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Impact of Buyer's Ethical Environment on Supplier's Performance: A Trust-based Mediation Model

Amjad Ur Rehman
Department of Business Studies,
Al-Qadir University Project Trust Sohawa, Jhelum Pakistan
Email: amjad.rehman@alqadir.edu.pk

Adeel Ahmed
Department of Business Studies,
Al-Qadir University Project Trust Sohawa, Jhelum Pakistan
Email: adeel.ahmedlai1@gmail.com

Asif Mahmood
Department of Innovation and Technology Management,
Arabian Gulf University, Manama, Bahrain
Email: mahmood.engineer@gmail.com *(Corresponding Author)*

Zahid Maqbool
International Islamic University Islamabad, Islamabad, Pakistan
Email: mzahidmaqbool@yahoo.com

Mazhar Iqbal
School of Management,
University of Innsbruck, Austria
Email: dr.mazharoiqbal@gmail.com

ABSTRACT

This research aims to analyze the impact of buyer ethical environment on supplier performance with mediating role of trust. For this purpose, 177 responses were collected by surveying employees of procurement departments of the manufacturing and service industry. The finding of this research shows that buyers' ethical environment has a strong positive impact on supplier performance, considering trust as a mediator. Similarly, the buyers' ethical environment has a positive impact on the trust in a buyer-supplier relationship. The findings of this research can help procurement managers and executives to enhance supplier performance in their procurement department by facilitating suppliers and strengthening their trust in buyer-supplier relationships.

Keywords: *buyers' ethical environment, supplier performance, trust*

1. INTRODUCTION

Suppliers play a vital role in the performance of an organization. The business environment has become more competitive, and the competition has shifted from the organizational to the supply chain level (Huang and Keskar, 2007). Multinational companies (MNCs) working globally have a huge number of suppliers and geometrically grow toward their organizational performance in terms of operational and financial areas. The performance of every single supplier is important to support MNCs in holistic supply chain management (Soh *et al.*, 2016). International trends in delivery methods and procurement procedures influence the inclusion of social criteria in tendering and other supply chain processes (Montalbán-Domingo *et al.*, 2019).

It is a major concern of every buyer's firm to enhance the performance of their suppliers to become competitive (Nishiguchi and Anderson, 1995). Suppliers are increasingly being asked to align with the products/markets. Thus, where the market demands lower costs, suppliers may be chosen based on cost; where the market demands faster delivery, suppliers may be chosen based on excess capacity (Basnet and Seuring,2016). Supplier performance is based on trust and strong relationships among supply chain partners. It is especially noted that corruption in procurement during emergencies is a global issue, exemplified by incidents during the COVID-19 pandemic in South Africa (Baloyi, 2022). Many researchers have examined and suggested that assessment criteria for supplier's performance should be based on cost, delivery, quality and services (Giunipero,

1990; Henseler, 2009). Suppliers are known as being essential resources in an organization. In purchasing, the role of the supplier and relationship management with the supply base is becoming more recognized. Zambika (2022) emphasized the importance of sustainable procurement, and identified the lack of policy guidelines and top management commitment in the public sector. Moreover, it is found that procurement procedures prioritize financial aspects over non-financial aspects, highlighting the need to balance financial, social, and environmental considerations for sustainable public procurement (Ramadhan and Gomera, 2022).

Today's competitive global market requires strong relationships with supply chain partners to overcome business complexities. Cooperation and integration with suppliers are important components to achieving competitive advantage for many organizations. The integration of suppliers can be defined as the combination of the internal resources of the buying firm with the resources and capabilities of selected key suppliers through the meshing of intercompany business processes to achieve competitive advantage (Wagner, 2003).

Moreover, maintaining good relationships with suppliers has become important to remain dominant in the competitive market. Organizations are now highly dependent on suppliers' networks and have revealed the importance and need for effective management of relationships with suppliers (Kannan and Tan, 2002). In business research, it has been long recognized that organizations are embedded in a wider external environment (Adler and Kwon, 2002), and the role of suppliers is very important in business competitiveness (Porter, 1996). Thus, the research highlights the need for trust, fairness, and ethical behavior among buyer-suppliers in the given area. Ethical considerations contribute to long-term partnerships, effective communication, and shared value creation. Ethical procurement practices promote transparency, integrity, and collaboration, ultimately enhancing the overall efficiency and sustainability of the procurement process. Various scholars have studied the impact of variables such as vendor size, mutual trust, commitment, long-term orientation, reputation, cost, quality, information exchange, and relationship-specific investments on buyer-seller relationships and related outcomes in the relational exchange and vendor selection literature streams (Lee, & Kim, 2023). Similarly, it is well-recognized how suppliers influence the buyer's manufacturing costs, product quality, and, ultimately, the ability to run a profitable business (Pathak, 2023).

Furthermore, there has been a growing awareness of the importance of ethical considerations in business relationships in recent years. This awareness has led to increased interest in understanding the impact of buyers' ethical environment on suppliers' performance. In this context, this study aims to investigate the relationship between buyers' ethical environment and suppliers' performance, with a focus on the mediating role of trust. The research paper finds that buyers' ethical environment significantly impacts suppliers' performance and that the level of trust between buyers and suppliers mediates this impact. Specifically, the paper finds that ethical considerations such as fairness, transparency, and honesty have a positive impact on suppliers' performance, and that this impact is strengthened by the presence of trust between buyers and suppliers.

2. 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Social Capital Theory

The social capital theory has emerged as one of the highly noticeable concepts in social sciences in different types and perspectives over the last two decades (Dubos, 2017). The concept of social capital theory (SCT) has become a popular way to understand the nature of cooperation and connections between organizations (Adler and Kwon, 2002). Social capital is an essential tool that helps to explain how the supplier-buyer relationship can lead to an organization's competitive advantage as "relational glue" maintaining successful supply chain relationships (McGrath and Sparks, 2005).

