THE EFFECTIVENESS OF SUPPORT POLICIES FOR SMES IN PAKISTAN: A STUDY OF KARACHI BASED SMES

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Abstract

Pakistan's economy is based on SMEs and there is a strong realization of the importance of such enterprises in the country. The support systems for the SMEs are in place in Pakistan for years. However, there is a general perception that these systems are inadequate. Hence, effectiveness of the support systems needs to be evaluated by gauging the satisfaction level of entrepreneurs as no significant research has been conducted in this area in the country.

This research is descriptive-cum explanatory in nature. A mixed of sampling technique have been used to have a representative sample size from 2,463 registered SMEs with the four industrial districts of Karachi. The survey of the population has been carried out with a five point Likert scale to gauge the satisfactory level of the entrepreneurs for the support policies available to them. The result of this research reveals that the satisfaction level of SMEs' entrepreneurs is low.

Based on the findings of this research, areas of the existing support policies can be improved to make SMEs more productive.

Keywords: Small and Medium Enterprises, Support Systems, Socio-economic Development, Entrepreneurship
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Introduction

In the recent years, small and medium enterprises (SMEs) have received much attention of policy makers and researchers. SMEs have been viewed as an important means for achieving economic development through job creation and accelerating the pace of economic activities in many countries of the world (Kongolo, 2010). In the developed countries, they are considered as the facilitator for maintaining the momentum of industrial development through change and innovation by involving human capital for productive engagement. As Schumpeter (1947)observed that the entrepreneurs are the driving force for creating change and innovation in an economy. Despite the fact that SMEs consist of the majority of enterprises and share substantial percentage of GDPs and in employment in the developing and developed countries, they lag behind the large enterprises and seek support of governments for their operations and growth.

Nevertheless, SMEs are considered to be the engines of prosperity for the large majority of people in the developing, emerging and developed countries alike. The basis of this consideration is that the prosperity of a nation is linked to its overall social development with a focus on disadvantaged groups (UN 1995). The USA and other developed countries established various policies, acts and authorities to support and facilitate small businesses in their countries.[1] On the other hand, in the developing countries, the 'trickle down' economic development model remained popular until the late 1980s but had little success in delivering sustained development(Derby, 2009). The failure of "trickle down" has given way to the participatory development model which advocates the inclusion of all segments of society into

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1- The USA established the SBA in 1953 and various other supporting small business acts and amendments, such as: the Small Business Act; the Small Business Investment Act of 1958; and major small business policies enacted and applied from 1977 to 2001 in the USA See for detail the chapter "Entrepreneurship and Small Business Policy from Carter to Clinton" by Linda Le in the book "Public Policy in an Entrepreneurial Economy: creating the conditions for business growth" edited by , Acs and Stough

economic activities (Makumbe, 1996). For the proliferation of SMEs with well regulated and helpful support systems, the developing countries have the potential to enhance the effectiveness of the participatory development model. The examples of Taiwan and China, where 97 to 99% firms are SMEs, are much relevant here as these two countries are pre-dominantly SME-based economies. At the same time, Pakistan shares many common characteristics with Taiwan and China, such as: the three are Asian countries and they have the legacies of monarchies/feudalism and colonial past. Besides, they also got their independence as a democratic country in the late 1940s and have a large SME population. Taiwan has achieved the status of an industrialized advanced country (IAC), while China is attaining the position of newly industrialized country (NIC). Yet Pakistan is still struggling to get on the trajectory to development.

Given in the above backdrop, this study investigates the effectiveness level of the support systems available to formally established SMEs' entrepreneurs in Pakistan. Knowing the answer of the questions raised in this research is also important as gap of knowledge exists in this emerging field of entrepreneurship in the country.

The Paper comprises of six sections. Section one introduces the study while section two includes, research problem, research question and objective of the study. Section three is literature review on the subject and section four describes the research methodology applied while section five includes data analysis and findings and section six is on discussion and conclusion of the study.

