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Impact of network structure on sustainable competitive performance among Pakistani small and medium enterprises: does government financial support matter?

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Abstract

Government support plays a vital role to push the firms to gain sustainable competitive performance and economic development of an economy. Nevertheless, from the last decades, lack of government subsidies and incentives, especially in emerging economies, cuts owners networking roots at international and national level. Therefore, the current study underlines how networking structure (density and centrality) effects on sustainable competitive performance (thereafter SCPs) in Pakistan's SMEs. In addition, we conducted a mediating effect of government financial support on relation between networking structure and SCP. Hence, small enterprise is a major source of economic development, employment, and value creation. So, we developed hypothesis based on previous studies—related government financial support and network structure. The data was collected through structured questionnaires from top management of SMEs. The hypothesis was tested through Smart Partial Least Squares (PLS). The results indicated that density has a positive and significant effect on sustainable competitive performance, while centrality has an insignificant effect on SCP. Furthermore, government financial support strongly and significantly supports the relation between networking structure and SCP in Pakistan. This research has several recommendations for government to fully support small enterprises because owners have a networking system at national and international level but they have lack of environment.

Keywords Density · Centrality · Government support · Sustainable competitive performance · Pakistan

Abbreviations

SCP	Sustainable competitive performance
GFS	Government financial support
SMEDA	Small Medium Enterprises Development Authority
NSD	Networking structure density
NSC	Networking structure centrality

Introduction

In previous studies, researchers stated that government had applied different rules and regulation forth across the globe for SMEs to enhance economic growth and standard of living in emerging economies (Braczyk et al., 1998; Howells, 2005). Because, in current knowledge-based

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economy, small enterprises have become one of the most significant drivers of sustainable economic development (Doh & Kim, 2014). While having a substantial contribution (results of entrepreneurship) to GDP, economic growth, and sustainable development goals, still SMEs have high failure rate across the globe (Anwar et al., 2018). Thus, the underlying study discusses different factors, which significantly contribute in SME failure rate in emerging economies (Gupta & Mirchandani, 2018), such as lack of resources, limited networking structure, and lack of government support (financial support, tax incentives, loan, and social support) (Joo & Suh, 2017), although networking system and government financial support are very critical issues which play a vital role during SME failure in emerging economies. Therefore, the current study shed the light on these special issues, lack of government financial support and networking structure, in emerging economies.

Thus, it is very important for SMEs to connect with financial institutions, suppliers, and competitors, and gain incentives from the government to find new opportunities in the market. However, as compared to large corporation, SMEs feel lack of resources and find opportunities to prevail networking structure to gain sustainable competitive performance (Yoon et al., 2018). Especially, external resources and networking structure are a crucial factor in acquisition of resources (Waluszewski, 2006). While, lack of growth among SMEs can be attributed to the unavailability of essential support from government agencies and regulators in emerging economies like Pakistan (Bilal et al., 2016; Mboniyane & Ladzani, 2011). On the other side, government plays a vital role in SME performance (Hoque, 2018). Hence, Tahir et al. (2016) scrutinized that government and political support in Pakistan is like they offer limited support and resources to SMEs; therefore, it can rely on their own available resources to gain sustainable competitive performance, which is impossible.

Therefore, we postulate that the relationship between network clustered and performance strongly ties when firms possess a high level of government and political support. Specifically, investigating how each government-supporting factors can interact networking structure, we will be able to understand more regarding how both concepts enhance and relate performance.

Thereafter, a large number of previous studies shed light on SME contribution towards economic growth (Park et al., 2018), and also take debates on SME networking system importance, but majority of existing literature lack the multidimensionality of networking structure (Wang & Chen, 2016). So, in spite of several noteworthy studies (Wang & Fang, 2012) of network structure significant contribution on SME performance, very little attention has been given towards government or political support (Songling et al., 2018). While, in emerging economies, researchers give very little attention towards government and political support (financial support, taxes incentives, social support, IT, etc.) to gain sustainable competitive performance. Therefore, we proposed the model that “Does government support matter?” on the relation between networking structure and firm performance in emerging economies. The current study has several practical recommendations for managers, owners, and policymakers. Unfortunately, if a firm has weak networking ties with other sources but a strong relationship with government, then still it can gain competitive advantage. Therefore, the finding suggests many recommendations for managers to build strong networking ties with government and political bodies and further extend existing ties. These implications are useful for Pakistani SMEs because it has the same features as other emerging economies, government organizations, and SMEDA which are advised to formulate their strategies in order to enhance the survival and growth of SMEs in emerging economies.