Social capital seems to be an early term in the development of social sciences, clearly (Platteau, 2000; Woolcock and Narayan, 2000). French Sociologist Bourdieu (1980), an American sociologist, was the originator of the theoretical development of the Social Capital concept. It took almost half a century before urban sociologists, namely Seeley (1956), and an exchange theorist, namely Homans (1961). In one way or another, both dealt with the meaning of links in culture and social networks. However, in the work of the French sociologist Bourdieu, in which he defined social capital as the number of resources, current or expected, resulting from the possession of a durable network of less or more institutionalized relationships of shared knowledge and recognition; it was not until 1980 that the notion began to gain significance. An emerging body of supply chain research has looked at the impact of various aspects of social capital on efficiency, either separately or in combination. Cousins *et al.* (2006) looked into the effect of Relational Capital on buyer performance; Cousins *et al.* (2008) examined the effect of structural and relational capital on buyer performance; and Krause *et al.*(2007) investigated the effects of structural and cognitive capital to explain organization performance in terms of quality, delivery, and flexibility. Social capital allows individuals to obtain valuable resources to improve inter-organizational relationships (Nahapiet and Ghoshal, 1998). Economic variables are seldom considered in social capital theory (Caïs *et al.*, 2021). Social capital can be referred to as a relational resource achievable by individual actors via social relationship networks (Tsai, 2000). In this study, we use Social Capital Theory to explain our research variables and their relationships. Ethical practices by suppliers increase trust in relationships, while trust as a dimension of relational social capital can enhance supplier performance.

2.2 Buyers' Ethical Environment

Recent literature has increasingly focused on the impact of buyers' ethical environment on suppliers' performance. Ethical considerations, such as fairness, transparency, and honesty, have been found to have a significant impact on suppliers' performance, with studies suggesting that ethical behavior can lead to improved supplier relationships, increased innovation, and better overall performance.

One recent study conducted by Wang *et al.* (2020) examined the impact of ethical leadership on supplier performance, finding that ethical leadership positively impacted supplier performance through the mechanism of trust. The study also found that the effect of ethical leadership on supplier performance was stronger for suppliers with high levels of trust.

Another study by Hosseini *et al.* (2020) investigated the impact of ethical considerations on supplier innovation. The study found that ethical considerations, such as honesty and integrity, were positively related to supplier innovation, and that this relationship was mediated by trust between buyers and suppliers. Similarly, a study by Lai *et al.* (2021) investigated the impact of buyer-supplier ethical relationships on supply chain resilience. The study found that ethical considerations, such as fairness and honesty, positively impacted supply chain resilience, and that this impact was mediated by trust between buyers and suppliers. In this unpredictable climate, supply businesses must limit their supplies to a small number of clients, choosing them based on a variety of criteria, including the ethical standards they adhere to and the amount of trust they have in their relationship (Fready *et al.*, 2022). According to Bendixen and Abratt (2007), ethical norms and open connections affect ethical perspectives. Maintaining good connections with suppliers based on trust and mutual respect benefits enterprises' supplier positioning (Bendixen & Abratt, 2007). In reality, building open connections with suppliers pays off in the long term, especially during unpredictable periods like COVID-19.

The aim of ethical procurement practices is to enhance the availability and quality of procured services, products, or work at fair cost and time due to improved transparency, competitiveness and corruption prevention among public servants (Mustapha, 2009). Ethical standards in public procurement must be followed to safeguard the resources of the company, boost efficiency and the best value for money by taking into account all related costs and quality benefits (Asare and Prempeh, 2017) during the entire procurement cycle process. Similarly, Hussein and Shale (2014) observed that corruption, kickbacks, conflicts of interest, bid rigging and manipulations would result in the eventual loss of public resources and the untimely delivery of procured products and works and services if ethical standards are ignored. The practice of ethical procurement for organizational efficiency is based on principal-agent theory assumptions. Findings showed that the procuring body embraced and enhanced transparency, accountability, fairness and best standards to a greater degree when conducting public procurement and improved performance in terms of timely delivery, cost-effectiveness and efficiency of procured products, works and services. It was therefore concluded that the mutual adoption and consideration of ethical standards in public procurement enhances the performance of organizations in the procurement criteria of timely and quality delivery at cost efficiency in the procurement of public interest products, works and services (Israel and Kazungu, 2019).

2.3 Supplier Performance

Gordon (2008) describes supplier performance management (SPM) as the process of analyzing, monitoring, and tracking suppliers' performance as well as their business processes and practices in order to reduce costs, minimize risk, and improve quality. Supplier performance evaluation is an essential part of SPM. A vital component of SPM is the supplier performance assessment. Lyson (2012) describes performance measurement as "the systematic assignment of numerical values (quantitative) or verbal descriptors (qualitative) to the characteristics of objects or individuals. The evaluation also involves collecting data to make recommendations for further decision-making. To analyze supplier efficiency, more subjective and non-financial metrics such as information sharing, responsiveness in problem-solving, degree of cooperation, supplier satisfaction, supplier certifications, and supply base characteristics are used (Lawson *et al.*, 2008). The operations, such as recognition and awarding, financial assistance, training and education, and so on, are also closely linked to improving suppliers' performance and skills.

Many scholars think the supplier's operational performance is critical to the purchasing organization's success. (Handley and Benton, 2012; Shin e al., 2000). Based on the overall effect, i.e., direct and indirect, both the development of suppliers and the relationship between suppliers and buyers have a greater impact on performance improvement (Mahmood, 2020; Tungjitjarurn *et al.*, 2012). Many organizations focus on their core operations (Lardenoije *et al.*, 2005), which increases their reliance on suppliers (Mahmood and Montagna, 2013; Krause and Ellram, 1997). As a result, the performance of the supplier has a direct influence on the organization's performance. In order to ensure that the supplier's output has a good impact on the organization's results, it is important to choose a supplier whose objectives are aligned with the organization's objectives.

