




# Impact of ethical practices on small and medium enterprises' performance in Saudi Arabia: An Partial Least Squares-Structural Equation Modeling analysis

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**Purpose:** The real challenge of establishing and maintaining business ethics in small and medium enterprises (SMEs) has become a global issue. We investigated the driving forces of ethical practices (EP) and its contribution to the overall performance in businesses.

**Design/methodology/approach:** This study collected primary data from 117 small and medium enterprises (SMEs) in Saudi Arabia by using a well-designed questionnaire survey amongst SMEs and draw inferences using the structural equation modelling (SEM) analysis.

**Findings/results:** Findings suggested that top management's characters and ethical commitment, ethical policy and culture of the organisation and external pressure positively influence the ethical practice in the organisation, which leads to a significant positive impact on both financial and non-financial performances of SMEs. But the level of fraud and corruption and the level of monitoring show a mixed moderating effect on the relationships between ethical practice in the organisation and business performance.

**Practical implications:** The findings of this research will help SMEs' administrators and managers, as well as the companies to instil workplace ethics, which manages the level of business performance. The policymakers and other relevant authorities can also utilise the outcomes of this study to develop ethical policy guidelines and frameworks to improve SMEs' competitiveness and sustain their companies in the long run.

**Originality/value:** The unique feature of this research is that both the causes and effects of EP are considered in one integrated model. This gives a more vivid picture of the ethical issue in a business organisation.

**Keywords:** business ethics; business performance; ethical practices; ethical policy and culture; ethical commitment; small and medium enterprises.

## Introduction

Ethics is vital in business because it builds trust and confidence in business relationships. Business ethics is a unification of the principles that guide the actions of management concerning their stakeholders. Any business should apply the elements of this concept if the business wants to be considered as a reliable business partner. Business enterprises would not be able to ensure their sustainable existence without applying business ethics (Dutta & Banerjee, 2011). As a result, it has recently become an established and a fast-growing field of interest of corporate and business organisations and within academia (Ajagbe & Ismail, 2014). Currently, the majority of corporations are seriously trying to enhance their commitment to ensure their social responsibility by implementing the code of ethics.

Several studies have been conducted on business ethics and its impact on organisational performance. But these studies have sadly centred essentially around multinational and large corporations only, even though small and medium enterprises (SMEs) play a major role in the economies regardless of countries. At the same time, SMEs are ethically encountering the true contest to propel their business in the current global vibrant and competitive milieu (Crane, Matten, Glozer, & Spence, 2019; Naidoo, Perumal, & Moodley, 2009; Spence & Painter-Morland, 2010). Moreover, because of different features of SMEs and their other limitations, SMEs cannot be dealt with similarly through legislation as in the case of large organisations (Spence & Painter-Morland, 2010; Werner & Spence, 2004). Nowadays, SMEs seek out new opportunities for future profit streams from existing operations, under ethical practices (EP) and business needs (Kristal, Huang, & Roth, 2010). Such attempts require an exclusive evaluation of whether these

opportunities translate into improved company success in the current aggressive and competitive environment (Dabor, Isiauwe, Ajagbe, & Oke, 2015). At the same time, understanding the influencing factors of EP with the link of business performance by utilising a single integrated model is very rare and difficult. Therefore, the authors tried to fill up these gaps by empirically investigating the scenario of SMEs in Saudi Arabia, and the intention of this research is to uncover the driving forces of EP and its contribution to the overall performance of SMEs in Saudi Arabia.

Although Saudi Arabia's economy has relied heavily on natural resources since independence, the government has taken several initiatives since 2016 to reduce that dependence and transform it into a multifaceted economy. For example, the government has launched 'Saudi Vision 2030' with the main aim to develop entrepreneurship by inspiring the youth with the necessary talents, knowledge and practices. As a result, the number of SMEs has increased and their number is about 90% of all businesses but the performance of SMEs is not enough and commendable (AlBar & Hoque, 2019; Jureidini, 2017). Moreover, because of increased fraud cases the Saudi government has taken some initiatives to increase responsibility, pellucidity and develop a system of rules, practices and process. But very little effort has been offered to understand how the adoption and implementation of EP on SMEs can contribute extraordinary guidelines of business. For example, Jenkins and Gibb confirmed that the efforts made by SMEs to embrace and implement policies for broader corporate social responsibility (CSR) activities have not been successful because of their misperception of exact requirements (Jenkins, 2004). But to the best of our knowledge, no research has been conducted to examine the impact of practices of business ethics in SMEs in Saudi Arabia. By focusing on this vacuum, the importance of this research is evidently justified. Therefore, this study tries to find an answer to the following question: Does EP play a role in SMEs' overall performance and which elements are affecting the EP in the Saudi SMEs?

This study extended the current literature on business ethics by discovering the key role of EP for the non-financial performance (NFP) of SMEs. This study has further expanded the existing literature by recording the logical process of how EP influence SME's performance. In addition, this study distinguishes itself from other existing studies by analysing both the reasons and consequences of ethical practice in a single model. Lastly, this is the first empirical research in the Gulf Cooperation Council (GCC) countries that discovered a link between the practice of ethics and the achievement of SMEs.

The next section highlights literature review and an overview of the theoretical framework of this study followed by the research methodology. The overall results of the study are described in the Results and findings section, followed by the Discussion section. Finally, conclusions are drawn with the study contribution, implication, limitations and suggestions for future study.

## Literature and theoretical background

### Business ethics and ethical practices by small and medium enterprises

Before the 1960s, the concept of business ethics was primarily theological and religious. Since then, the concept of business ethics has progressed and has gone beyond just a moral code of right and wrong. Now a days, business ethics lies underneath the umbrella of ethics, which denotes forming decisions that affirm the stability between the economy, society and environment to confirm long-term business success concerning ethical behaviour. Business ethics is a most debated topic in our time and there is no common definition of business ethics (Jones, Parker, & Ten Bos, 2005) and consequently the theoretical opinions and definitions vary with individual researches, organisations and countries. There are different definitions of business ethics provided by scholars although it seems complex to define (Abramov & Johnson, 2004; Crane et al., 2019; Ferrell, Fraedrich, & Ferrell, 2013). This study utilised the definition of business ethics provided by Ferrell et al. (2013) as they comprised a set of specific principles of business actions and conditions. We considered this definition as we think that it fits with the objectives of this research, as we are also exploring SMEs and their actions regarding ethics in a global context.