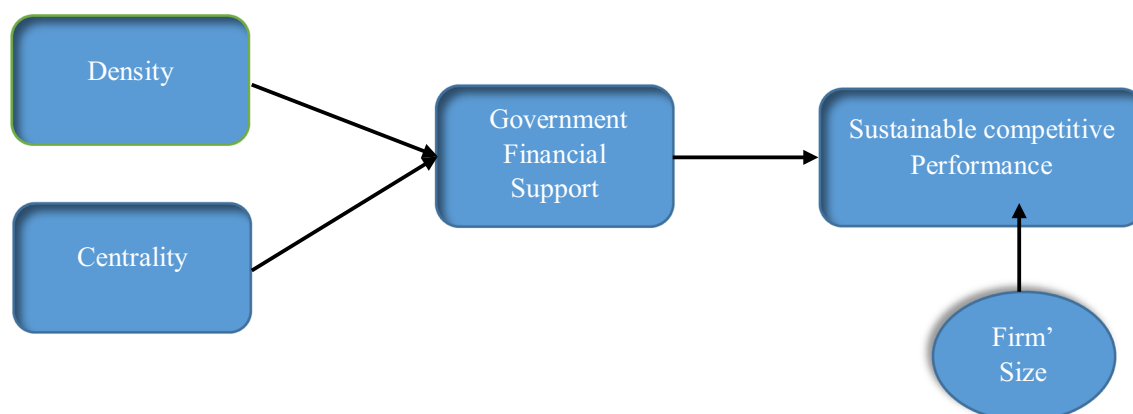


Fig. 1 Conceptual framework. Networking structure

Literature review and hypothesis development

Theoretical background

Network structure and sustainable competitive performance

In a business context, networking system means to establish link with suppliers, customers, and competitors; besides these networking roots, firms cannot compete in turbulent market. Specifically, these ties solve financial and non-financial issue of SMEs at national and international level Alkahtani, Nordin, & Khan, (2020), and also help to gain sustainable competitive performance. Furthermore, networking support during actual and potential resource is rooted within; these resources are derived with the help of network (Nahapiet & Ghoshal, 1998). Hence, Wu et al. (2008) postulated that the firm’s external networking system significantly contributed to the firm’s performance in emerging economies, supported by social capital theory. Networking ties with any financial institution are a very important factor, because SMEs intrinsically have lack of internal funds. Due to unlimited resources, managers apply different policies for resource and network system and acquire information to develop the business strategy (Franco et al., 2016). Networking system facilitates actors for easy access to resources (such as information, management skills, equipment, technology) (Gnyawali & Madhavan, 2001). This alliance can help SMEs to gain sustainable competitive advantage in emerging economies of scale (Watson, 2007). In addition are networking assistances to identify the opportunities, new idea, and innovativeness to achieve their objective (Lee et al., 2001). Hence, Naudé et al. (2014) postulate that firm networking system and performance have positive strong correlation with each other within the context of SMEs, and it also minimizes the SME failure rate and can increase success rate (Watson, 2007). Hence, those SMEs have long roots of networking in turbulence market; it positively influences firm performance in Pakistan (Hanif & Irshad, 2018; Stam et al., 2014). Similarly, cluster of networking system especially plays a pivotal role for collaboration of information, gaining knowledge, resources, or competitive advantage (Wang et al., 2015).

The network structure splits into two subparts (density and centrality). Network density discusses the level of connection among thespians/suppliers in the networking system (Gnyawali & Madhavan, 2001). Increase in network density represents high level of exchange in information and resources (Tseng et al., 2016). While, it also indicates to minimize the total time prerequisite to gather information and justify the information accuracy across various sources (Lee, 2007). While, network centrality defines an individual thespian in networking system (Gnyawali & Madhavan, 2001). It represents the degree at which actor covers the total range of network (Wang et al., 2015); similarly, firm accesses high degree

Table 1 Details of participating SMEs

S. no.	Description	Frequency	Percent
Firm size			
1	10–50 employees	123	40.1
2	51–100 employees	115	37.5
3	101–250 employees	69	22.5
Firm age			
1	< 10 years	126	41.0
2	11–20 years	104	33.9
3	> 21 years	77	25.1
	Total	307	100.0

of resources; it depends on the high level of networking system (Ibarra, 1993), and additionally networking, especially firm ties with their counterparts at other foreign firms (for example, buyers, competitors, and suppliers) in turbulence market (Li et al., 2009). Similarly, this networking cluster facilitates the firms to provide benefits from information and

Table 2 Mean (M), standard deviation, skewness, and kurtosis

Items	Mean	Std. deviation (SDs)	Skewness	Kurtosis
NSC1	3.67	0.548	0.010	-0.715
NSC2	3.68	0.533	-0.097	-0.742
NSC3	3.68	0.533	-0.097	-0.742
NSC4	3.72	0.528	-0.434	-0.026
SCP1	3.68	0.515	-0.392	-0.651
SCP2	3.75	0.484	-0.528	-0.330
SCP3	3.78	0.493	-0.415	0.008
SCP4	3.72	0.491	-0.475	-0.624
SCP5	3.75	0.484	-0.528	-0.330
SCP6	3.75	0.492	-0.453	-0.347
SCP7	3.72	0.499	-0.399	-0.615
SCP8	3.76	0.492	-0.443	-0.215
SCP9	3.71	0.510	-0.303	-0.651
SCP10	3.76	0.487	-0.490	-0.252
NSD1	3.75	0.535	-0.518	0.397
NSD2	3.69	0.511	-0.581	-0.364
NSD3	3.77	0.502	-0.670	0.509
NSD4	3.69	0.540	-0.569	0.097
NSD5	3.78	0.508	-0.758	0.940
GFS1	3.83	0.412	-1.159	0.974
GFS2	3.78	0.477	-0.567	-0.033
GFS3	3.71	0.482	-0.574	-0.801
GFS4	3.79	0.449	-0.836	0.103
GFS5	3.72	0.479	-0.603	-0.746
GFS6	3.83	0.420	-1.048	0.936
GFS7	3.77	0.472	-0.622	-0.072
Total numbers	307			