A well-balanced performance evaluation system will benefit an organization from different aspects. These include corporate decision-making, internal and functional level coordination, awareness of buying practices and divisions, identified and minimal waste, and incentive for recognized workers. In addition, the findings of Simpson represent the robust degree of the assessment process with 41.7 per cent agreement. It is noted that the first benefit which can be achieved from supplier performance management is by concentrating efforts on value-added operations and reducing the initiative to address supplier performance issues, such as late deliveries, glitches, weakening of productivity or surplus inventory (Cousins *et al.*, 2008; Simpson, 2002; Gordon,2008). The second benefit is a competitive advantage that companies can take advantage of, such as a low-cost competitive increase, responsiveness and high-quality products and services, technology, faster order processing times, and aligning customer and supplier processes. The potential of suppliers for innovation will then be identified, and core partnerships can be improved. The appraisal framework would add the most benefit to the supplier-buyer relationship (Simpson *et al.*, 2002). As a result, for long-term development, the company can identify its top best suppliers, as well as enhance communication between the channels through supportive information flow. A few key serious elements were comprehensively used to analyze the supplier performance. For example, product quality, delivery performance, cost, physical distribution, services, flexibility, and relationships are considered to be important factors for measuring supplier performance

(Prahinski and Benton, 2004; Modi and Mabert, 2007). This will help the suppliers to develop a greater understanding of the demand and desires of buyers, recognizing which particular dimensions to strengthen. All in all, the upgraded performance of suppliers is parallel to the general priorities of businesses.

2.4 Trust

Trust is a critical success factor for a good relationship between a purchasing company and its suppliers in terms of supplier growth and performance; a high level of trust between suppliers and buyers leads to more information sharing, which increases efficiency and reduces costs (Rajput *et al.*, 2019). Trust is the foundation of any organization-to-organization interaction (Nguyen and Pervan, 2020). Trust is a complicated term affected by various properties that are measurable and non-measurable. It relates to an entity's goodness, strength, reliability, accessibility, capacity, or other characteristics. For this purpose, it is more difficult to build, guarantee and retain trust (Fortino *et al.*, 2020). Trust is recognized as one of the main success factors for a supply chain partnership between two parties, such as the purchasing company and its supplier relationship (Chen *et al.*, 2011). For a variety of reasons, trust has received a lot of attention among different management methods. Collaboration and network building of every kind are built on the foundation of trust. Trust was originally studied in social science and sociology but also appeared in marketing literature in the 1980s. The transition from discrete business operations to continuous trading relationships requires a high level of trust. (Dwyer *et al.*, 1987). According to a study, the breakup ratio of business breakup relationships is about half (Dwyer *et al.*, 1987). Another UK company research calculates that 55% of all strategic business alliances collapse within the first three years (Jones and Moberg, 2003). A variety of reasons can definitely be concealed behind this failure, but more research is more conclusive as it states that about 33% of strategic partnerships have collapsed because of a deficiency of trust between trading partners (Jones and Moberg, 2003).

The most basic and critical factor for effective supply network management is information sharing (Das *et al.*, 2000) which is directly related to trust among partners. Many supply chain flaws have been named for supply chain instability, ranging from abnormally huge inventory levels in the supply chain to a deficiency of certain items in other regions. It is presented that integrated information system management is a vital element that enhances long-term collaboration and addresses disputes within the supply network (Das *et al.*, 2000; Kumar and Dissel, 1996). When business partners exchange essential information, the transaction runs more smoothly, effectively, and efficiently. Trust is also seen as a major consequence of cooperation within inter-organizational relationships in literature (Goodman and Dion, 2001). According to Chenhall and Langfield-Smith (2003), a lack of interaction is a significant impediment to the establishment of trust between buyers and suppliers. Sharing details increases confidence in the relationship's long-term stability and decreases conflicts and tensions. Trust requires an uninterrupted flow of communication and an effective exchange of information (Anderson and Weitz, 1992; Hayat and Ahmed,2017).

Regardless of the type of partnership, trust is a vital component of every relationship. (Blomqvist, 1997; Sabherwal, 1999). In a simple buyer-seller relationship, two types of trust can be identified. The first is inter-organizational trust, which is concerned with the partner organization's trust. The second type of trust is interpersonal trust, which focuses on the salesperson for the partner company and the trust in him/her (Ganesan and Hess, 1997; Zaheer *et al.*, 1998).

2.5 Buyer's Ethical Environment and Supplier's Performance

Buyer's Ethical Environment will create an environment to perform ethical practices, including transparency, justice and equal opportunity for all suppliers, which in turn leads to better supplier performance. Lillywhite (2004) advised organizations to take responsibility for the working environment, labor and human rights across the supply chain at domestic as well as international levels of the production network. Her research established that using ethical practices to acquire goods and services can enhance performance. Ethical environment, organizational commitment, and job satisfaction may influence organizational performance, and managers are rethinking their company strategy to focus on these elements (Sumlin *et al.*, 2021). Su (2014) researched the relationship between business ethics and intellectual capital, and he proposed a path for the growth of all three components of intellectual capital (organizational, social, and human capital) over time. Svensson (2009) summarized that ethical considerations must be taken in corporate actions and behavior to improve supply chain performance. Generally, suppliers who are unsatisfied due to unethical practices used by the buyers' organization may perform below the expected level. To enhance supplier performance, the buyer needs to adopt ethical practices (Carter, 2000). So, the following hypothesis can be concluded from the preceding statements:

H1: *Buyer's Ethical Environment has a positive impact on the supplier's performance.*

2.6 Buyer's Ethical Environment and Trust

All Social Capital processes have an ethical dimension, as all these interactions in such relations have the potential for moral components to a greater or lesser degree (Pastoriza *et al.*, 2008). An unethical environment and a culture that does not respect ethics can destroy trust in corporate relationships over time (Agrawal, 2017). The ethical environment will force the ethical practices that lead to confidence and trust in the organization, which will enhance the friendship and interactions between buyers and suppliers.