Research problem, question, and objective

As discussed above, economic development is very much linked to the people's involvement in entrepreneurial activities. Despite, in the recent years, some initiatives undertaken by the government of Pakistan to support SMEs through small medium enterprise development authority (SMEDA)[2] and other agencies, the

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2- SMEDA was established in 1998 under the Ministry of Industries, Government of Pakistan as a facilitative body to give support to the SMEs and promote their interest.

results of SME performances are not satisfactory (Berry, 1998). Bhutta, Rana and Asad (2007) have observed that the performance of SME sector in Pakistan is still not up to the mark. They are of the view that the agencies formed and the policy interventions put in place to facilitate SMEs are not bearing fruits. Hence, SMEs need supportive environment to help them become more productive to achieve the goal of improved socio-economic condition of the population in Pakistan (SME Business Support Fund, 2011). Though, the support environment to the SMEs is considered important in Pakistan, it is imperative to find the answers of the question: whether sufficient supportive environment is available to the SMEs in Pakistan to facilitate reaching their potentials? The answer to this question will be sought with an objective to evaluate the satisfaction levels of the SMEs' entrepreneurs for the available support systems in the country.

Theoretical grounding

In Pakistan, SMEDA (2007) defines SMEs on the criteria of employment and investment. The higher limit of employment for the small enterprises is 99 persons and paid up capital not exceeding 20 million ($2.36 million)[3], while medium enterprises' maximum limit of employment is 250 persons with the higher limit of an investment is Rs. 25 million ($2.917 million).

Generally, the success of a small enterprise is that it starts small but grows gradually and becomes large and productive (Hart, 2003). A different view of the explanation of small enterprises comes from Linda Le; she observes that "small enterprises are businesses that are not novel in their conception and are not quickly expanding in size or market influence. These enterprises do not radically alter, or replace the industries in which they operate, but can make incremental advancements and changes to their industries by building on existing market structures" (Le, 2008 p30). There could well be a debate on Le's articulation over whether small enterprises can be 'novel' or not in their conception, but there can be little argument that small enterprises have an important role in the economic activities of a society (Kongolo, 2010); further they are also promoters of equitable market

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3-$ 1= 84.7282 PKR

representation for disadvantaged groups. At the same time, SMEs themselves need support and a favorable state policy to survive and grow. As in 1953 even in the developed country like USA, the Small Business Administration (SBA) was established with a purpose to "aid, counsel, assist and protect, insofar as possible, the interests of small business concerns while also ensuring that small business received a 'fair portion' of government contracts"[4] (Le, 2008 p31). In the context of developing countries, UN agencies and charity foundations like Ford Foundation provided financial and technical support to the Asian and Latin American countries in 1950s to make small enterprises more productive[5](Levitski, 1996). The different views presented by Hart (2003) and Le (2008) reflect the productive and non productive types of entrepreneurship respectively.

The challenges faced by the small and medium firms are of almost the same nature both in the developed and developing countries across the world. Generally, they are deficient in having updated technology, modern machineries, proper management systems and supportive regulatory environment. However, these weaknesses of SMEs are generally miss-perceived for their sizes. On the basis of this assumption, the SMEs further face difficulties in procuring finances and quality human resources (Chaminade and Vang, 2007). As a result, SMEs further lack qualified human resources, relatively poor managerial skills, and face difficulties in accessing strategic information. While all these are considered to be the important ingredients for a firm to become more innovative in their operations and development. Further due to the late beneficiaries of the technological breakthrough they become the follower of the large enterprises even in the indigenous and emerging market (Levy, 1994).

4- The USA established the SBA in 1953 and various other supporting small business acts and amendments, such as: the Small Business Act; the Small Business Investment Act of 1958; and major small business policies enacted and applied from 1977 to 2001 in the USA. See for detail the chapter "Entrepreneurship and Small Business Policy from Carter to Clinton" by Linda Le in the book "Public Policy in an Entrepreneurial Economy: creating the conditions for business growth" edited by , Acs and Stough.
5- Ford Foundation was the first ever charity foundation led by a corporate organization extended technical and financial support to the small indigenous enterprises in South Asia and Latin America

The realization of these short comings by the international support agencies and governments in various countries has led to create and expand support mechanism for the SMEs. The support to SMEs by the donor agencies and governments were with an objective to promote indigenous entrepreneurship to enable the local people to get the benefit of the economic development in the country and also for mainstreaming economic activities. For the technical support, the UN agencies sent their experts to assist SMEs' development to the developing countries in 1950's and after. In the same period the first major financial grant (for five years) was given to the Stanford Research Institute by the Ford Foundation to analyze the policies and recommend the suitable programs in Latin American and Asian countries for the promotion of small enterprises. As a result of this five year grant "Indian model" was recommended by the Stanford researchers. This model was basically a set of recommendations to provide support to the Indian government in their small enterprises support and development in India. This was the start of support provision to small enterprises (Levitski, 1996). However, the support and helping SMEs have been, some time, seen as pampering the small firms and making them stagnant and more dependent on the subsidies from the government or support agencies[6].