Table 3 Correlation

S/ no	Items	1	2	3	4	5	6	7
1	Industry	1						
2	Firm size	0.019	1					
3	Firm age	0.102	0.15*	1				
4	Network structure centrality	0.089	0.05	0.15**	1			
5	Network structure density	0.097	0.22**	0.22**	0.24**	1		
6	Sustainable competitive performance	0.019	0.19**	0.12*	0.12*	0.24**	1	
7	Government financial support	0.072	0.37**	0.45**	0.25**	0.47**	0.28**	1

*Correlation is significant at the 0.05 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed)

resources (Peng & Luo, 2000). While, political ties represent the connection with government officials, political leaders, and officials in regulatory and supporting organizations (Li et al., 2009), and they help to increase the firm's performance in the emerging economies.

In the past literature, notions posit that networking density and centrality significantly contribute to SMEs in sustainable competitive performance, including innovation (Wang & Fang, 2012; Naudé et al., 2014; Tseng et al., 2016). Wang et al. (2015) especially highlight that network centrality has a

Table 4 Measurement model, reliability, and validity

S/ no	Items	Factor loading	Cronbach alpha	Composite reliability	AVE
Networking structure centrality					
1	NSC1	0.816	0.83	0.894	0.739
2	NSC2	0.907			
3	NSC3	0.847			
Networking structure density					
1	NSD1	0.776	0.84	0.884	0.605
2	NSD2	0.747			
3	NSD3	0.755			
4	NSD4	0.782			
5	NSD5	0.828			
Sustainable competitive performance					
1	SCP1	0.697	0.94	0.959	0.722
10	SCP10	0.917			
2	SCP2	0.842			
4	SCP4	0.911			
5	SCP5	0.905			
6	SCP6	0.888			
7	SCP7	0.875			
8	SCP8	0.888			
9	SCP9	0.686			
Government financial support					
2	GFS2	0.68	0.87	0.896	0.591
3	GFS3	0.88			
4	GFS4	0.65			
5	GFS5	0.87			
6	GFS6	0.74			
7	GFS7	0.77			

AVE average variance extracted

Table 5 Discriminant validity

Items	SCP	GS	NSC	NCD
Sustainable competitive performance	0.850			
Govt financial support	0.311	0.769		
Networking structure centrality	0.115	0.180	0.860	
Networking structure density	0.247	0.494	0.044	0.780

significant and positive impact on both organizational innovation and performance using meta-analysis based on 40 samples. Therefore, from past literature, we posit the following hypotheses:

- H₁: Network density has a significant positive effect on sustainable competitive advantage.
- H₂: Network centrality has a significant positive effect on sustainable competitive advantage.

Government financial support and sustainable competitive performance

Government supports SME sector in different categories including tax allowances, grants, loans, IT, social support, and financial capital so far (Storey & Tether, 1998). Social network theory (Burt, 2000) posits that firms, which have external strong networking ties with other firms or institutions, can get a large number of resources, which is very beneficial for firm’s performance long-term survival. Similarly, resource-based view theory (Barney, 1991) suggested that firms gain sustainable and competitive advantage on their competitor in the emerging economy, who have rare and inimitable resource. Hence, rapid global development revolution supported by government, tariffs, and subsidies help to enhance the entrepreneurship level (Amsden,

1992). Furthermore, Sheng et al. (2011) enrich the notions that government support plays a vital role to surge a sustainable competitive performance in emerging economies such as China, Pakistan, and Malaysia. Hence, it is justified in emerging economies that government incentives and development projects increase the firm’s performance (Wei & Liu, 2015).

However, government incentives help the SMEs to expand their operational activities; it can also increase the SME performance and significantly contribute to the economy (Clement & Hansen, 2003). Hence, in emerging economies such as Malaysia, SMEs receive ample financial support from the government, which can enhance the firm performance as compared to those firms which have fewer government incentives (Guan et al., 2009). Li et al. (2017) suggested that firm performance is significantly dependent on the political and government incentives in emerging economies. Moreover, top management, which has strong political and government ties, can easily gain sustainable competitive advantage in turbulence market (Li et al., 2008).

Government support not only supports the easy access of resources but also supports the SMEs at seeding stage, for their growth and to gain sustainable performance in the turbulence market (Hansen et al., 2009). Fajnzylber et al. (2009) suggested that GS (credit, training, services, loan, tax payment, etc.) not significantly enhances the firm performance but in fact, it is an important driver to gain sustainable performance. Hence, from past literature, we posit that financial and non-financial government support significantly improves the innovativeness and sustainable business performance (Ma & Gao, 1997). However, it is clear that government support plays a positive role in the improvement of a firm performance (Han et al., 2017). A strong emphasis on government support in technological development can contribute significantly to a firms’ growth (Guan & Yam, 2015). Especially government financial incentive is deemed a major factor to surge innovation between the business sector in