The Social Capital concept meets the standard criteria for ethical thought. According to (Singer, 1993), ethical concerns are the priority in conduct toward others. Putnam (2000) explained that social networks provide channels through which partners recruit each other for good deeds and such networking foster norms of reciprocity that inspire attention to others' welfare.

Hence, we can conclude that:

H2: *Buyer's Ethical Environment has a positive impact on Trust.*

2.7 Trust and Supplier Performance

Trust creates relationships and interactions between buyers and suppliers, ultimately leading to higher supplier performance. Trust is the most valuable asset any organization has, the base on which a business is founded, as indicated by the social exchange theory (SET). (Benassi, 1999). According to Abdullah and Musa (2014), trust is defined as a party's belief in the reliability and integrity of its partners. Because there are risks involved, this is a difficult decision. Trust is a value, a guideline, and an expectation that the partner will fulfill the commitment in a satisfactory manner (Hudnurkar *et al.*, 2014). Trust is the basis upon which social capital and partner relationships are built. Trust lowers transaction costs and, in some cases, even removes the need for complex contracts and governance systems. While opportunism may have short-term benefits, it has long-term drawbacks due to a lack of reputation and trust. Trust facilitates the creation of a win-win strategy for collaborative benefit between buyer and supplier (Cao and Zhang, 2013).

Supplier performance is measured by operational outcomes such as product quality, delivery, responsiveness, pricing, and technical assistance, as well as how effectively the supplier can produce the items required by the customer. Customer satisfaction can be achieved through good supplier performance, which is the ultimate goal of every supply chain (Pooe *et al.*,2015). From the above discussion, it can be presumed that trust in suppliers can enhance operational outcomes resulting in overall supplier performance improvement. So, it can be concluded that:

H3: *Trust has a positive impact on Supplier Performance.*

2.8 Buyer's Ethical Environment, Trust and Supplier Performance

An ethical Environment provides a setup where ethical practices can be performed. In such an environment, social relationships and interactions between buyers and suppliers are developed. Due to good relationships, trust is created, which boosts the supplier's performance.

Trust given to the suppliers by buyers' organizations by creating an ethical environment can improve the quality and innovativeness of the resulting product, reduce lead time, and minimize costs (Hartono *et al.*, 2015). Trust is an important success factor for a good relationship between a buying company and its suppliers in terms of supplier growth and performance; a high level of trust between suppliers and buyers leads to more information sharing, which increases efficiency and reduces costs (Rajput *et al.*, 2019). In this case, the ethical environment created by buyers' organizations can enhance the trust in buyer-supplier relationships, further improving the supplier's performance.

H4: *Trust mediates the relationship between Buyer's Ethical Environment and Supplier Performance.*

Based on these hypotheses, the research framework has been formulated, as shown in **Figure 1**