In the Pakistani context, SMEDA and SME Banks in 1998, and a number of international agencies/organizations such as WB, ADB, ILO and the UNDP have begun support initiatives in the SME sector within the last ten years (Bhutta, Rana & Asad, 2007).

It is important to understand that, ceteris paribus, the better the support systems available to small enterprises more will be effectiveness of SMEs in creating economic opportunities in a society. As Acs (2008; 17) asks "How can policy makers maintain and accelerate the continued transition towards a more entrepreneurial society?" This question has been raised in an entrepreneurial society like the

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6- See Sandesara (1982) and Kashyap (1986) who are among the economists who critically reviewed the Indian Small Industries Program.

USA and other industrialized countries. In a not so-entrepreneurial society like Pakistan, the question can be rephrased as "how can policy makers start a true transition from agrarian to a productive entrepreneurial and innovative society?" A possible answer to this question can be – by placing a better policy framework and physical support systems to the small enterprises to make them more productive (Rahman 2010 p12).

Scholars in Pakistan have found that the trade was regulated in a way that kept the small firms in disadvantaged positions and allowed large firms to progress and grow by providing easy accessibility to the trade licenses, official exchange rates for imports and tariff (Bari, Cheema and Haque, 2005). They further observed that along with labor, taxation and trade, access to credit facilities is also a main area of concern and constraint for the SMEs' growth in the country. Rahman (2010) found that the entrepreneurs of SMEs are largely dissatisfied for the support provided by the government irrespective of the size and age of the SMEs in Pakistan.

Conceptual framework
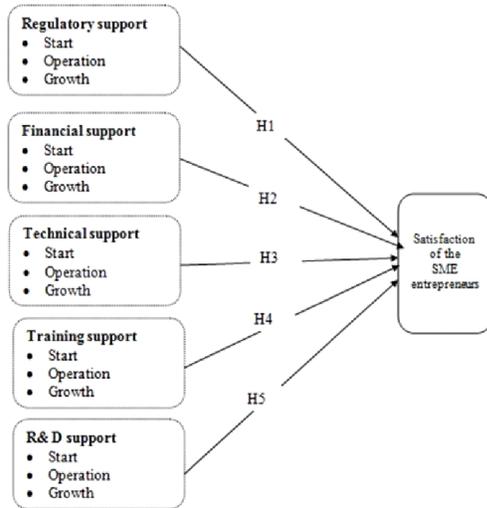
Hypothesis formulation

In the given background, five hypothesis, based on the five variables selected for this research, are being formulated for testing to reach the answers to the research questions.

Hypothesis-1: Regulatory support

Roomi and Hussain (1998) identified government regulation as a factor hindering SME growth and causing failure. On the other hand import substitution strategies also put the SMEs on the disadvantaged positions, because of their size and for their more domestic targeted products. rebates. Ivy (1997) in Slovakia, Stevenson (1998) in Turkey, Pope (2001) in Europe and Kiggundu (2002) in Africa found that the unfavorable institutional/regulatory environment is often accompanied by the added expenses of corruption and bribery. Realizing the hindrances of bureaucratic intervention in the name of government regulations during the registration process, in Vietnam, authorities have standardized the business registration process by establishing a system of online registration (Nguyen et.al, 2009). In Pakistani context a recent comparative study of the SMEs located at different places of SMEs in Karachi revealed that the satisfaction level of the SME owners of all kinds and ages for the various kinds of support is low (Rahman 2010). Hence a hypothesis for further testing the satisfaction level of the SME entrepreneurs, specifically, on the regulatory systems available to them is being formulated as follows:

H1a: The SMEs' entrepreneurs are satisfied with the 'Regulatory Support' in start of SMEs available to them in Pakistan

H1b: The SMEs' entrepreneurs are satisfied with the 'Regulatory Support' in operations of   SMEs available to them in Pakistan

H1c: The SMEs' entrepreneurs are satisfied with the 'Regulatory Support' in growth of SMEs available to them in Pakistan