Ethical practice refers to the standards of moral conduct and judgement that any industry professional (employees at all levels of an organisation) is expected to uphold. Organisational policies and procedures outline the basis of these activities. This study considered EP as SMEs' professional activities aligned with its core principles, standards, systems and expectations, supported by its business ethics setup. Ethical practice in an organisation also includes policies and practices that affect employees and their work.

Weinstein (2012) argued that in the 21st century, market influence has moved from producers and dealers to purchasers and users. This means that buyers and customers have control over business sectors, and they influence business performance. Thus, EP in business could be one of the fundamental factors of business success (Twomey, Jennings, & Greene, 2016). Moreover, Jones (2000) stated that a business' picture and notoriety might be affected through the great exercises it displays to its clients and overall population. The advantages of ethical exercise empower a business with the ability to acquire effective opportunities that set it apart from its competitors (Ahmad, 2009). Haron, Ismail and Oda (2015) stated that SMEs with high ethical rules and a guarantee to upgrading trustworthiness are not only productive and bound to prevail in a financially competitive world but also with the growing role of SMEs around the globe, a moral methodology towards business is basic for them (Dutta & Banerjee, 2011). Consequently, business associations and supervisors need to carry on being ethical and ensure their own business advantages in case they want to endure and stay competitive (Abiodun &

Oyeniya, 2011). Small and medium enterprises might not be able to perceive such benefits because of the absence of EP (Mahmood, 2008).

Business practices need the maintenance of fundamental ethical norms, for example, trustworthiness, unwavering quality and participation. Small and medium enterprises and other firms cannot survive if their chiefs never come clean, if purchasers and merchants never trust one another or if the workers will not offer help to one another and to clients (Branko, Drago, & Zoran, 2015). Thus, SME owners should consider trust as a key factor in business investment, development and deals (Twomey et al., 2016). Chun, Shin, Choi and Kim (2013) and Twomey et al. (2016) reported a strong and positive connection between EP and financial success of a business. Webley and More (2003) demonstrated that there is a significant positive link between great economic success and different factors of business obligation. Thus, the given literature confirms the fact that EP in general make the business stronger and have better exposure that attracts clients. As a result, clients happily increase their reliance on these businesses and increase purchases from them. Therefore, in order to achieve that power, SMEs need to practice ethical principles and create publicity (McFarlane, 2013).

### Research hypothesis development

Understanding the underline driving factors of EP is very important to ensure proper EP in the organisation. There are many factors available that determine the level of EP in an organisation, such as ethical characters and ethical commitment of top management (employers, etc.), ethical policy, ethical culture of the organisation and external pressures (ExP) related to EP, etc. As an influential institutional enabler, the top management is in a position to formulate ethical standards and a code of ethics for the organisation. Thus, they play a substantial role in modelling company culture, atmosphere and staff views by affecting employees' perceptions and behaviour (Blome & Paulraj, 2013; Godos-Díez, Fernández-Gago, & Martínez-Campillo, 2011; Grandia, 2016; Walumbwa, Hartnell, & Oke, 2010). This is because, in an organisation, managers at various stages perform a crucial part in forming and sustaining moral values and ethical behaviour (Madanchian, Hussein, Noordin, & Taherdoost, 2018). Moreover, earlier researches validated the fact that the managers' justice and motivation are aligned with trust from staffs (Kalshoven & Zegveld, 2011; Nedkovski, Guerci, De Battisti, & Siletti, 2017). Furthermore, ethical behaviours of the top management also impact the ethical behaviour of other employees in different ways. Moreover, these factors are also universally different around the world (Bailey & Spicer, 2007). Although these studies were not in the domain of business ethics, but the results of these studies urged that leadership is an essence of ethical exercises. Finkelstein and Hambrick (1996) also acknowledged that the ethical standards of managers are remarkably vital as managers can shape company reputation and practices and later the moral conduct. Thus, the following hypothesis was proposed:

**H<sub>1</sub>:** The ethical commitment of top management has a positive impact on SMEs to engage in EP.

Similarly, the ethical culture of the organisation is reflected by the collective views held by the workforce concerning the company's standards, rules, exercise and process. Three essential aspects must be considered if unlawful actions are to be reduced in order to create an ethical environment for business (Schwartz, 2013). The three elements include: (1) The existence of central moral standards in its strategies, progressions and practices in all aspects of the business; (2) the incorporation of a proper ethical programme, for example, moral teaching; (3) the constant presence of morally correct leadership in front of employees. Because of the devastating cost of corporate failure, investigators, educators and practitioners have paid more attention to the concept of business ethics and EP. It is a proven fact in the current literature that there exists an excellent bond between organisational culture and the outlooks and habits of employees (Blome & Paulraj, 2013; Kaptein, 2008; Trevino & Nelson, 2004; Verbos, Gerard, Forshey, Harding, & Miller, 2007; Victor & Cullen, 1988). These investigations narrated a clear influence of employee-focused and community-focused ethical culture on ethical behaviour. For example, Kaptain (2006) stated that the lack of ethical culture (normative framework) in the organisation led to unethical behaviour/practice, which proves that management and workers depend on their ethical reform and good prudence is essential. In addition, Cooper, Frank and Kemp (2000) reported that the ethical atmosphere of a company is a useful weapon for regulating moral practices or behaviour. Accordingly, the following hypothesis is proposed:

**H<sub>2</sub>:** Established ethical policy and culture (EPC) within SME firms enables EP amongst SMEs.

At the same time, ExPs such as social culture, CSR, the severity of the possible risk, stakeholder pressure, etc. make the organisation more exposed to ethical environments. External pressure is an important factor that influences the execution of EP (Diabat & Govindan, 2011). They also stated that the ExP results in gradually flattering the most powerful in an organisation. Such pressures provide business entities with some protection from the volatility they face. The existing literature reported that the ExP enables firms to practice ethical actions so that their business can get a competitive advantage over its competitors (Bucar & Stalnaker, 2014; Surroca, Tribó, & Zahra, 2013; Vallaster, Kraus, Lindahl, & Nielsen, 2019). Adams and Hardwick (1998) also confirmed that companies that are facing substantial outside pressures are likely to practice better ethics to demonstrate their dedication to community obligation. Therefore, the following is proposed:

**H<sub>3</sub>:** External pressure such as (social culture, CSR and stakeholder pressure) has a positive impact on SMEs to practice ethical actions.