Fig. 2 Measurement model

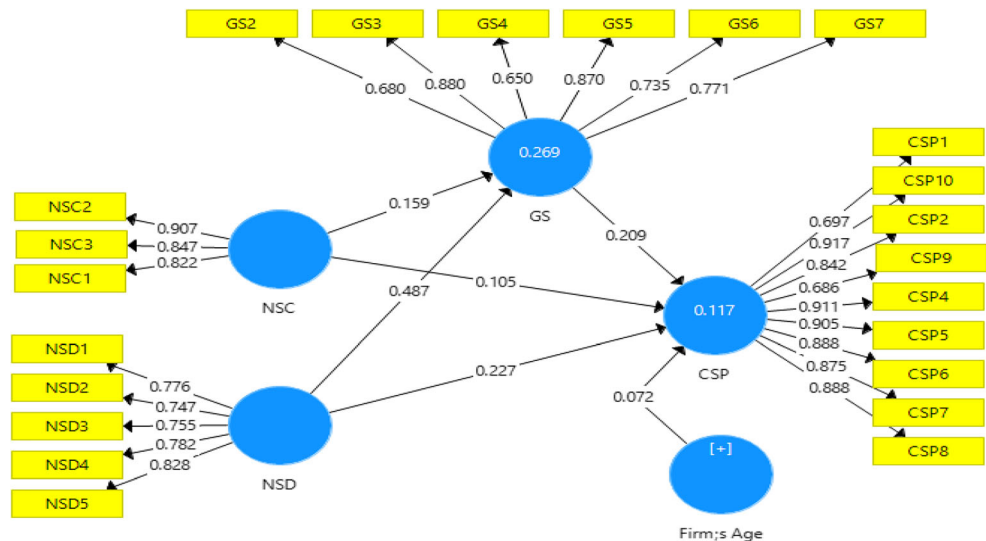


Table 6 Network structure relation with sustainable competitive performance

Hypotheses	Path	Beta	Mean	S. D	T statis	p value	R ²	F ²	Decision
	Firm age ->CSP	0.038	0.127	0.055	2.372	0.258	0.083	0.01	
H ₂	NSC ->CSP	0.128	0.139	0.095	1.433	0.091		0.058	Non-support
H ₁	NSD ->CSP	0.237	0.225	0.054	3.992	0.000		0.018	Support

developed and developing economies (Mustar & Larédo, 2002; Wei & Liu, 2015).

Hence, we claim that a firm having support from the government can gain high performance in dynamic markets. Therefore;

H₃: Government support has a positive impact on sustainable competitive performance.

Mediation As discussed in prior literature, networking system supports SME internal and external policies, to gain sustainable competitive performance in emerging economies (Desai & Shaikh, 2018). Networking net just facilitates the firm’s connection and goodwill with buyers, suppliers, or competitors; instead of this networking, SMEs need some external support to gain sustainable competitive performance in emerging economies (Songling et al., 2018). Therefore, researchers scrutinized that government support plays a vital role as an external resource in form of tax allowances, grants, loans, IT, social support, and financial capital so far (Storey & Tether, 1998) and also helps SMEs to gain sustainable competitive performance, supported by social network theory and resource-based view theory. Therefore, the social network theory (Burt, 2000) posits that a firm has strong networking ties with financial or governments institutions to compete competitor in turbulence market, while the resource-based view theory

(Barney, 1991) postulates that those firms which have unique, rare, and inimitable resources support SMEs to gain sustainable competitive performance in emerging economies.

Similarly, past literature speculated that government support directly influences on the firm performance via research and development, and internal and external networking net (Cano-Kollmann et al., 2016); a firm has strong government financial and political support but without networking system, it cannot compete in the emerging economies (Holl & Rama, 2012). Networking net with social peers exposes a small enterprise to create new ideas and different business new ideas for exploiting new investment opportunities (Aldrich & Zimmer, 1986). It is likely that during the process of searching new ideas or opportunities, top management calls for help to the political or government bodies because market is saturated from various ideas and opportunities; it helps the management for accurate decision (Adomako et al., 2018). Therefore, Jugend et al. (2018) suggest that beside government support, firm could not complete the networking system for gaining sustainable competitive performance, especially in emerging economies; government supports the firm via different sort of financial, informational, and technological support for competing the competitor in the turbulence market (Li & Atuahene-Gima, 2001). Hence, we posit from the past literature that government support links the relationship between the networking structure (density and centrality) sustainable performance (Fig. 1).