Hypothesis-2: Financial Support

Levy (1994) observed in their paper presented to the World Bank Conference that along with management skills, research and development also lacks in the regular supply of finances in the developing countries. As a result, they have lower productivity and lack of access to the newly available market. ILO (2002) claims that the lack of access to institutional financing is a major obstacle for the development of SMEs in Pakistan. Ngwuonugu (2005), found lack of access to credit and lack of venture capital are responsible factors for the weak growth and development of SMEs in Nigeria. Benzing, Chu, and McGee (2007) consider limited access to financial capital as important problems faced by the SMEs in developing and transitional economies.In the Pakistani context, Bari, Cheema and Haque (2005) in their study found that along with labor, taxation and trade, access to credit facilities is also a main area of concern and constraint for the SMEs' growth in Pakistan. They further observed that lack of access to credit is a 'binding constrains' not only on the SME's operation but also hinders growth and expansion. Hence a hypothesis for further testing the satisfaction level of the SME entrepreneurs, specifically, on the financial support to them is being formulated as follows:

H2a: The SMEs' entrepreneurs are satisfied with the 'Financial Support' in start of SMEs available to them in Pakistan

H2b: The SMEs' entrepreneurs are satisfied with the 'Financial Support' in operations of SMEs available to them in Pakistan

H2c: The SMEs' entrepreneurs are satisfied with the 'Financial Support' in growth of SMEs available to them in Pakistan

Hypothesis-3: Technical support

Ngwuonugu (2005) attributed the hindrances to growth and development of the Nigerian SMEs to the lack of SMEs workers technological knowledge and poor access to modern technology to SMEs in general. Ganesh and Mehta (2010) while conducting research on success of entrepreneur resource planning in India found that technology and end-user related critical success factors of the large enterprise also have relationship with the successful ERP implementation at Indian SMEs. Hence a hypothesis for further testing the satisfaction level of the SME entrepreneurs, specifically, on the 'technical support' available to them is being formulated as follows:

H3a: The SMEs' entrepreneurs are satisfied with the 'Technical Support' in start of SMEs available to them in Pakistan

H3b: The SMEs' entrepreneurs are satisfied with the 'Technical Support' in operations of SMEs available to them in Pakistan

H3c: The SMEs' entrepreneurs are satisfied with the 'Technical Support' in growth of SMEs available to them in Pakistan.

Hypothesis 4: Training support

While researching factors affecting the growth and development of Nigerian SMEs, Ngwuonugu (2005) found the responsible factor for the growth and development of SMEs in the country are the low level of education and training. In Pakistan, human resource constrains are for all sizes of firms because of low literacy rate and insufficient numbers of vocational/technical training institutions in the public and private sector (Bari, Cheema, and Haque 2005). They further observed that "as manufacturing firm expands; the lack of trained higher management and qualified technicians emerges as a binding constraint – a natural consequence of the

increased need for professional management" (p33). Hence a hypothesis for further testing the satisfaction level of the SME entrepreneurs, specifically, on the training support available to them can be formulated as follows:

H4a: The SMEs' entrepreneurs are satisfied with the 'Training Support' in start of SMEs available to them in Pakistan

H4b: The SMEs' entrepreneurs are satisfied with the 'Training Support' in operations of   SMEs available to them in Pakistan

H4c: The SMEs' entrepreneurs are satisfied with the 'Training Support' in growth of SMEs available to them in Pakistan

Hypothesis 5: Research and Development

Levy (1994) observed in his paper presented to the World Bank conference that along with lack of management skills, insufficient research and development the field of small and medium enterprises hinders the growth and development of the SMEs in the developing countries. It is widely recognized that government policies have a strong bearing on the effectiveness of the role of universities and research institutions in the process of innovation. However, the role which government plays in promoting SMEs in Pakistan in this regard is insufficient (Majid et al., 2000).Hence a hypothesis for further testing, the satisfaction level of the SME entrepreneurs, on 'research and development' systems available to them is being formulated as follows:

H5a: The SMEs' entrepreneurs are satisfied with the 'Research and Development' in start of SMEs available to them in Pakistan

H5b: The SMEs' entrepreneurs are satisfied with the 'Research and Development' in operations of SMEs available to them in Pakistan

H5c: The SMEs' entrepreneurs are satisfied with the 'Research and Development' in growth of SMEs available to them in Pakistan

Methodology

This research is empirically interpretative in nature and data has been collected by survey method using the five point Likert Scale. The 2,131 SMEs (target population) have been identified from the universe of the population of 2,463 registered members[7] of thefour trade associations from the five industrial zones in Karachi[8], Pakistan. The sample size is 214 SMEs derived from the target population accumulating @ 10% from each zone (Annexure 1). The sample size of 214 is justified for this research as size of 30/variable is required for five variables used in this research. Accordingly, against the minimum 150 sample size, the number of responses is 183, which is sufficient for the sample size requirement.