Measuring business performance is a broad issue, which can be categorised in many ways, such as FP and NFP. There is

limited literature on business ethics and organisational performance and the results of the study of the existing study are not completely uniform. For example, some studies found that companies consider business EP as a factor that increases profitability (Chun et al., 2013; Kehoe & Wright, 2013; Novelskaite, 2014). Thus, the outcomes of this study disclose a substantial connection between the level of moral practices and the financial achievement of the organisation. For instance, during the worldwide financial crisis in 2008, the businesses that have overlooked the moral standards and philosophies of sustainable development had substantial adverse consequences on their financial performance (FP) (Lewis, Kay, Kelso, & Larson, 2010; Ruiz-Palomino, Martínez-Cañas, & Fontrodona, 2013). Moreover, the positive and significant association between the EP and NFP was discovered by Cuadrado-Ballesteros, Garcia-Sanchez and Martinez Ferrero (2016). Conversely, some studies revealed that companies consider business EP as a factor that constrains profitability as it only increases business costs (Hwang & Chung, 2018). In spite of the absence of practical proof of the effects of EP on organisational performance (Hwang & Chung, 2018), the existing arguments lead to the subsequent hypotheses:

$H_4$ : Ethical practices are positively associated with SMEs' FP.

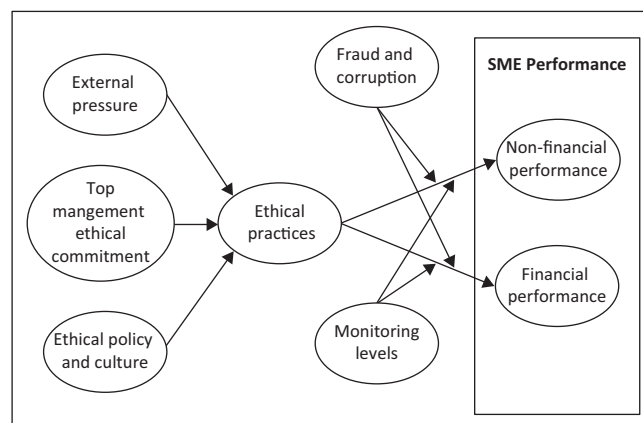
$H_5$ : Ethical practices are positively associated with SMEs' NFP.

The level of monitoring can play a crucial role in improving the performance level of an organisation (Bititci, Garengo, Ates, & Nudurupati, 2015; Chintaloo & Mahadeo, 2013). In the case of a proper monitoring system, employees project their image as well as their business image based on their point of view and actions whilst interacting with colleagues, customers and other stakeholders, which ultimately improves the NFP of the organisation (Hirsh, Lu, & Galinsky, 2018). At the same time, the level of monitoring also helps to increase the FP of the organisation by reducing fraud and corruption (Buallay, Hamdan, & Zureigat, 2017; Yenkey, 2018). Holt, Lang and Sutton (2017) stated that EP in organisations are poor under high monitoring situations, which is also supported by Alder, Schminke, Noel and Kuenzi (2008):

$H_6$ : Association amongst EP and SMEs' performance is moderated by level of monitoring.

As SMEs are much more vulnerable proportionally to fraud by employees and much less capable of absorbing these losses in comparison to a large corporation (N'Guilla Sow, Basiruddin, Mohammad, & Abdul Rasid, 2018), fraud and corruptions result in negative performance of the organisation. Therefore, to monitor fraud and corruption in the business organisation, especially in SMEs, many organisations have established an internal control system (e.g. accounting information system), which is very helpful in controlling their business efficiency and performance (Shepherd & Button, 2019).

$H_7$ : The affiliation amongst EP and SMEs' performance is moderated by level of fraud and corruption.



SME, small and medium enterprises.

FIGURE 1: Research framework.

## Proposed conceptual model

The framework for this research is presented in Figure 1, which denotes a single integrated model of influencing factors of EP with the link of business performance.

## Methodology

### Instrument development and psychometric properties

Different studies have used different tools to measure FP but the growth of profits, sales and market share, as well as cost reduction, and return of assets are the most commonly used tools. The tools that Islam, Karim and Habes (2015) had developed were used in this study as a proxy scale of FP as they confirmed the validity and reliability of items with the Cronbach's coefficient > 0.70.

Psomas and Kafetzopoulos (2014) stated that NFP was measured using the five distinctive elements of: human resource management performance, quality performance, operation management performance and overall management performance and local and international business performance. Islam et al. (2015) tested all items of this non-financial scale and validated the internal consistency with the evidence from Cronbach's coefficient > 0.70. This research applied this proven 'NFP' scale as a proxy measure 'non-financial performance (NFP)' scale.

This study used a scale of 'EPC' as a proxy measure of the 'ethical policies' scale, which was tested by the Center for Business Ethics (1992) and validated the internal reliability and harmony amongst items with the confirmation of Cronbach's coefficients > 0.70. The 'ethical leadership' scale developed by Yukl, Mahsud, Hassan and Prussia (2013) was employed in this research as a proxy measure of top management ethical commitment (TMEC). They found the values of Cronbach's coefficient of 0.96, which proved the internal consistency and dependability of items. To better measure top management commitment in Saudi Arabian context (which exhibits a culture that has been shaped by its Islamic heritage), we added one more item from the religious

dimension suited to Saudi leaders with the intention to inquire about whether leaders regulate the principal belief of their religion in daily activities in the workplace. The item is: management is practicing and committed to perform principal belief of their religion in daily activities.