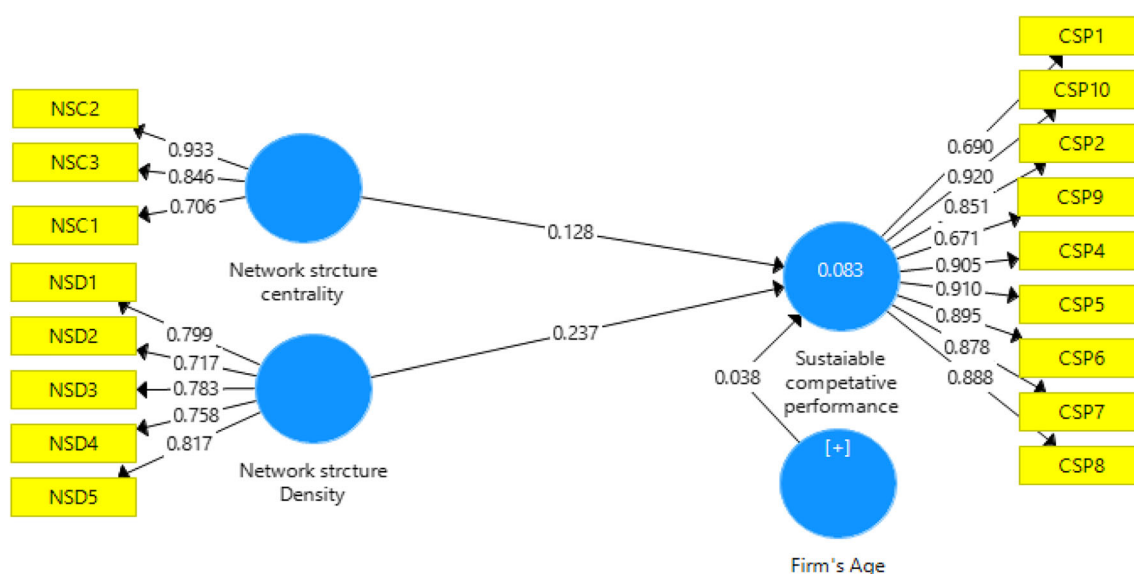


Fig. 3 Direct effect

Table 7 Government support impact on sustainable competitive performance

Hypotheses	Path	Beta	Mean	S. D	T statis	p value	R ²	f ²	Decision
H ₃	Firm age ->CSP	-0.02	0.127	0.055	2.372	0.258	0.092	0.01	Support
	GFS ->CSP	0.313	0.324	0.056	0.580	0.000		0.087	

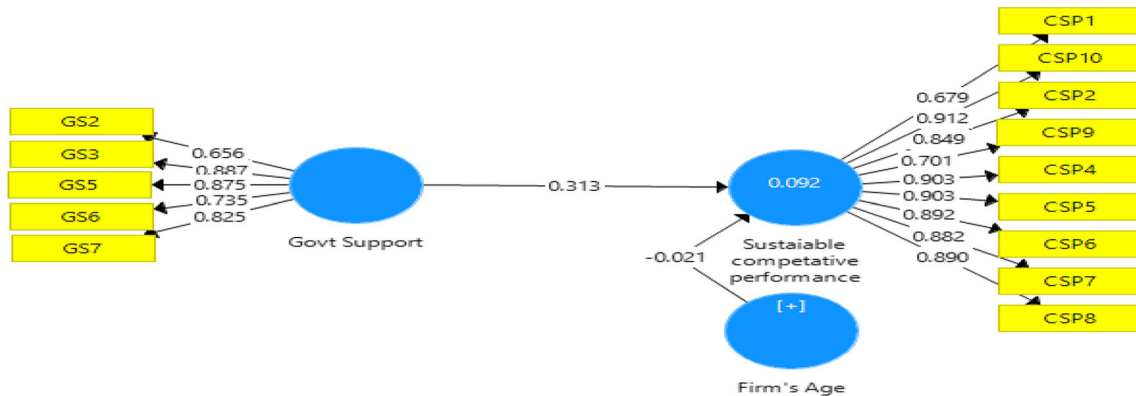


Fig. 4 Mediator and DV direct relation

H₄, H₅: Government financial support positively and significantly mediates the relationship between networking structure (density and centrality) and sustainable competitive advantage.

Methodology

Sample and data

This study relies on small and medium enterprises (SMEs) from manufacturing, trading, and servicing industries. But precisely, we targeted manufacturing small enterprises from two cities: Islamabad and Rawalpindi, because majority of medium enterprise head offices are located in these areas. Registered SME lists were acquired from Islamabad chamber of commerce and industry capital and Rawalpindi chamber of commerce and industry, verified from SMEDA.¹ Structured questionnaires were used to collect data from owners and top management because they are more responsible for strategic planning and decision-making (Tajeddini & Mueller, 2012). A total of 600 questionnaires were distributed among small and medium enterprises operating in these two big cities (Krejcie & Morgan, 1970). A total of 367 respondents fill the questionnaires but some of them filled incorrectly and many have missed the required information. However, totally 307 useable responses were considered for analysis and the rest were excluded as they were incorrectly filled. The response rate achieved in this research was 51.16%.

¹ Small and Medium Enterprises Development Authority

Measurement of variables

The current study consists of two independent variables (networking structure density and networking structure centrality), one of two dependent variables (sustainable competitive performance), and one mediator (government financial support) (Appendix). The *network structure density* postulates the average strength of relationship in SME networking system and measured through a 5-item scale developed by Antia and Frazier (2001). While, *networking structure centrality* explains the small enterprise’s position in the networking system; similarly, centrality is also measured through a 4-item scale adopted from Antia and Frazier (2001). Five-point Likert scales were given representing strongly disagree, 1, to strongly agree, 5.

Sustainable competitive performance We measured sustainable competitive performance through a 10-item scale adopted from Su et al. (2017). And SCP represents to express their feeling about firm performance before the last 3 years. A 5-point Likert scale was given representing extremely declined, 1, to extremely improved, 5.