The type of sampling is random through quota fixation in all the four industrial zones in Karachi. Quota sampling has been opted as a first step due to the limitation of this study as the population is scattered in the four industrial zones having different number of SMEs in each zone. The sampling technique involves two steps; first quota allocation and then systematic random sampling. The population frame for the four industrial zones was provided by the respective industrial zones. Subsequently required random numbers for the four sample frames were generated separately through excel for selecting the required samples (Annexure 1). This mixed methodology for this research has been applied to ensure the proportionate participation of the enterprises from each zone and then systemic random sampling ensures the equal representation of each subject. In the given circumstances, the above method is ideal for the balanced participations of each zone.

7-All the four trade and industries' associations update their lists of members every years. For this research the lists of 2010 have been considered.

8- SITE, North Karachi Association of Trade and Industry, Korangi Association of Trade and Industries, LandhiAssociation of Trade& Industry and Federal B Area Association of Trade and Industry

The data collected through a questionnaire which was derived from the relevant literature. Various aspects of the support policies of SMEs have been evaluated by Ngwuonugu (2005); Benzing, Chu and McGee (2007); Bari, Cheema and Haque, (2005). Questionnaire of this study has been adapted from the previous researches. The questionnaire has five sections: 'Regulatory Support', 'Financial Support', 'Technical Support', 'Training Support', and 'Research & Development'. It comprised of five independent variables and each independent variable has three constructs in the context of start, operation and growth: On the other hand dependent variable is 'Satisfaction Levels' of the entrepreneurs.

Findings and results

Prior to testing the five hypotheses, reliability of the constructs, and normality of the data were ascertained and derived hypotheses were tested through regression.

Normality of constructs

The normality of each construct was also ascertained through Skewness and Kurtosis which were within acceptable range of ± 3.0 (Kline 2005 and Park, 2008) as depicted in (Table-1, Annexure 2)

Reliability of the constructs

For this study, the reliabilities of each construct were measured separately as shown in Table 2 (Annexure 3). The calculated Cronbach's Alpha for all the constructs are higher than 0. 89 and hence were within the acceptable range of at least 0.70 (Nunnally and Bernstein,1994; Zahra and George, 2002)

Multivariate Outliers Mahalanobis Distance (D^2).

Multivariate outliers were identified for all the cases through Malanobis Distance (D2). Multivariate outlier is the distance between

a set of scores for each case and the sample means for all the variables. All the cases with low values of $D^2(p<.001)$ are multivariate outliers and had to be dropped (Bhardwaj, 2010; Hair Jr., *et al.*, 2007). In this case all of them were within the prescribed range.

Multicollinearity of the Independent Variables

Multicollinearity of the independent variables was assessed through Eigen Values. This diagnosis helps in identifying numbers of distinct dimensions in the independent variables. In case several values are closer to zero, it is an indication of very high correlation (UCLA, 2014). In this case the lowest the highest value 0.197, and the lowest was 0.42. All the condition indices should be less than 15 (UCLA, 2014). The condition indices in this study were as lowest for regulatory policy $= 5.304< 15$, and highest was for research development $11.674<15$, which again revalidates that the data does not have Multicollinearity issue. None of the tolerance values were close to Zero indicating no issue with Multicollinearity. Large VIF values (greater than 10) indicate higher level of collinearity (UCLA, 2014). The highest VIF was for financial support $1.448 < 10$, and the lowest was for research and development $1.010< 10$.

Hypothesis testing

Prior to testing the hypotheses, normality of data was ascertained through skewness and Kurtosis analyses and by converting to all the cases to standardized Z-score. Subsequently multivariate analysis was carried out through Mahalanobis distance. Subsequently multiconlinery of the data were tested. These tests confirms the normality of data.

Hypothesis-1

Hypothesis one postulates that Pakistan's entrepreneur are satisfied with the development of SMEs in the context of the regulatory

policy. Multiple regression analysis was used to test entrepreneur satisfaction level with the government regulatory policy at three stages which are (1) Start (2) Operation, and (3) growth.

Assumptions of linearity, normal distributed errors, and uncorrelated errors were checked and met. For testing nonlinearity observed and predicted values were plotted. The output showed that the points were distributed around a diagonal or horizontal line, with none of the graphs showing bowed pattern (Decision 411, forecasting, 2014). The standardized values for all the cases are within acceptable range of ± 3.0 (Kline 2005 and Park, 2008) confirming the normality of the data. The Durbin Watson value is 1.957, which is in the prescribed range of 0 to 4 (University of Texas, 2014) and indicates no serious violation of independence and the errors associated with one observation to any other observation (UCLA, 2014).The summarized results are presented in Table-3 (Annexure 4).

