H5 is not supported as the relationship between Monitoring and Performance is found insignificant ($\beta = 0.109$, $t = 1.378$, $p = 0.084$), as both the p-value and t-value did not meet the recommended criteria.

The Mediation effect (indirect effect) and moderation effect are checked using the

bootstrapping process in Smart PLS-4. A mediator variable functions as an intervening factor that elucidates the connection between independent and dependent variables (Baron & Kenny, 1986). Results in Table 4 show a positively significant mediating effect of Result-oriented Culture in the relationship between Contractibility and

Performance ($\beta = 0.124$, $t = 2.376$, $p = 0.009$), therefore H4 is supported. For Moderation, hypothesis H6 is supported as the results in Table 4 demonstrate that Monitoring moderates the relationship between the Performance of the schools and Result-Oriented Culture ($\beta = 0.114$, $t = 2.696$, $p = 0.004$).

Figure 3: Structural Model Assessment



Source: Author designed by using Smart PLS

5. DISCUSSION AND IMPLICATIONS

5.1 Discussion

The current study aimed to scrutinize the impact of contractibility on performance of low-cost schools contracted by PEF's, along with result-based contracting as a mediator and monitoring as a moderator. Based on Mitnick (1975) agency theory, this study hypothesized a positive link between contracting and performance. The strategic decision of outsourcing and contracting education services in public sector is often driven by the lack of available funding due to low budgetary allocations (Khushik & Diemer, 2020). The findings support previous research (Bergen et al., 1992; Muhammad et al., 2019) and provide evidence that contractibility positively influenced

performance, especially when focusing on desired performance or outcomes.

The study's findings also demonstrated a significantly positive relationship between contractibility and a result-oriented culture. These results are found consistent with Popoli (2017) as he highlighted strategic reasons behind outsourcing decisions considering the impact of the organizational culture on outsourcing choices. Additionally, the relation a result-oriented culture and performance hypothesized is consistent with earlier research. Previous research highlights that a focusing on a positive culture is important to achieving results and improving organizational performance (Cheung et al., 2011; Denison, 2000; Thi Tran et al., 2022). Consistent with earlier research, the empirical results of this study found the effect of a result-oriented culture as significant on performance of contracted-out schools (Rizzi et al., 2018; Sheridan, 1992; Thi Tran et al., 2022;

Tran & Nguyen, 2020) as well as in public sector services (Spekle & Verbeeten, 2014; Verbeeten & Speklé, 2015).

Verbeeten & Speklé (2015) discovered that within OECD-NPM frameworks, culture serves as a mediating factor between organizational performance and performance information. Similarly, Daryoush et al. (2013) and Nitzl et al. (2019) noted a positive moderating influence of results-oriented culture and NPM-oriented culture on public sector organizational performance. Building on empirical evidence supporting the mediating role of results-oriented culture in the association between performance and contracting, this study's proposed relationship is affirmed.

Monitoring is crucial in contracting, as advocated in Principal-Agent research under Agency Theory (Mitnick (1975), which acknowledged agency problems and emphasized the importance of monitoring agent (Bendickson et al., 2016; Wholey & Hatry, 1992). Previous studies have also highlighted significant impact of monitoring on performance (Maestrini et al., 2018; Siti-Nabiha & Jurnal, 2020). However, this study's findings differed from the hypothesized relationship as the direct impact of monitoring on performance of PEF schools lacked empirical support. Such novel and divergent results may be due to implementing such a complex model on such a large-scale. PEF schools not only face competition from public sector schools which have established systems and regulatory frameworks but also issues in allocation and release of funding. Another reason could be that in a developing country like Pakistan, there may be limited understanding of this unique contracting model, or challenges in defining KPIs and monitoring them effectively. Despite budgetary constraints, the government continues the PEF model to accommodate a large population of out-of-school children, giving less importance to monitoring frameworks. Further empirical investigation is needed to explore these divergent findings fully.

Interestingly, the moderating effect of monitoring on the relationship between result-oriented culture and performance was found significant. Comparable research, like Nitzl et al. (2019), investigated monitoring's role and shown how a new public management orientation positively

moderated the relationship between organizational performance and monitoring utilization, likely because of NPM principles such as goal-setting and monitoring. Furthermore, Gatimu et al. (2021) discovered that contextual factors, including the M&E structure, hold a significant moderating function in the correlation between performance and M&E practices within health programs. This study support earlier results by finding a significant moderating role of monitoring in relationship to performance.