Government financial support In the competitive market, a firm can get financing assistance from various institutions such as banks, financial institutions, internal funds, and angel investors. However, in many countries, governments have taken responsibility to support and to facilitate new and established small enterprises. Zamberi Ahmad and Xavier (2012) obtained the measures of financial sources available for ventures from a prior study. However, the items are a little modified according to the study and culture.

Table 8 Relation between networking structure (density and centrality) and sustainable competitive advantage

Hypothesis	Path	Beta	Mean	S. D	T statis	p value	R ²	f ²	Decision
H ₄	NSC ->GFS ->CSP	0.043	0.045	0.022	1.950	0.026	0.082	0.027	Support
H ₅	NSD ->GFS ->CSP	0.147	0.152	0.038	3.882	0.000		0.313	Support

Control variables

Literature has suggested a few control variables such as the size of firms, age of firms, and educational background in the research of SME performance (Khan et al., 2020). Considering the mentioned variables as control, the results of the structural model indicate that the size of firms has mixed result.

Descriptive statistics

The list of the participating firms is reported in Table 1.

This study measured mean scores (M), standard deviations (SDs), excess kurtosis, and skewness values, and all items of these scales showed consistent “reliability” and satisfactory results, as shown in Table 2.

Table 2 presents a comprehensive description of the descriptive statistical analysis showing the mean (M) and standard deviation (SD) scores, as well as the skewness and kurtosis values. The values of Table 2 reveal that the data present satisfactory results and show normal distribution.

Correlation coefficient (Table 3)

Pearson’s correlation of the current study has been tested through SPSS. The results indicate that there are positive and significant correlations among networking structure (density and centrality), and sustainable competitive performance such as network structure centrality ($r = 0.12, p < 0.01$) and

network structure density ($r = 0.24, p < 0.01$). Furthermore, government financial support has a positive and significant relation with sustainable competitive performance such as $r = 0.28, p < 0.01$. Similarly, we found that network structure density has a positive and significant relationship with government financial support ($r = 0.25, p < 0.01$), while network structure centrality also has a positive and significant correlation with government financial support ($r = 0.47, p < 0.01$). Hence, the overall results show that there are not such multicollinearity errors in our model because all values are < 0.80 .

Measurement model assessment

In the current study, we used PLS (SEM) 3.0 to evaluate outer (measurement model) and direct, indirect, and mediator analysis, and it was used to determine causal link in the theoretical model (Ringle et al., 2015). Furthermore, Smart PLS is very essential for model configuration approach in testing the reflective measurement model. Therefore, we explain that all constructs explain more than 50% of the indicator variance (Table 4). Hence, we know from the results that our model is fit (Hair et al., 2019).

After model fitness, the next step is to check model composite reliability and validity (Hair et al., 2019). Higher values generally show higher level of reliability, so our results indicate that every construct has a greater than 0.70 reliability value (Table 4) which is acceptable, as suggested by Hu and Bentler (1999). While, convergent validity explains the construct converge variance of its item. Therefore, AVE acceptable

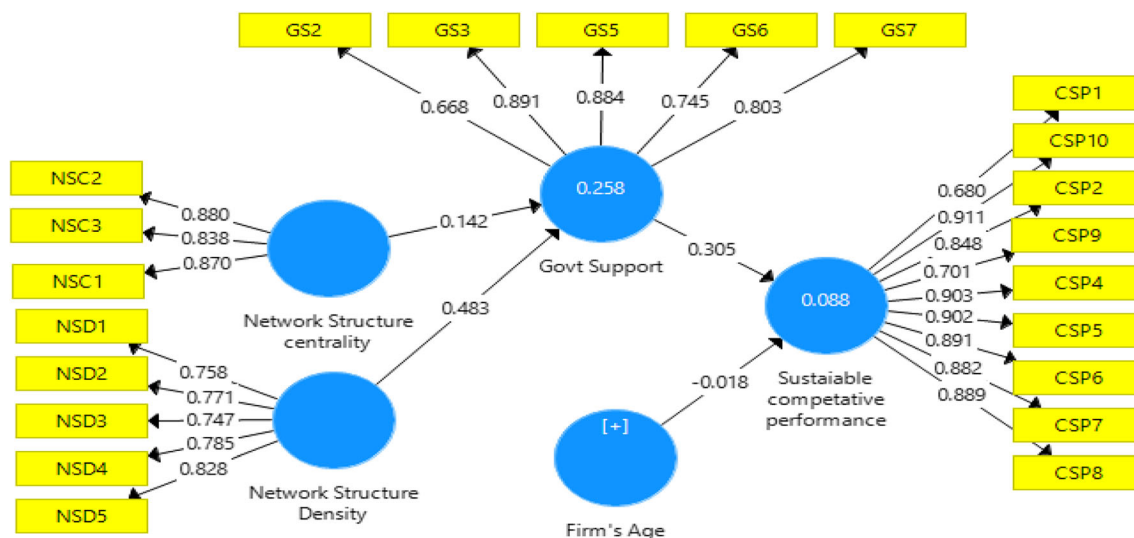


Fig. 5 Mediation

range is greater than 0.50 (Hair et al., 2019). Hence, our study AVE results explain that all construct has greater than 0.50 (Table 4). Our results postulate that discriminant validity is also in the acceptable range (0.65 to 0.85) because all constructs have greater than 0.70 values (Table 5). Similarly, in Fig. 2, every construct item has reliability and convergent validity.