The results of the regression indicate that government regulatory policy at : (1) Start (M= 2.150, SD=0.971; (2) Operation (M= 2.09, SD=0.912, and (3) Growth (M= 1.98, SD=0.880 explain 16.3% of the variance towards entrepreneur satisfaction towards SME development, (M=2.098, SD=1.021), (R^2=.163, F (3,179) =12.842, p<.05), which according to Cohen(1998) is a small effect. It was, also found that government financial support at growth stage is a stronger predictor of satisfaction towards development of SME (ß = .345, p<.05), while other two stages have no significant relationships.

Hypothesis-2

Hypothesis two postulates that Pakistan's entrepreneurs are satisfied with the development of SME in the context of the governmental financial assistance. Multiple regression analysis was used to test the entrepreneur satisfaction level with the governmental technical assistance at three stages which are (1) Start (2) Operation, and (3) growth.

Assumptions of linearity, normal distributed errors, and uncorrelated errors were checked and met. For testing nonlinearity observed and predicted values were plotted. The output showed that the points were distributed around a diagonal or horizontal line, with none of the graphs showing bowed pattern (Decision 411, forecasting, 2014). The standardized values for all the cases are within acceptable range of ± 3.0 (Kline 2005 and Park, 2008) confirming the normality of the data. The Durbin Watson value is 1.966, which is in the prescribed range of 0 to 4 (UCLA, 2014) and indicates no serious violation of independence and the errors associated with one observation to any other observation (UCLA, 2014).
The summarized results are presented in Table-4 (Annexure 5).

The results of the regression indicate that governmental financial support at (1) Start (M= 2.700, SD=1.106 (2) Operation (M= 2.54, SD=1.036, and (3) Growth (M= 2.53, SD= 1.042 explain 10.8% of the variance towards entrepreneur satisfaction towards SME development in the context of financial support (M=2.098, SD= 0.799, (R^2=.10.8, F (3,179) =8.635, p<.05), which according to Cohen(1998) is a small effect. It was, also found that government financial support at growth stage is comparatively a stronger predictor of satisfaction towards development of SME (ß = .249, p<.05), while other two stages have no significant relationships.

Hypothesis-3

Hypothesis three postulates that Pakistan's entrepreneurs are satisfied with the development of SME in the context of the governmental technical support. Multiple regression analysis was used to test the entrepreneur satisfaction level with the governmental technical support at three stages which are (1) Start (2) Operation, and (3) growth. Assumptions of linearity, normal distributed errors, and uncorrelated errors were checked and met. For testing nonlinearity observed and predicted values were plotted. The output showed that the points were distributed around a diagonal or horizontal line, with

none of the graphs showing bowed pattern (Decision 411, forecasting, 2014). The standardized values for all the cases are within acceptable range of ± 3.0 (Kline 2005 and Park, 2008) confirming the normality of the data. The Durbin Watson value is 1.967, which is in the prescribed range of 0 to 4 (UCLA, 2014) and indicates no serious violation of independence and the errors associated with one observation to any other observation (UCLA, 2014). Table-5 (Annexure 6).

The results of the regression indicate that governmental technical support at (1) Start (M= 2.05, SD=0.76192) Operation (M= 2.06, SD=0.689, and (3) Growth (M= 2.07, SD= 0.719 explain 14.7% of the variance towards entrepreneur satisfaction towards SME development in the context of technical support (M=2.098, SD= 0.799, (R^2=.14.7, F (3,179) =11.43, p<..05), which according to Cohen (1998) is a small effect. It was, also found that government technical support at operation stage predicts higher satisfaction towards development of SME (ß = .259, p<.10), as compared to growth (ß = .218, p<.10), while at start stage the relationship was insignificant.