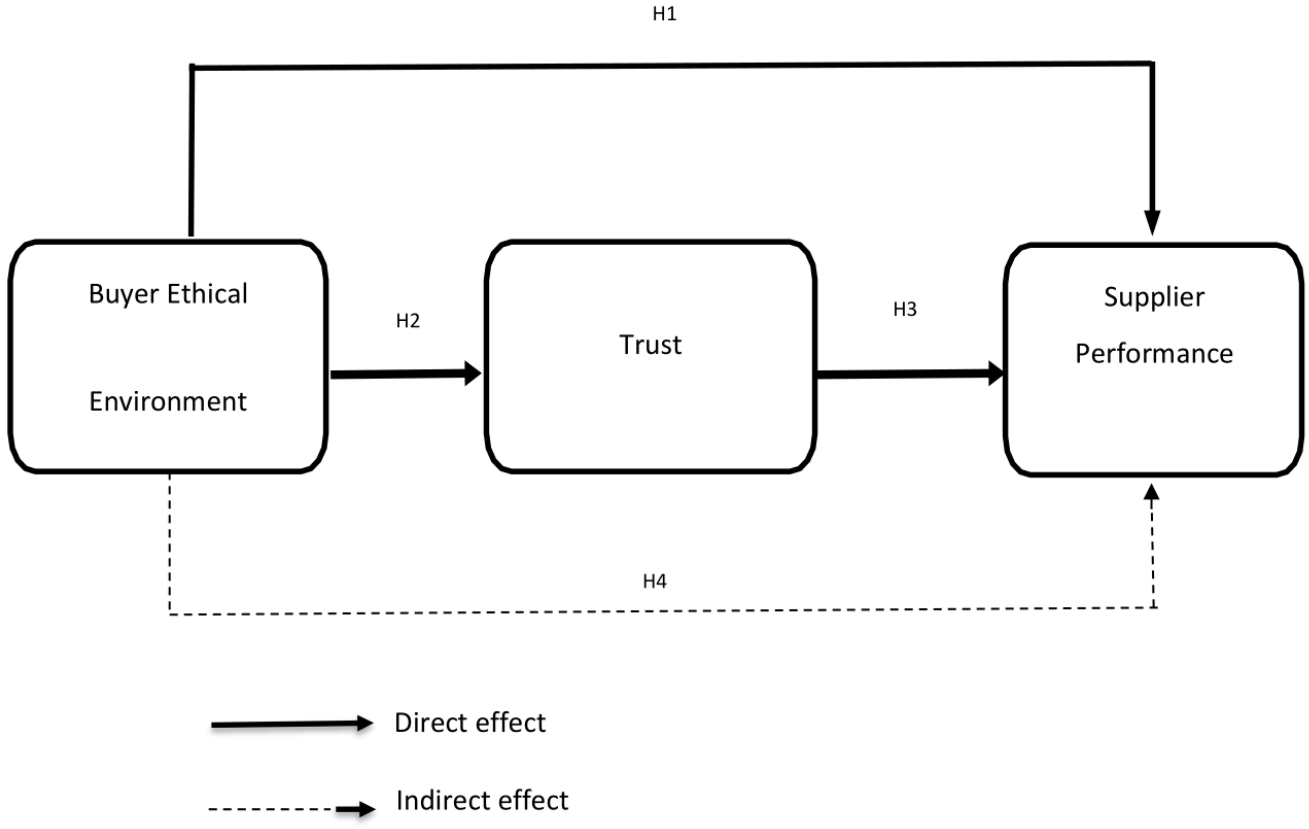

Figure 1 Research framework

3. METHODOLOGY

The present study is a descriptive applied survey and is quantitative regarding the type of collected data. The questionnaire was distributed among 195 employees of procurement departments of multinational, local and public sector organizations in Islamabad. Out of 195, 177 acceptable responses, 83.2% (144) were collected from services and 16.8% (29) were collected from the manufacturing sector. The major organization from which data were collected are Pakistan State Oil (PSO), the Public Works Department (PWD), the National Highway Authority (NHA), Pakistan Telecommunication Company Limited (PTCL) and the Purchase and Store Department of International Islamic University Islamabad (IIUI). Some public sector organizations related to defense production do not allow us to use their name in the written portion. This research is conducted on primary data through a personally administered questionnaire. The convenience sampling technique was used to collect data because of the COVID-19 pandemic. The reason for choosing convenience sampling during COVID-19 is that most organizations were closed or partially closed during covid-19 and that covid prevention SOPs were followed strictly. Due to this limited access of organizations for collecting data for research, a convenience sampling method was used. Furthermore, according to Joyal-Desmarais (2022), most researchers use convenience sampling because of its accessibility and safety during the lockdown period.

3.1 Measures

The survey instrument is used with items validated in previous research to assess each construct for our conceptual testing model (shown in the Appendix), using a seven-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (7).

3.1.1 Buyer's Ethical Environment

Buying the materials, products and services an organization needs from its suppliers in an ethical and socially responsible way, whether the focal organization is formally accountable or not. (Kushwah *et al.*,2019.) It is measured using seventeen items scale developed by (Bendixen and Abratt, 2007). The sample item includes "Everybody is given an equal opportunity to submit proposals for contracts."

3.1.2 Trust

According to Moorman *et al.*(1992), trust is "A willingness to rely on an exchange partner in whom one has confidence" In this study, trust is measured by using seven items scale developed by (Kingshott, 2006). The sample item includes "In our relationship, and our major supplier can be counted on to do what is right".

3.1.3 Supplier Performance

Lysons (2012) describes supplier performance measurement as "the systematic assignment of numerical values (quantitative) or verbal descriptors (qualitative) to the characteristics of objects or individuals (supplier). The supplier performance items are measured using sixteen items scale developed by (Terpend and Krause, 2015). The sample item includes " Our suppliers can consistently deliver on promised due date."

4. DISCUSSION

The demographics of this study, i.e., Gender, Job Level, Organization Type and Job Timing, were also collected through the second part of the questionnaire. Both manufacturing and services sectors were considered for data collection. From the total responses, 9.9% of respondents are female and 91.1% are male. Among the 177 responses, 83.2% (144) were collected from services and 16.8% (29) were collected from the manufacturing sector. We have various respondent categories concerning different levels of hierarchy in an organization. A total of 8.5% (15) of respondents are from top-level management, 51.4 (91) are from middle-level management, and 40.2% (71) are from lower-level management.

Table 1a Reliability and convergent validity

No	Items	Factor Loading(λ)	CR	AVE	Cronbach Alpha
	Buyer's Ethical Environment (BEE)		0.903	0.510	0.745
1	BEE 1	.010 (invalid)			
2	BEE 2	.029 (invalid)			
3	BEE 3	-.087 (invalid)			
4	BEE 4	.807			
5	BEE 5	.788			
6	BEE 6	.771			
7	BEE 7	.744			
8	BEE 8	.245 (invalid)			
9	BEE 9	-.084 (invalid)			
10	BEE 10	-.005 (invalid)			
11	BEE 11	.473 (invalid)			
12	BEE 12	.632			
13	BEE 13	-.276 (invalid)			

Table 1b Reliability and convergent validity (con't)

No	Items	Factor Loading(λ)	CR	AVE	Cronbach Alpha
14	BEE 14	.672			
15	BEE 15	.682			
16	BEE 16	.644			
17	BEE 17	.667			
	Trust (T)		0.886	0.565	0.767
1	T 1				
2	T 2	0.711			
3	T 3	0.753			
4	T 4	0.681			
5	T 5	0.741			
6	T 6	0.781			
7	T 7	0.835			
	Supplier Performance (SP)		0.947	0.518	0.933
1	SP1	0.48(invalid)			
2	SP2	0.795			
3	SP3	0.748			
4	SP4	0.671			
5	SP5	0.731			
6	SP6	0.699			
7	SP7	0.802			
8	SP8	0.762			
9	SP9	0.758			
10	SP10	0.546			
11	SP11	0.595			
12	SP12	0.786			
13	SP13	0.74			
14	SP14	0.669			
15	SP15	0.748			
16	SP16	0.703			
17	SP17	0.696			
18	SP18	0.735			

4.1 Convergent Validity and Reliability

In the study, reflective constructs were utilized. Accordingly, in accordance with Ahmed *et al.* (2022); Fornell and Larcker's (1981) recommendations, **Table 1** presents the composite reliability (CR), average variance extracted (AVE) and factor loadings of the item (λi), the value of AVE is higher than 0.50, the value of CR is higher than 0.60, and the values of Cronbach alpha is higher than 0.70 which indicates the convergent validity of and reliability of data (Hair *et al.*, 2012; Bhatti *et al.*, 2022).