Direct effect and hypothesis testing

The next step is evaluating PLS structural equation model (SEM). Structural model examines the inner model justification of direct relation among the latent constructs and comprises path coefficient (β) and t value. Hence, our results show that network structure density has a positive and significant relation with sustainable competitive performance ($\beta = 24$, $p = 0.00$) while centrality has an insignificant relation with sustainable competitive performance ($\beta = 13$, $p = 0.06$) (see Fig. 3 and Table 6). So, based on the results, we accept H_2 and reject H_1 .

Similarly, our results explain that mediator (government support) has a positive and significant relation with sustainable competitive performance ($\beta = 0.313$, $p < 0.01$); hence, the results show that H_3 is supported, and inferred that government support has a positive impact on sustainable competitive performance (Table 7; Fig. 4).

Furthermore, during mediation, our results postulate that government financial support significantly mediates the relation between network structure density and sustainable competitive performance ($\beta = 0.15$, $p < 0.00$), while it also mediates the relation between network structure centrality and sustainable competitive performance ($\beta = 0.043$, $p = 0.026$). Hence, H_4 and H_5 are accepted. It is inferred that government financial support positively and significantly mediates the relation between networking structure (density and centrality) and sustainable competitive advantage (Table 8; Fig. 5).

Discussion and conclusion

The current study examines the influence of networking structure on sustainable competitive performance in Pakistani SMEs, if government financial support matters in this relation. Many researchers have conducted research on networking structure and firm performance but the role of sustainable competitive performance has been ignored especially in manufacturing sectors because Pakistan's GDP is significantly effected through manufacturing sector (Hassan et al., 2017). Furthermore, the current study contributes to existing literature by collecting evidence from small-medium enterprises' (SMEs') manufacturing sector. In very rare cases, the researchers examined the role of certain networking structure underpin with resource-based view theory (RBV) and social network theory. Our results contradict the research conducted by Kim and Lee (2018) on Korea small and medium convergence association, which found that all

networking structures have positively and significantly impacted SME success and this study discusses many of the similarities and differences below.

Even among the networking structure, results postulate that networking structure (density) has a positive and significant effect on sustainable competitive performance. Hence, this finding supports the past literature conducted by Kim and Lee (2018), Wang and Fang (2012), Naudé et al. (2014), Lee (2007), Tsai (2001), and Wang et al. (2015). It posits that if Pakistani's manufacturing sector small enterprises have a strong relation with ventures at local or international level, then it significantly contributes to SME performance. Hence, we support the argument that network structure density has a positive and significant effect on sustainable competitive performance in Pakistani manufacturing sector firm.

Furthermore, our results explain that networking structure centrality has an insignificant ($\beta = 0.13$, $p < 0.05$) effect on sustainable competitive performance. Hence, H_2 is not accepted. In addition, this research confirms the study conducted by Adomako et al. (2018) who summarized that if a firm has a large number of connection roots with international or national firms, sometimes this pool of connection creates barriers during target achievement in sustainable competitive market (Rodrigues, 2019). On the other side, several kinds of literature explain that network structure centrality has a strong and positive impact on firm performance; these studies were conducted in developed countries (Kim & Lee, 2018; Wang et al., 2015). Nevertheless, the current study is conducted in the developed country Pakistan which is the pool of challenges for managers and owners. Hence, as in the light of Rodrigues (2019), this study suggests that network structure centrality has an insignificant effect on sustainable competitive performance in Pakistan.

In addition, the results show that government financial support has a positive and significant ($\beta = 313$, $p < 0.01$) impact on sustainable competitive performance. Hence, H_3 is accepted and this is in confirmation with previous studies conducted by Doh and Kim (2014) and Wei and Liu (2015). So, our results postulate that a firm that has strong network ties with political and government bodies in the developing economies can give a higher sustainable competitive advantage as compared to those who have weak connection with government and political bodies (Fan et al., 2007). The current results scrutinized that if managers have strong ties with political and government bodies in developing country, they could enjoy high return rate and higher growth rate (Li et al., 2008). Finally, we suggest that government financial support has a significant positive effect on sustainable competitive performance in developing economies.

We found that government financial support positively and significantly supports the relation among network structure density, network centrality, and sustainable competitive performance in developing countries. This is in the line with Jugend et al. (2018) who posit that managers or owners who

have weak networking system could improve on behalf of government and political bodies and can gain their long-term goals in turbulence market. Government offers incentives, subsidies; and taxes, and their credit incentives can promote manager and owner networking ties towards achieving long-term goals (Adomako et al., 2018). Hence, it is suggested that if a firm has government financial incentives and subsidies, it strengthen in Pakistan the relationship between networking ties and competitive performance.

Practical implication

This research advocate several implications for managers, owners, policymakers, and responsible bodies to focus on local and international networking ties. The results of the study confirm that networking structure (density and centrality) ensures government financial support and can boost sustainable competitive performance. Therefore, the research delineates that if a firm has weak networking roots (density and centrality), it can be strong by government support such as credit or tax incentives and subsidies to gain sustainable competitive performance in developing economies. In Pakistani contacts, most small enterprises of manufacturing sector have lack of networking cluster with local or international firms; hence, government supports owners, policymakers, and managers of small enterprises to offer the creation of new networking clusters at national and international level for development of new products, new services, and technological adaption to survive in the turbulence market.