Our study also used the 'external stakeholder pressure' scale developed by Tian, Liu and Fan (2015) as a proxy measure of 'ExP'. They tested external stakeholder pressure scale and provided evidence of Cronbach's coefficient 0.77 which indicates acceptable levels of internal homogeneity and reliability. The combination of the opinions of SME owners and existing literature was employed to design 'EP' instrument and 'monitoring level (LM)' instrument related to EP. This study measured the EP scale by the professional actions according to 12 core ethical principles stated by Josephson (2015) and the monitoring level (ML) scale developed by the efforts of the organisation according to six best practices suggested by Protiviti (2018). Finally, based on the perception of SME owner and a review of literature, this study designed the 'level of fraud and corruption (LFC)' scale. A total of 12 items were established to measure the LFC scale.

### Psychometric properties

Prior used scales and the scales that were developed from a review of the literature, this study used Partial Least Squares-Structural Equation Modeling (PLS-SEM) software to examine the psychometric properties. This process involves points such as factor analysis, structural solidity of data, descriptive statistics and internal uniformity assessments. The analysis confirmed the authenticity and dependability of the dimensions of FP and NFP (except 15 items as their outer loading value were  $< 0.70$ ) identified by Islam et al. (2015), dimensions of EPC developed by Center for Business Ethics (1992), dimensions of ExP (except two items as their outer loading values were  $< 0.70$ ) developed by Tian et al. (2015) and dimensions of TMEC (five items as their outer loading value were  $> 0.70$ ) developed by Yukl et al. (2013) with an item identified by the authors of this study. The construct validity and reliability of the latent factors are established through the inspection of convergent validity, discriminant validity and reliability. Convergent validity was judged by checking the outer loadings and the average variance extracted (AVE). The study reported that the loading value for each item was more than 0.70 which is shown in Table 1. The AVE for each construct was above 0.50 which is presented in Table 2 (Hair, Sarstedt, & Ringle, 2019). Thus, the model showed that convergent validity was achieved.

Furthermore, the discriminant validity was measured by inspecting the Fornell-Larcker criterion (Fornell & Larcker, 1981) which shows in Table 3. It refers that the square root of AVE in every latent variable was more than other correlation values among the latent variables. The discriminant validity also was measured by the heterotrait-monotrait (HTMT) ratio of correlations between the constructs (Franke & Sarstedt, 2019; Hair, Hollingsworth, Randolph, & Chong, 2017) which shows in Table 4. The HTMT ratios were below the threshold

of 0.90. Therefore, both Fornell-Larcker criterion and HTMT ratios validated that discriminant validity was established.

### Participants and procedures

Primary data that were gathered through a survey form amongst 117 SMEs in Saudi Arabia were utilised to fulfill the objectives of the study. The survey was conducted from June to August 2019. The final questionnaire was distributed through email to 250 SMEs enlisted in the chamber of commerce. After following up twice, the final respondents were 125 and this study used 117 samples based on the usability of data. The demographic portrayal was taken into account as the study tried to cover the whole of Saudi Arabia. Our sample maintained nearly the same ratios of SMEs population to gain a demographic picture (Table 5). Therefore, we may claim that our respondents nearly portrayed the national allocation of SMEs.

As the measurement model is valid, this study proceeds for the assessment of the structural model by using (PLS-SEM) software. The structural model assessment mostly involved inspecting collinearity, path coefficients, coefficient of determination, effect size and predictive relevance. Besides, a bootstrapping method (with  $n = 5000$  bootstrap resample) was also employed in this study.

## Results and findings

### Descriptive statistics

The descriptive statistics of the variables are given in Table 6. The highest average score was found for the construct of top management's characters and ethical commitment (TMEC), followed by EPC and ExP. It indicates that the respondents mostly agreed that the top management is committed to EP and EPC and ExP are existing in their company. On the contrary, the lowest average score was for the level of fraud and corruption (LFC) construct, which indicates that the level of fraud and corruption of the employee is high amongst the sample SMEs. The average score of EP 3.49 indicates that SMEs engage in unethical practices and employees were involved in fraud and corruption.

### Assessment of the structural model

The bootstrapping procedure for 5000 trails showed the following: firstly, the direct relationships revealed that top management's characters and ethical commitment, EPC and ExP had a significant useful connection with ethical practice in the organisation ( $\beta = 0.275, p < 0.01$ ;  $\beta = 0.382, p < 0.01$ ;  $\beta = 0.210, p < 0.01$ , respectively) (Figure 2 and Table 7). Ethical practice in the organisation had a significant positive relationship with both NFP and FP ( $\beta = 0.397, p < 0.01$ ;  $\beta = 0.146, p < 0.05$ ). Generally, all the straight associations assessed in this study were all significant and positive.

Secondly, regarding the mediating impacts, Table 7 shows that ethical practice in the organisation mediated the relationships between the three antecedents of ethical

TABLE 1: List of items with factor loading.