4.2 Discriminant Validity

After assessing convergent validity, we evaluated discriminant validity using Fornell and Larcker's (1981) criterion, as shown in **Table 2**. It is calculated by taking the square root of AVE and written down in diagonal in bold. The value of the square root of AVE is higher than the correlation among variables; this shows the discriminant validity of data.

Table 2 Discriminant validity

Variables	T	BEE	SP
Trust (T)	**0.751**		
Buyer Ethical Environment (BEE)	0.417**	**0.714**	
Supplier Performance (SP)	0.673**	0.502**	**0.719**
Mean	5.00	5.23	4.97
Std. Deviation	1.075	1.095	0.983

Table 3 Direct effects

Hypothesis	Construct	Estimate	SE	CR	p-value	Decision
H1	BEE→SP	2.41	0.052	4.633	***	Accepted
H2	BEE →T	0.409	0.067	6.083	***	Accepted
H3	T →SP	0.513	0.053	9.700	***	Accepted

4.3 Hypotheses Testing

To test the study's hypotheses, we employed Structural Equation Modeling (SEM) with the assistance of AMOS software. **Table 3** below shows the direct effect of our study. For H1, the buyer's ethical environment directly affects supplier performance, and the p-value is significant, indicating that our proposed hypothesis is accepted. Furthermore, the Buyer's ethical environment directly impacts trust, and the p-value is also significant, indicating that our hypothesis H2 is accepted. The third direct effect of our study, i.e., trust impacts supplier performance positively and the p-value is also significant, indicating the acceptance of H3. So, our proposed hypothesis H1, H2 and H3 is accepted.

Table 4 Mediation effect

Hypothesis	Construct	Std. Effects	95% CI		p-value	Decision
			Lower	Upper		
H4	BEE→T→SP	0.210	0.121	0.322	.001	Accepted

We used Structural Equation Modeling in AMOS to calculate the mediating effect of digital organizational agility in our research model. **Table 4** presents the mediating effect of trust between buyers' ethical environment and supplier performance. This shows a significant relationship with a p-value of less than 0.05, and there is no zero between the upper and lower confidence interval, which indicates the acceptance of our hypothesis H4.

5. DISCUSSION

The study tested the impact of buyers' ethical environment on supplier performance. It also examines the mediating effect of trust between buyers' ethical environment and supplier performance. The data were collected from procurement and supply chain professionals, and 177 usable responses were collected. The results are consistent with the previous studies. The findings show that BEE Influence has a positive impact on SP with a positive beta value and significant effect, confirming the first hypothesis (H1). This shows that when the buyer's ethical environment increases in the organization, then the performance of the supplier will also increase (Svensson, 2009). Because when the organization has a culture for the procurement of the product by following all the ethical standards, all the employees must follow the ethical standards set by the organization. This also impacts the suppliers, and they also follow the standard SOPs for delivering goods to the customer (Carter, 2000). Thus, by enhancing the buyer's ethical environment, the performance of the supplier is also enhanced. The results also describe that trust is a strong and significant predictor of BEE (B=0.5736, SE=.0840, p<0.000) and SP (B=0. 5909, SE=.0628, p<0.000) (H2 and H3). The results show when the organization has a higher buyers' ethical environment, the trust in the organization will automatically enhance (Putnam, 2000). Thus, the overall environment of the organization changed significantly by trusting one another. Additionally, when the organization has higher trust values among the organization members and also with outside stakeholders (Cao and Zhang, 2013), this will cause a good reputation for the organization in the market. Also, when different suppliers work with the organization and the organization's trust in their suppliers, it ultimately enhances the supplier's performance (Pooe *et al.*, 2015), giving the firm a competitive advantage in the market. Conclusively, the buyer's ethical environment boosts trust, which in turn leads to higher supplier performance.

In this research work, supplier performance was measured on the basis of five dimensions, including delivery, cost, quality, innovation, and flexibility, as suggested by various researchers (Giunipero, 1990; Billesbach *et al.*, 1991; Henseler, 2009). These all extents help out the procurement departments to judge the supplier's performance. Preacher and Hayes (2004), a relatively recent technique that uses Bootstrap to evaluate the hypothesis, was used in this analysis to test the hypothesized relationship. This approach has the advantage of not only testing mediation or moderation but also describing the main path in the same analysis. For hypothesis 4, results reveal mediation of trust between buyer ethical environment and supplier performance, i.e., Trust has a significant positive mediation effect between BEE and SP (B=0.34 SE=.0747, LLCI=.2062, ULCI=.4953). This result indicates that the relationship between buyers' ethical environment and supplier performance is enhanced by adding trust factor during procurement. The trust between buyer and supplier will enhance their relationship and thus will ultimately be beneficial for the organization in the longer run.

The direct path is shown in hypotheses 2 and 3. (BEE on T and T on SP). The results for this association were found to be fully supported in the proposed direction, and all items are correlated. The Correlation between BEE and T is (r = 459**, p < .05). Significant moderate positive relationship means that an increase in BEE causes an increase in Trust. The correlation between T and SP is (r = .656**, p < .05), showing a significant strong positive relationship among variables. An increase in Trust causes an increase in Supplier Performance.