In addition, a few practical implications for top management and policymakers of SMEs who face big challenges regarding networking clusters are suggested; following our study results, it is recommended to build strong networking ties with government and political bodies. Top managers and owners of SMEs are recommended to spread his networking roots up to local and international level and also build a strong relation with political and government bodies because it helps to gain sustainable objective of firm. In emerging economies, our results recommended governments play a vital role to build networking clusters at international level in Pakistan, because board of director of Pakistan's firm has no such strong position to create networking ties.

Moreover, this research strongly recommends the Small Medium Enterprises Development Authority (SMEDA) to modify their strategies and policies to encourage the relationship between foreign and local firms, for instance CPEC (China Pakistan Economic Corridor) to launch its operation very soon. This trade route will result in massive transactions in international markets. Therefore, SMEDA and government need to keep the SMEs ready for this opportunity (e.g., CPEC) to get benefits of international technology, international finance, international experience, and networking. This study does not only encourage SMEs and policymakers in the emerging

market, but also gives equal weight to the importance of certain international resources and capabilities in other countries.

Limitation and future direction

The current study is not free from limitation because it has significant implication in current era but still it has several limitations. The current study was conducted in a single emerging country, Pakistan, that may not be deemed fit to whole representative of emerging countries. Hence, more evidence can be collected from emerging and developed economies because every country has different categories of subsidies and incentives for top management and policymaker of a firm, which can affect the top management networking clusters with international and national firms. In the current study, we just targeted small enterprises, but in future, we recommended testing the model in a startup venture, because small venture faces a lot of barriers regarding networking clustered in emerging economies. In future, the researcher can extend the study through collecting cross-sectional data from Islamic and non-Islamic emerging economies because these results must clarify the small venture challenges.

Conclusion

This study examines the effect of networking clustered (density and centrality) on sustainable competitive performance in Pakistani manufacturing sector SMEs, and does government financial support matter. In emerging economies, the top management and owners have the capability to connect their roots at national or international level firm, but they have lack of government support; therefore, we conduct the study. The research is based on the resource base view (RBV) theory, where the role of network structure on SCP and mediating role of government financial support were tested. For fruitful results, we collected data through structured questionnaires from responsible bodies (top managers and policymakers). After analyzing through Smart PLS, it was found that network structure density had a positive and significant effect on SCP but centrality, without any external support, did not have a significant impact on SCP in Pakistani contests. While government financial support had strong positive support between centrality and sustainable competitive performance, further, government financial support had strong positive support between network structure density and SCP. In addition, our results contradict the study conducted by Kim and Lee (2018) and strongly support that of Hassan et al. (2017). This study recommended many implications for government, top managers, financial institution, and SMEDA. Hence, many implications for government that encourage SME top management and owners to build a strong network clustered with local and international level are suggested because China-Pakistan economic corridor (CPEC) is going to launch its operation shortly.

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Author contribution Rizwan Ullah Khan developed the model and wrote the original draft. Mohammed Ahmed and Mohammad Khamis Alshamsi reviewed the paper and made necessary contribution, e.g., supervised the

paper. Makwan Jameel and Qaisar Iqbal helped in data collection and analysis, while Arshad Mehmood and Yashar Salamzadeh proofread the paper.

Declarations

Conflict of interest The authors declare no competing interests.

Appendix

Name	S/no	Items scales	Published
Government financial support	1	In my country, government financial policies (e.g., public procurement) consistently favor new firms.	Zamberi Ahmad and Xavier (2012).
	2	In my country, the support for new and growing firms is a high priority for policy at the national government level.	
	3	In my country, the financial support for new and growing firms is a high priority for policy at the local government level.	
	4	In my country, new firms can get most of the required permits and licenses in about a week.	
	5	In my country, the amount of taxes is NOT a burden for new and growing firms.	
	6	In my country, taxes and other government regulations are applied to new and growing firms in a predictable and consistent way.	
	7	In my country, coping with government bureaucracy, regulations, and licensing requirements is not unduly difficult for new and growing firms	

Name	S/no	Items scales	Published
Network structure density	1	Relations among SMEDA members are very close.	(Antia & Frazier, 2001)
	2	SMEDA members frequently communicate with each other.	
	3	SMEDA members frequently discuss common problems.	
	4	There is very much interaction among SMEDA members through the various gatherings.	
	5	SMEDA members have extremely close ties.	

Name	S/no	Items scales	Published
Network structure centrality	1	Our company is a central component in the SMEDA network.	(Antia & Frazier, 2001).
	2	Our company is very central to the SMEDA network.	
	3	Our company is very active in the SMEDA network.	
	4	Our company has closed relationship with SMEDA members.	

Name	S/no	Items scales	Published
Sustainable competitive performance	1	Return on investment (ROI)	Su et al. (2017).
	2	Profits as a percentage of sales	
	3	Decreasing product or service delivery cycle time	
	4	Rapid response to market demand	
	5	Rapid confirmation of customer orders	
	6	Increasing customer satisfaction	
	7	In profit growth rates	
	8	In reducing operating costs	
	9	Providing better product and service quality	
	10	Increasing our market share	

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