Constructs	Item description	Loadings
EPC	<b>Our company:</b>	-
	Has written ethical policies and guidelines.	0.717
	Regularly updates, improves and circulates the ethical policies	0.855
	Has an ethical committee.	0.826
	Provides ethical training to our workforce.	0.816
	Considers the ethical conduct as a core organisational value.	0.753
	Has compiled the legal requirements for adopting ethical policies and rules.	0.884
TMEC	Involves into social and environmental concern.	0.593
	<b>In our company:</b>	-
	Management reviews the policies and procedures to ensure that appropriate internal controls.	0.784
	Management emphasises and promotes ethical conduct as a core organisational value and strategy.	0.916
	Management has deep-seated commitment and demonstrates ethical conduct in their day-to-day operation.	0.921
Exp	Management takes appropriate action in instances of reported unethical behaviour.	0.595
	Management practices and is committed to perform principle belief of their religion in daily activities.	0.664
	<b>Our company:</b>	-
	Is liable to prepare the social audit report.	0.896
	Is responsible to disclose audit information to the public, shareholders, all employees and relevant authorities.	0.837
EP	Does ethical practices because of pressure from our customers to maintain a certain business image.	0.924
	Is involved with the environmental ethical practices because of pressure from environmental watch groups and public in general.	0.937
	Willingly does ethical practice for our own beliefs and values.	0.850
	<b>Employees in our company usually:</b>	-
	Do not compromise with our ethical principles.	0.735
	Act in ways that are consistent with our commitment to social responsibility.	0.886
	Choose what is right when a choice has to be made between what is right and what benefits our organisation.	0.850
	Tell the truth, even when confronted by personal and professional risks, economic pressures.	0.807
Report any unethical behaviour of our fellow colleagues to protect the image of our organisation.	0.777	
LFC	Disclose the information of illegality, fraud, mismanagement, abuse of power, general wrongdoing, because of social justice and professional ethics.	0.719
	Do not receive gifts from the peoples who are associated with our business transaction.	0.636
	Are treated with fair managerial decisions.	0.833
	Does not make any promise that cannot be kept.	0.729
	<b>Employees in our company do:</b>	-
	Not take informal payment from citizens/companies for any service/buying products.	0.931
	Not blackmail private citizen or business to obtain money.	0.923
	Not steal funds or equipment from the organisation.	0.761
	Not show preference to relatives and other close persons.	0.848
	Not get late or are absent from work without justification.	0.893
	Not get paid without work at all.	0.918
Not come late for work or leave early.	0.935	
Carefully maintain and audit inventories of goods and equipment.	0.864	
Do not accept or pay bribes to help/get promoted or to hire.	0.863	
Do not find any fraud cases.	0.895	
Do not abuse power or trust relationship to gain a wrongful advantage.	0.775	
Do not create a falsified invoice by getting bribes.	0.731	
LM	<b>Our company:</b>	-
	Appoints an internal and an external auditor to monitor works for our workforce.	0.832
	Uses technological tools such as software, telephone, video recordings to monitor our workforce.	0.858
	Timely reviews transaction, quality checks and outcome data, staff completed checklists, recorded customer service intake calls, etc.	0.944
	Ensures that audit reports are timely and clear.	0.862
	Welcomes inspectors to investigate reports prior to submitting to donors.	0.931
	Door is always open for funding and oversight agencies for monitoring.	0.838
	Has a high-quality self-monitoring system that formed by an individual or a group of staff?	0.864
Puts best and timely efforts to review our monitoring systems with the assistance from various sources.	0.854	
NFP	<b>Ethical practices:</b>	-
	Improved our organisational internal efficiency.	0.856
	Improved our organisational transparency.	0.764
	Improved our organisational productivity.	0.902
	Improved our organisational social and environmental responsibilities.	0.820
	Improved our organisational on-time delivery.	0.909
	Reduced our organisational waste and customer's complaints	0.856
	Decreased our client's objections.	0.876
	Increased board's dedication.	0.890
	Upgraded documentation.	0.825
Increased organisation's image.	0.877	

Table 1 continues on the next page →

**TABLE 1(Continues...):** List of items with factor loading.

Constructs	Item description	Loadings
FP	<b>Ethical practices have:</b>	-
	Benefited our organisation financially by reducing overall cost.	0.746
	Benefited our organisation financially by increasing profit (profits growth).	0.803
	Benefited our organisation financially by increasing sales (sales growth).	0.904
	Benefited our organisation financially by improving return of asset (ROA).	0.923
	Benefited our organisation financially by increase market share.	0.913

EPC, Ethical Policy & Culture; TMEC, Top Management’s Characters & Ethical Commitment; ExP, External Pressure; EP, Ethical Practice; LFC, Level of Fraud & Corruption; LM, Level of Monitoring; FP, Financial Performance; NFP, Non-Financial Performance.

**TABLE 2:** Convergent validity test.

Constructs	Cronbach’s alpha (CA)	rho_A	Composite reliability (CR)	Average variance extracted (AVE)
EPC	0.891	0.895	0.916	0.613
TMEC	0.836	0.859	0.888	0.620
ExP	0.934	0.94	0.95	0.792
EP	0.917	0.921	0.932	0.605
LFC	0.968	0.97	0.972	0.746
LM	0.956	0.967	0.963	0.763
NFP	0.96	0.964	0.965	0.737
FP	0.91	0.916	0.934	0.741

EPC, Ethical policy and culture; TMEC, Top management’s characters and ethical commitment; ExP, external pressure; EP, Ethical practice; LFC, Level of fraud and corruption; LM, Level of monitoring; FP, Financial performance; NFP, Non-financial performance.

**TABLE 3:** Output of Fornell–Larcker criterion.

Constructs	EPC	EP	ExP	LFC	LM	FP	NFP	TMEC
EPC	0.783†	-	-	-	-	-	-	-
EP	0.741	0.778†	-	-	-	-	-	-
ExP	0.721	0.696	0.89†	-	-	-	-	-
LFC	-0.427	-0.717	-0.413	0.864†	-	-	-	-
LM	0.31	0.304	0.272	-0.322	0.874†	-	-	-
FP	0.362	0.378	0.292	-0.367	0.677	0.861†	-	-
NFP	0.418	0.538	0.279	-0.467	0.303	0.449	0.859†	-
TMEC	0.766	0.727	0.776	-0.443	0.442	0.441	0.491	0.787†

EPC, Ethical policy and culture; TMEC, Top management’s characters and ethical commitment; ExP, External Pressure; EP, Ethical practice; LFC, Level of fraud and corruption; LM, Level of monitoring; FP, Financial performance; NFP, Non-financial performance.

†, the square roots of the AVE.

Note: The bold diagonals represent the square roots of the AVE whilst the other entries below the square roots of the AVE represent the latent variable correlations.