Hypothesis-4

Hypothesis four postulates that Pakistan's entrepreneurs are satisfied with the development of SME in the context of the governmental assistance towards training and development. Multiple regression analysis was used to test the entrepreneur satisfaction level with the governmental training and development support at three stages which are (1) Start (2) Operation, and   (3) growth. Assumptions of linearity, normal distributed errors, and uncorrelated errors were checked and met. For testing nonlinearity observed and predicted values were plotted. The output showed that the points were distributed around a diagonal or horizontal line, with none of the graphs showing bowed pattern (Decision 411, forecasting, 2014). The standardized values for all the cases are within acceptable range of ± 3.0 (Kline 2005 and Park, 2008) confirming the normality of the data. The Durbin Watson value is 1.931, which is in the prescribed

range of 0 to 4 (UCLA, 2014) and indicates no serious violation of independence and the errors associated with one observation to any other observation (UCLA, 2014). The summarized results are presented in Table-6 (Annexure 7).

The results of the regression indicate that Governmental support for providing training and development at (1) Start (M= 2.33, SD=0.985) (2) Operation (M= 2.30, SD=0.926, and (3) Growth (M= 2.310, SD= 0.918 explain 9.4% of the variance towards entrepreneur satisfaction towards training and development (M=2.098, SD= 0.799, (R^2=9.4% , F (3,179) =6.664, p<.05), which according to Cohen (1998) is a small effect. It was, also found that government training and development support at all the three stages were insignificant: at growth stages (ß = .161, p >.10), at operation stage (ß = 0.073, p>.10), while at start stage (ß = .0.092, p>.10).

Hypothesis-5

Hypothesis five postulates that Pakistan's entrepreneurs are satisfied with the development of SMEs in the context of the governmental assistance towards research and development. Multiple regression analysis was used to test the entrepreneur satisfaction level with the governmental training and development support at three stages which are (1) Start (2) Operation, and (3) growth. Assumptions of linearity, normal distributed errors, and uncorrelated errors were checked and met. For testing nonlinearity observed and predicted values were plotted. The output showed that the points were distributed around a diagonal or horizontal line, with none of the graphs showing bowed pattern (Decision 411, forecasting, 2014). The standardized values for all the cases are within acceptable range of ± 3.0 (Kline 2005 and Park, 2008) confirming the normality of the data. The Durbin Watson value is 1.844, which is in the prescribed range of 0 to 4 and indicates no serious violation of independence and the errors associated with one observation to any other observation

(UCLA, 2014).The summarized results are presented in Table-7 (Annexure 8).

The results of the regression indicate that the Governmental support for providing training development at (1) Start (M= 2.33, SD=0.985) (2) Operation (M= 2.30, SD=0.926, and (3) Growth (M= 2.310, SD= 0.918 explain 6.4% of the variance towards entrepreneur satisfaction towards training and development (M=2.098, SD= 0.799, (R^2=6.4%, F (3,179) =5.140, p<.05), which according to Cohen(1998) is a small effect. It was, also found that government training and development support at all the three stages were insignificant: at growth stages (ß = .310, p >.10), at operation stage (ß = -0.134, p>.10), while at start stage (ß = .0.107, p>.10).

Discussion and conclusion

Evidences from all over the world shows that the SMEs play a significant role in the economic growth and development of a country as these entities are a major source for creating and generating employment in both developing and the developed countries. Literature searched for this study reveals that the contribution of these enterprises would not be affective without the support of Government and other specialized sectors. Small and medium enterprises thus need Governmental support at all the three stages which are start, operation and growth. The available literature on the SMEs in general and particularly on developing countries shows that the SME entrepreneurs expect more support to them at all the stages of businesses.

Realizing the importance of SME, the Government of Pakistan established SMEDA in 1998 with the objective of providing support to these enterprises. However, the contribution of these enterprises was below than what was envisaged, and thus the entrepreneurs were not happy with the kind of support they expected from the government and other entities.

In order to have a deep understanding on the issue, the entrepreneurs' satisfaction level were measured in the context of regulatory policy, financial support, technical support, training program, and research and development. Subsequently, their (entrepreneurs) satisfaction level was also measured at three stages (introduction, growth and operation) for each of the above parameters.

The overall level of satisfaction for these five parameters were low and were in the following descending order (1) Regulatory Policy ($R^2 = 0.177$; Adjusted $R^2 = .163$, $P<.05$), (2) Financial support $R^2=(.123$, Adjusted $R^2=.108$, $F(3,179)= 8.635<.05$ (3) Training and Development ($R^2=.306$ Adjusted $R^2=.094$, $F(3,179)= 6.163<.05$) (5) Technical Assistance $R^2=.161$, Adjusted $R^2=.147$, $F(3,179)= 11.43<.05$ (5) (4) Research and Development($R^2=.282$ Adjusted $R^2=.064$, $F(3,179)= 5.140<.05$.