The relationships between variables were investigated using simple linear regression. Because the correlation

coefficient for BEE and SP is .401, the relationship between the two variables is moderate. Both variables had a significant relationship (p =.000) as per regression analysis. R2 is .161 in the summary of the model (16 per cent). This value indicates that 16% variation in Supplier performance. It indicates that 84% of the variation is still unexplained. Likewise, the relationship between BEE and Trust is moderate, as seen by the correlation coefficient of.459. According to regression analysis, both variables had a significant association (p =.000). The R2 value in the model summary is .210 (21 per cent). This number represents a variance of 21% in Trust. It indicates that 79% of the variance is still unexplained. Moreover, the relationship between Trust and SP is strong, as seen by the correlation coefficient of .656. Regression analysis showed a significant relationship between both variables (p = .000). R2 is .431 in the summary of the model (43 percent). This number shows a variance of 43 percent in SP. This indicates that 57% of the variance is still unexplained.

Trust was used by many researchers as a mediator for supplier results or related DVs. Rajput *et al.*, 2019 used buying firms' trust as a mediator between the relationship between Supplier Performance Improvement and other independent variables and observed that Buying firms' trust was positively linked to Supplier Performance Improvement. Previous related studies have shown that purchasing firms' trust is a major predictor of supplier performance (Chen *et al.*, 2011; Hosmer, 1995; Liu, 2012). The performance outcomes of a trust-based partnership and the processes that help to establish trust have continued to be the topic of trust-based buyer–supplier relationship research.

5.1 Managerial Implications

This research study offers beneficial suggestions for both buying firms and suppliers, especially in Pakistan. In a business environment, it is common in a buyer-supplier relationship that the supplier often complains about the unethical behaviors of buying firms while buying firms often grumble about poor performance from the supplier. This study gives a thorough understanding that is very useful for suppliers so that buyer firms can trust them and choose them for a long business relationship. On the other hand, buying a firm ethical environment has been thoroughly discussed. It has been found that a better buyer-ethical environment is very important for supplier performance. With ethical practices from the buyer firm, trust will be created in a buyer-supplier relationship, which eventually benefits both supplier and buyer, as discussed in social exchange theory. Another important point about supplier performance is quantifying it with some dimension. Five important dimensions for supplier performance have been highlighted, which can help procurement managers and supervisors choose the best suppliers from the supplier pool. The major measures managers can check supplier performance are delivery, cost, quality innovation and flexibility. Along with supplier performance, ethical standards are also needed to improve and strict checks and balances in recommending for procurement employees so that suppliers can work in a hassle-free environment.

5.2 Theoretical Implications

The present study's contribution to knowledge is connected to social capital theory. The relationship between the Buyers' ethical environment and Supplier performance is mediated by trust, a dimension of relational social capital.

According to social exchange theory, trust is the most valuable intangible asset any organization has, the base on which a business is founded (Benassi, 1999). This study also shows that trust mediates the relationship between SP and BEE. With a better buying firm's ethical environment, trust in the relationship can be increased, further enhancing supplier performance. The better performance of suppliers will help the buying firm to achieve its organizational goals.

5.3 Social Implications

The research has a wide range of social implications. The study's primary focus was on supplier performance. Presently, with the growing supply chain recognition in the country and upcoming opportunities in both manufacturing and services sectors because of CPEC, there is a broad range of expected opportunities for both suppliers and organizations. Better supplier performance will eventually result in better organizational performance, which will be a win-win situation for everyone.

Corrupt practices in an organization or corruption are one of the major social problems in Pakistan. In the past, in large governmental contracts, it is pre-understood that contractors have to pay extra money to procurement department employees to win a contract or even work smoothly. Although after the establishment of PPRA in 2002, things are very much in control. So, in both public and private sector procurement departments, standardizing SOP should be implemented to stop and discourage unethical behaviors.

6. Limitation, Future Research Direction and Conclusion

First of all, because of the COVID-19 pandemic, respondents were reluctant to physically meet with researchers and their availability was also an issue because of the rotation policy and work from home. Secondly, very few people are allocated to the procurement department compared to other departments like finance and operations, so the data collection process was relatively tougher.

Some future directions should also be highlighted, and such directions are very important for perfection in further research. First, a specific instead of a generalized study can help for better results, i.e., a specific field or area should be chosen for data collection. Secondly, in the future, researchers can use qualitative approaches to examine the relationship of a single organization with its supplier. Thirdly, experimental studies should also be conducted to analyze the supplier's behavior with buyer organizations and supplier performance in Pakistan. Lastly, proper SOPs should be implemented in procurement departments regarding supplier dealing. Unnecessary delays in clearing their bills and unethical behaviors with them should be discouraged.

This study stands in one of the very few initial investigations in the procurement sector of Pakistan for supplier performance. The efficiency of every supplier is critical in helping the organization manage its supply chains holistically. This study investigated Supplier performance due to the Buyer's ethical environment and the nature and intensity of the relationship between the Buyer's ethical environment and Supplier performance with mediating effect of trust. Results show that Supplier Performance has a strong and meaningful relationship with Trust. We can say that trust is a relational glue in supplier-buyer relationships through social exchange theory and social capital theory. Buyers and suppliers will take mutual benefits by improving supplier performance through trust. In terms of supplier performance, trust is a crucial success factor for effective relationships between purchasing firms and their suppliers.

Furthermore, a significant contribution to knowledge is made by filling research gaps by proving findings for trust as a mediator between Supplier performance and Buyer Ethical Environment. Trust between Buyer Ethical Environment and Supplier Performance was found to be substantially and strongly mediated by buying firms' trust; supplier performance can be put forward based on trust, as proven by the results. The use of supplier performance dimensions can also assist in the selection of a particular supplier. It is argued that to get full benefits from BEE in terms of improving supplier performance, purchasing firms must trust their suppliers. Future researchers are encouraged to investigate the large research field of supplier performance with various dynamics. Also, the addition of the other construct of social capital for buying firms and their suppliers in this research model is recommended for future research.