**TABLE 4:** Output of HTMT.

Constructs	EPC	EP	ExP	LFC	LM	FP	NFP	TMEC
EPC	-	-	-	-	-	-	-	-
EP	0.816	-	-	-	-	-	-	-
ExP	0.785	0.74	-	-	-	-	-	-
LFC	0.453	0.751	0.425	-	-	-	-	-
LM	0.352	0.313	0.309	0.317	-	-	-	-
FP	0.411	0.417	0.32	0.385	0.704	-	-	-
NFP	0.445	0.565	0.301	0.474	0.29	0.481	-	-
TMEC	0.876	0.826	0.864	0.489	0.481	0.509	0.55	-

EPC, Ethical Policy & Culture; EP, Ethical Practice; ExP, External Pressure; LFC, Level of Fraud & Corruption; LM, Level of Monitoring; FP, Financial Performance; NFP, Non-Financial Performance; TMEC, Top Management’s Characters & Ethical Commitment.

practice in the organisation (top management’s characters and ethical commitment, EPC of organisation and ExP) ( $\beta = 0.108, p < 0.05, \beta = 0.152, p < 0.01, \beta = 0.083, p < 0.05$ , respectively), and NFP. As a contrast ethical practice in the organisation did not mediate the relationships of these antecedents and FP ( $\beta = 0.040, p > 0.10, \beta = 0.056, p > 0.05, \beta = 0.031, p > 0.10$ , respectively).

Thirdly, concerning the moderating impacts, Table 7 shows that the level of monitoring did not moderate the relationships

**TABLE 5:** Sample distribution.

Region	Total number of SMEs		Sample SMEs	
	N	%	N	%
Central region (Riyadh and Qassim)	287 088	31.2	38	32.3
West region (Makkah, Madinah and Tabuk)	303 385	33.0	40	34.0
Southern region (Asir, Jazan, Najran and Baha)	137 712	15.0	16	13.7
Eastern region (Eastern Province)	135 185	14.7	17	14.5
Northern region (Northern Borders, Hail and Jouf)	55 787	6.0	6	5.5

Source: Based on data from General Authority for statistics. (2019). *Population by gender, age groups and nationality (Saudi/Non-Saudi)*, Kingdom of Saudi Arabia. Retrieved from <https://www.stats.gov.sa/en/5680>

SME, small and medium enterprises.

**TABLE 6:** Descriptive statistics.

Variable	N	Minimum	Maximum	Mean	Standard deviation
EPC	117	1.00	5.00	3.65	0.93
TMEC	117	1.00	5.00	3.88	0.76
ExP	117	1.00	5.00	3.63	0.89
LFC	117	1.00	5.00	2.60	1.07
NFP	117	1.00	5.00	3.35	0.83
FP	117	1.00	5.00	3.12	0.71
LM	117	1.00	5.00	3.40	0.95
EP	117	1.00	5.00	3.49	0.93

EPC, Ethical Policy & Culture; TMEC, Top Management’s Characters & Ethical Commitment; ExP, External Pressure; LFC, Level of Fraud & Corruption; LM, Level of Monitoring; FP, Financial Performance; NFP, Non-Financial Performance; EP, Ethical Practice.

between ethical practice in the organisation and business performance (FP and NFP) ( $\beta = -0.016, p > 0.1$  and  $\beta = 0.102, p > 0.1$ ). However, level of fraud and corruption moderated the relationships between ethical practice in the organisation and business NFP ( $\beta = -0.153, p < 0.05$ ), but did not moderate for the relationships between ethical practice in the organisation and business FP ( $\beta = -0.029, p > 0.1$ ).

### Robustness of the model

The collinearity test given in Table 8 shows that the variance inflation factor (VIF) estimates for all predictors are between 1.129 and 3.327, which is less than the suggested threshold value of 5.0 (Hair et al., 2017). Thus, it proves the absence of collinearity in the model.

To evaluate the structural model, coefficient of determination ( $R^2$ ) uncovered that the three antecedent variables of ethical practice in the organisation collectively explained 63% of the variance as illustrated in Figure 2. The analysis also showed that ethical practice in the organisation, level of fraud and corruption as well as level of monitoring explained 32% of the variance in NFP and 50% in FP as illustrated in Figure 2. The values of  $R^2$  above 63%, 50% and 32% are considered to be large (Cohen, 1988).