The above results show that the governmental agencies have to contribute more in all the above parameters in order to have growth and development of SME in the country. Moreover, the entrepreneurs would like to have better support of the government agencies at the introduction stages. However, for most of the parameters the government support is available at growth stages, which again need to be addressed by the concerned agencies in order to promote and develop SME in Pakistan.

Despite, this research is limited to the SMEs in one city of Pakistan which is Karachi, its results can be generalized all over Pakistan as Karachi is the biggest industrial city of the country which account for about 40% of the total SMES operating in Pakistan.

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Annexure 1

Sampling Frame

Four registered associations of trade and industries	Registered Members (Population)	No. of SMEs (Target population)	Sample drawn @ 10% of the quota of the target population	Questionnaire filled	Questionnaire filled accepted after cleansing
FB Area Association of Trade and Industries	212	198	20	19	18
North Karachi Association of Trade and Industries	632	608	61	52	50
Korangi Association of Trade and Industries (K ATI)	483	417	42	33	31
SITE Association of Trade and Industries	1087	908	91	86	84
Total	**2,463**	**2131**	**214**	**190** (89%)	**183** (85.5%)

Annexure 2
Table-1 (Descriptive statistics)

	Mean	Std. Dev	Skewness	Kurtosis
Reg. Policy	2.077	0.835	0.826	0.314
Fin. Support	2.579	0.955	0.334	-1.036
Tech, Assistance	2.062	0.659	1.398	3.091
Train. Program	2.313	0.880	0.935	0.016
Research & Dev.	1.903	0.941	0.222	-1.848
Satisfaction	2.098	0.799	0.604	0.200

Table-1, above shows that technical assistance (M=2.062, SD= .0659) has the highest skewness 1.389. The lowest skewness of 0.222 was found in research and development (M=1.903, SD= .941). On the other hand technical Assistance (M=2.062, SD= .0659) has also the highest Kurtosis of 3.091 and satisfaction (M=2.098, SD= .0799) has the lowest kurtosis of 0.200.

Annexure 3
Table-2 Reestablishing Reliabilities

Construct	Cronbach's Alpha	No Of Items	Mean	S.D
Reg. Policy	0.891	3	2.077	0.835
Fin. Support	0.887	3	2.579	0.955
Tech, Assistance	0.897	3	2.062	0.659
Train. Program	0.825	3	2.313	0.880
Research & Dev.	0.890	3	1.903	0.941
Satisfaction	N/A	1	2.098	0.799

Table-2, above shows that the reliably of all the constructs are within the acceptable range (0.825 to 0.891). The reliability of regulatory policy (α=.891, M=2077, SD=0.835) was the highest followed by research and development (α=.890, M=1.903, SD=0.941) and the least was training program (α=.825, M=2.313, SD=.880).

Annexure 4
Table-3 Regression summary (Regulatory Policy)

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.305	.146		8.962	.000
Start	.000	.095	.000	-.004	.997
Operation	.083	.122	.095	.682	.496
Growth	.313	.095	.345	3.291	.001

Annexure 5

Table-4 Regression Summary (Financial Support)

	Un standardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	1.355	.162		8.373	.000
Start	.066	.076	.092	.872	.384
Operation	.033	.111	.042	.293	.770
Growth	.191	.094	.249	2.035	.043
R^2=.123, Adjusted R^2=.108, $F_{(3,179)}$= 8.635<.05					

Annexure 6

Table-5 Regression Summary (Technical Assistance)

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	1.137	.180		6.313	.000
Start	-.077	.115	-.073	-.671	.503
Operation	.301	.165	.259	1.826	.070
Growth	.242	.131	.218	1.849	.066
R^2=.161, Adjusted R^2=.147, $F_{(3,179)}$= 11.43<.05					

Annexure 7

Table-6 Regression Summary (Training Program)

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.454	.161		9.047	.000
Introduction	.075	.093	.092	.806	.421
Operation	.063	.182	.073	.346	.730
Growth	.141	.164	.161	.857	.393
R^2=.306 Adjusted R^2=.094, $F_{(3,179)}$= 6.163<.05					

Annexure 8
Table-7 Regression Summary (Research and Development)

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.645	.129		12.709	.000
Introduction	.089	.274	.107	.325	.745
Operation	-.113	.400	-.134	-.282	.778
Growth	.262	.294	.310	.889	.375

R^2=.282 Adjusted R^2=.064, F(3,179)= 5.140<.05
http://people.duke.edu/~mau/testing.htm