5.2 Theoretical Contributions

This study significantly contributes to the literature by expanding our knowledge relating low-cost school education services contracted by the government. This study added to the body of knowledge by empirically testing novel relationships between organizational performance and contractibility (Spekle & Verbeeten, 2014), monitoring (Nitzl et al., 2019), and result-oriented culture (Verbeeten & Speklé, 2015) in one of the largest low cost school education model being run under public-private partnership and thereby advancing theoretical knowledge in realm of agency theory. The study distinctively focused on the role of government (as the principal) as service provider by outsourcing education services to private sector schools (agents), which adds to the theoretical significance of this study. Another important addition to the existing literature is showcasing how government-funded private schools or other similar public sector initiates can leverage advantages from contracting model while relying on findings of agency theory and NPM.

The study also presents a fresh perspective on performance by highlighting the significance of monitoring and a results-oriented culture for public sector school education within the contracting framework. The study highlighted the neglected mediating role of a results-oriented culture in public sector concerning contractability (Spekle & Verbeeten, 2014) and their impact on performance of public service delivery. Future research can explore the complexities of implementing monitoring frameworks in large-scale contracting models. To fully understand the peculiarities of performance management in education as well as to develop informed policies in this field, one

should also explore the moderating effect of monitoring in relation to the result-oriented culture and performance. Besides, this study is highly beneficial as it will promote the conduct of similar works in other countries and other sectors of public services.

5.3 Practical Implications

In addition to its theoretical implications, the study also holds practical significance. The current study's results are beneficial in practice, as they offer insights into the partner schools' management. The importance of contractibility and contract-based results established in the study could be used by the partner schools to re-orient their management in a way that focuses on the results and payment conditions. In addition, the current study has implications for PEF's management, as they could be used to change the contracts with the schools to emphasize the result-based payments. The cultural importance of the results can also be considered by the management and fostered by the change of management in such an away culture that the result-based school performance is encouraged.

Moreover, other government agencies in charge of the formulation of education policies and plans can also learn from the study to understand the impact of outsourcing and contracting education services, especially in cases where the schools are operating with little funding. The policymakers can also ensure that they create a clear monitoring framework that aids in monitoring the contractor-out schools, hence enhancing accountability and overall performance. International donors can tailor their support and funding initiatives to align with the findings of the study, particularly in regions where outsourcing education services is a strategic decision driven by budget constraints. In short, policymakers in both public and private sectors can draw lessons from the study to design contracting models and monitoring mechanisms that promote performance improvement while considering cultural and contextual factors.

5.4 Limitations and Future Directions

It's important to consider certain limitations of this study when interpreting the results. Firstly, the results are specific to PEF's low-cost model and

may not apply to other public sector schools. Performance is self-reported by PEF's officials, therefore, issues of biases in responses cannot be ruled out. This study doesn't include public-owned schools and a comparison of both systems is not captured in this study. Having different bureaucratic controls and funding mechanisms, the findings of this study may not be applied or generalized to other public sector or private schools. A more focused study can be conducted in the future using mixed-method research or a comparative empirical study that can help compare the performance of both PEF and other traditional public sector schools. Being a cross-sectional study, the findings cannot be generalized widely. Future research could benefit from employing longitudinal surveys and mixed-method approaches to address these issues more effectively. While the current study focused solely on data from PEF officials due to time and cost constraints, a more comprehensive investigation involving students, parents, and other stakeholders could enhance its value. Furthermore, aspects such as quality of life, physical infrastructure, and the broader socio-economic and legal environment impacting schools' performance were not explored in this study. Considering these as potential gaps, future research could delve into these dimensions using methodologies like PESTEL analysis. Despite the limitations, these insights can serve as valuable directions for future research in this area.

5.5 Conclusion

The results unveiled a significant influence of contractibility on partner schools' performance. Moreover, a result-oriented culture significantly mediated the connection between contractibility and partner schools' performance. Furthermore, current study results also elaborated on the impact of monitoring as a moderator between results-oriented culture and partner schools' performance. The current study offers fresh insights by testing a model, relying on agency theory, in South Asia's largest educational context. The study also developed an inimitable affiliation with agency theory in a new perspective.

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