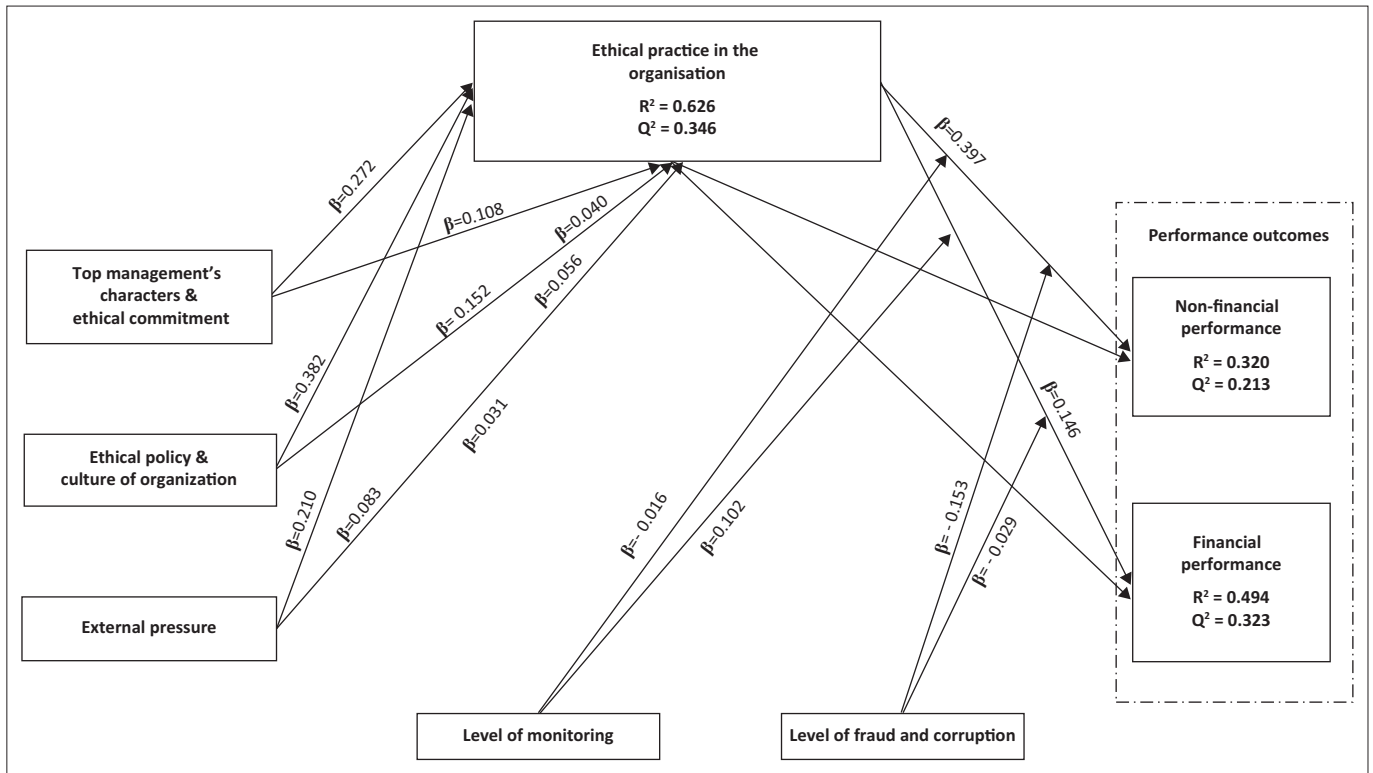


FIGURE 2: Path results.

TABLE 7: Path coefficient.

Relationships	Beta	p	Confidence intervals			Decision
			LLCI	ULCI	F <sup>2</sup>	
TMCEC → EPO	0.272	0.002	0.124	0.424	0.061	Supported
EPCO → EPO	0.382	0.000	0.210	0.572	0.145	Supported
EP → EPO	0.210	0.002	0.112	0.351	0.042	Supported
EPO → NFP	0.397	0.000	0.252	0.542	0.04	Supported
EPO → FP	0.146	0.021	0.033	0.265	0.024	Supported
TMCEC → EPO → NFP	0.108	0.012	0.038	0.212	n/a	Supported
TMCEC → EPO → FP	0.040	0.105	0.005	0.109	n/a	Not supported
EPCO → EPO → NFP	0.152	0.010	0.057	0.292	n/a	Supported
EPCO → EPO → FP	0.056	0.099	0.004	0.14	n/a	Not supported
EP → EPO → NFP	0.083	0.023	0.035	0.189	n/a	Supported
EP → EPO → FP	0.031	0.129	0.002	0.085	n/a	Not supported
EPO*LFC → NFP	-0.153	0.020	-0.034	0.277	n/a	Supported
EPO*LFC → FP	-0.029	0.346	-0.084	0.139	n/a	Not supported
EPO*LM → NFP	-0.016	0.407	-0.095	0.087	n/a	Not supported
EPO*LM → FP	0.102	0.254	-0.045	0.316	n/a	Not supported

EPC, Ethical Policy & Culture; EP, Ethical Practice; ExP, External Pressure; LFC, Level of Fraud & Corruption; LM, Level of Monitoring; FP, Financial Performance; NFP, Non-Financial Performance; TMCEC, Top Management's Characters & Ethical Commitment; n/a, not applicable; LLCI, lower limit confidence interval; ULCI, upper limit confidence interval.

Thereafter, the cross-redundancy prediction technique has been applied in this study for assessing the predictive

TABLE 8: Output of variance inflation factor test.

Constructs	EP	FP	NFP
EPC	2.680	-	-
ExP	2.783	-	-
TMCEC	3.237	-	-
EP	-	2.082	2.082
LFC	-	2.108	2.108
LM	-	1.129	1.129

EPC, Ethical Policy & Culture; EP, Ethical Practice; ExP, External Pressure; LFC, Level of Fraud & Corruption; LM, Level of Monitoring; FP, Financial Performance; NFP, Non-Financial Performance; TMCEC, Top Management's Characters & Ethical Commitment.

capability ( $Q^2$ ) of the model, which was proposed by Hair et al. (2017). As shown in Figure 2, the  $Q^2$  values for FP (0.323), NFP (0.213) and ethical practice in the organisation (0.346) were more than 0, signaling that the model had projecting applicability.

## Discussion

The survey in this study is the first of its kind on ethical practice in SME business in Saudi Arabia. The present study examined the structural relationships amongst indicators of SME's business performance in Saudi Arabia. These findings further advance ethical theories on SME business as it finds evidence to support the ethical practice as an important driver of SME business performance. The structural model revealed that the three antecedent variables of ethical practice in the organisation (top management's characters and ethical commitment, EPC of the organisation and ExP) collectively explained 63% of the variance in ethical practice in the organisation. Initially, it proposed a direct positive relationship between top management's characters and ethical practice in the organisation ( $\beta = 0.272$ ,  $p < 0.01$ ). According to Okpara and Wynn (2008), the theory of moral behaviour suggests that ethics represents concrete standards of behaviour and norms of action. Therefore, ethical commitment positively influences the ethical practice of management in the organisation, which is also true for Saudi Arabia. The finding also aligns with the previous study conducted by Shin (2012).

Then, this study proposed that the EPC of the organisation has a significant positive relationship with ethical practice in the organisation. This was also confirmed ( $\beta = 0.382$ ,  $p < 0.01$ )



as expected and consistent with previous studies conducted in entrepreneurship and other industries (Nedkovski et al., 2017). The EPC of an organisation induce the ethical practice of the SME's. As ethical behaviour is believed to be the power to perceive an individual's ethical attitude and ethical policy-making, business organisations and managers must practice ethics to secure their business advantages in order for their businesses to remain competitive (Savur, Provis, & Harris, 2018).