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APPENDIX

Table 1a Operationalization of construct and keywords abbreviations

Construct	Item No.	Items	Sources
Buyer's Ethical Environment (BEE)	BEE 1	"In our organization, family members and friends are given preference when contracts are awarded."	(Bendixen and Abratt, 2007)
	BEE 2	"Our organization is a large organization, so people can get away with unethical behavior. "	
	BEE 3	"Our management turns a blind eye to unethical behaviour."	
	BEE 4	"Our organization management and staff follow the code of ethics."	
	BEE 5	"Our organization staff is professional in their conduct."	
	BEE 6	"Our organization respects the confidentiality of supplier quoted prices and other information shared during negotiations."	
	BEE 7	"Our organization has a strict code of ethics."	
	BEE 8	"Our organization discusses proposals with Suppliers and competitors to bring down the price."	
	BEE 9	"Organization staff often denigrate (criticize unfairly) their supplier's products."	
	BEE 10	"Some employees of our organization spend far too much on entertainment."	
	BEE 11	"Our management at the organization has an open-door policy."	
	BEE 12	"Every supplier is given an equal opportunity to submit proposals for contracts."	
	BEE 13	"Our staff members are often rude."	

Buyer's Ethical Environment (BEE)	BEE 14	"Our organization is not only concerned with what is legal but also with what is morally right."	(Bendixen and Abratt, 2007)
	BEE 15	"Our organization is socially responsible."	
	BEE 16	"Our staff members who take bribes face penalties."	
	BEE 17	"Our organization does not accept second-rate (low-quality) work."	
Trust (T)	T 1	"In our relationship with suppliers, our major suppliers cannot be trusted."	(Kingshott, 2006).
	T 2	"In our relationship with suppliers, our major suppliers are perfectly honest and truthful."	
	T 3	"In our relationship with suppliers, our major suppliers can be trusted completely."	
	T 4	"In our relationship with suppliers, our major suppliers can be counted on to do what is right."	
	T 5	"In our relationship with suppliers, our major suppliers are always faithful."	
	T 6	"In our relationship with suppliers, our major suppliers are someone that I have great confidence in."	
	T 7	"In our relationship with suppliers, our major suppliers have high integrity."	
Supplier Performance (SP)	SP1	"Our suppliers have the ability to fulfill a rush order."	(Terpend and Krause, 2015)
	SP2	"Our suppliers can deliver an order quickly."	
	SP3	"Our suppliers can deliver a new/unique order (or a new part) quickly."	
	SP4	"Our suppliers have the ability to provide JIT (Just in Time) delivery."	
	SP5	"Our suppliers have the ability consistently deliver on promised due date."	
	SP6	"Our suppliers have the ability to provide us with reliable items."	
	SP7	"Our suppliers have the ability to provide us with durable items."	
	SP8	"Our suppliers have the ability to follow our specifications."	
	SP9	"Our supplier gives us total cost, which includes price, transportation, Inspection and testing, cost of supplier non-conformance, customer returns, and other costs."	
	SP10	"Our suppliers are willing to share cost data."	
	SP11	"The unit price of items demanded by suppliers are fair."	
	SP12	"Our suppliers have good technical capabilities and they are willing to use them for our products."	
	SP13	"Our suppliers are willing to share key technological information."	
	SP14	"Our suppliers have the ability to design new products/services or make changes in existing items."	
	SP15	"Our suppliers always have inventory on-hand to fulfill customer's demand."	
	SP16	"Our suppliers always have inventory on-hand to meet unexpected change orders."	
	SP17	"Our suppliers have the ability to customize orders as per the company's request, e.g., special coating, marking, color coding, and etc."	

Table 1c Operationalization of construct and keywords abbreviations (con't)

Construct	Item No.	Items	Sources
Supplier Performance (SP)	SP18	"Our Suppliers are willing to negotiate on price and delivery schedule."	(Terpend and Krause, 2015)

Dr. Amjad Rehman is an Assistant Professor in the Department of Business Studies at Al-Qadir University Project Trust. He earned his Ph.D (Marketing) from Riphah International University, Islamabad, in 2020. His areas of research are e-commerce, digital marketing, online shopping, Supply Chain Management and consumer behaviour.

Mr. Adeel Ahmed is currently a lecturer and associated with Al-Qadir University Punjab, Pakistan. He completed his MS in Supply Chain Management from Bahria University Islamabad. Earlier on, he did an MBA in Marketing as well. He achieved a silver medal in his MS program. He has experience of more than 7 years in industry and academia. His research interests include big data analytics, logistics management, supply chain resilience, consumer behavior and customer relationship management.

Dr. Asif Mahmood is an Associate Professor of Operations Management at the College of Graduate Studies, Arabian Gulf University, Bahrain. He holds a Ph.D. & MS in Operations Management from the Polytechnic University of Turin, Italy. He has published numerous research papers in various reputable journals, and has been cited by many scholars in his field. Dr. Mahmood's research focuses on a wide range of topics, including data analytics, machine learning, operations management, and project management.

Muhammad Zahid Maqbool is working as a Procurement officer at Menzies RAS (Menzies Aviation). He is also handling the import operations along with procurement. He earned his MS (Supply Chain Management) from the International Islamic University, Islamabad, in 2021. His areas of research are Procurement, Supplier Relationship Management, Supplier Performance Evaluation and Agri-Supply Chain.

Mr. Mazhar is currently studying master's program (Marketing and Branding) at The University of Innsbruck, Austria. He also worked as Operations Coordinator at Al-Qadir University Project Trust, Punjab, Pakistan. He completed his bachelor's from Namal College Mianwali, an affiliated college of the University of Engineering and Technology Lahore. Previously, he has worked as an intern with BoviTech International, Khushhali Microfinance Bank, and Namal College Mianwali. His research interest includes Marketing, Sales, and Psychology in the wider domain.