This study further examined the association of ExP and ethical practice in the organisation. This was also confirmed ( $\beta = 0.210, p < 0.01$ ) as expected and consistent with previous studies conducted in entrepreneurship and other industries (Williamson, Ardoin, Clow, & Cole, 2018). External pressures induce business organisations and managers to be ethical and demonstrate socially responsible behaviour to gain support from different external stakeholder groups.

In line with that, results confirm that ethical practice in the organisation had a significant positive relationship with non-financial performance ( $\beta = 0.397, p < 0.01$ ). Previous studies also support this result (Dzomonda & Fatoki, 2017), For instance, Berrone, Surroca and Tribó (2007) investigated the relationship between NFP as a result of business ethics and the FP of companies. Similarly, a considerable amount of positive relationships has been found to exist between the company's financial and NFPs and commitment to business ethics (Kehoe & Wright, 2013).

The findings of the study also confirm the anticipated significant positive relationship between ethical practice in the organisation and FP ( $\beta = 0.146, p < 0.05$ ), which also supports the previous literature (O'Boyle, Rutherford, & Pollack, 2010). For example, O'Boyle et al. (2010) discovered a positive and meaningful relation between ethical practice in the organisation and FP. They concluded that in the long run, entrepreneurs benefit financially by exercising social and moral responsibility. It means that an SMEs action of being honest, truthful, reliable, fair, responsible and accountable is very important for the sustainability of an SME in the long run.

Furthermore, the findings of the study confirm the anticipated significant mediating effect of ethical practice in an organisation in the relationship of top management's characters and ethical commitment; EPC of organisation; ExP and NFP (standardised regression weight = 0.108,  $p < 0.05$ ; 0.152,  $p < 0.01$ ; 0.083,  $p < 0.05$ , respectively). However, their relationships with FP were not mediated by ethical practice in the organisation.

On the other hand, this study did not find overall support for the moderation evidence for the level of monitoring in case of the relationship between ethical practice in the organisation and financial and NFP and did not support most of the previous studies that have been conducted on large organisations (Bititci et al., 2015). The potential reason for this

contradictory finding could be the firm size. Therefore, these mixed findings created the scopes for future research to get a better inference on the moderating roles, which might be the interest of future researchers. In the case of fraud and corruption level, the result shows a significant negative moderating effect for NFP, which is consistent with a previous study conducted by Shepherd and Button (2019). It means that a low level of corruption strengthens the relationship between ethical practice and the NFP of the organisation but insignificant moderating effect for FP.

## Conclusion

### Contribution of the research

To the best of researchers' knowledge, so far no research has explored the instilled ethics in Saudi Arabia in the context of SMEs. This study presents a rigorous approach to empirically examine the complex relationship between EP and business performance of SMEs in Saudi Arabia. The research reveals that ethical practice in the organisation has significant positive influence on both financial and NFPs of SMEs. Therefore, ethical behaviour is a vital issue that SMEs should take seriously so as not to suffer negative consequences such as lack of trust amongst different stakeholders, negative brand image and lawsuits etc. This study also reported that SMEs in Saudi Arabia are involved with lower levels of EP, which is a risk to the sustainability of SMEs.

### Implication of the research

The SME administrators and managers, as well as the companies, can utilise the outcomes of this study to develop ethical policy guidelines and frameworks to improve their competitiveness and brand reputations to maintain their FP and sustain their companies in the long run. Moreover, government and policymakers need to play a critical role in instilling a national culture that is ethically sensitive to motivate SMEs' managements and operators to practice ethical values in their companies to increase profitability and sustain in the competitive market. As the government is a significant performer in various areas of Saudi Arabian life, it is obligatory upon this body to synchronise not only its attempts to promote entrepreneurs but also the energies of other organisations. For example, the government can accelerate collaboration between governmental, educational and business entities as it has been revealed that education develops the ethical understanding of SME owners. Similarly, the ministry of commerce and industry jointly with other government sectors such as the SME General Authority (SMEA) should develop a set of agendas to educate SMEs regarding the consequence of business ethics. They should also attempt to eliminate differences in their rules and regulations on big companies and SMEs to move towards a common goal of improving the business ethics amongst management staff and other employees. The government's intention to strengthen this vital sector was made clear by bringing entrepreneurship to the forefront of the kingdom's strategic economic planning. Universities must be encouraged to conduct research on entrepreneurship and to make

students more aware of business ethics and assistance with business planning. Policymakers ought to develop programmes that will motivate SMEs to start instilling business ethics in their companies.

### Limitations and scopes of further research

This study has few limitations such as: (1) the findings cannot be generalised as they are based on a study conducted on only one country, (2) even the sample size is not large enough to generalise the findings for the whole nations, (3) the questionnaire survey was conducted online; however deeper insights could be gained if the survey would be conducted face to face, (4) the result may vary if SMEs are considered separately. Therefore, there are few scopes available for future research on this issue. As this study is based on SMEs in Saudi Arabia only, to generalise the findings, it also needs to be conducted on other countries. Moreover, future researchers can extend this study by including large organisation and comparing the performance based on organisational size, especially their FPs. There is also scope of looking at the barriers and inclusion of other control variables in the model, which will help the practitioners, businessmen, policymakers and academicians.

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### Competing interests

The authors have declared that no competing interest exists.

### Authors' contributions

M.M.I. designed the research instruments in consultation with other authors and conducted the research as an expert in the areas of SMEs, ethical climate and performance measurement. M.M.A. contributed to analysis of the results whilst T.S.A. awarded the research grant for this project. Finally, M.M.I. contributed to the drafting of the manuscript. All authors have read and agreed to the published version of the manuscript.

### Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

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### Data availability

The data that support the findings of this study are available from the corresponding author, M.M.I., upon reasonable request.

### Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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