

Training Needs of Small and Medium Enterprises: Findings from an Empirical Investigation

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Abstract

While small and medium sized enterprises (SMEs) are acknowledged by researchers and policy-makers alike as the major source of vitality in an economy, they are also found to be extremely vulnerable especially to the vagaries and turbulences of the external environment. It is therefore recognized by policy-makers in most countries that SMEs need special help for their survival and growth. Traditionally such help was offered by way of facilitating the external environment. Such facilitation will be effective only if the SMEs have the internal capabilities for taking advantage of the external facilitation. This is why the experiments with external facilitation have not met with much success especially in developing countries, where SMEs are inherently weaker than their counterparts in developed countries. Strengthening the internal capabilities of SMEs therefore has become a top priority nowadays and is positioned as an alternative or supplementary strategy for SME development. Training is recognized as an important tool for developing the internal capabilities of SMEs. However, research in the Western countries has shown that even though trainers, consultants and policy-makers consider training as an important tool for SME development, the SMEs themselves do not feel so. It is against this background that we launched a survey in Bangalore (India) to assess the training needs of SMEs, as perceived by themselves. This study is especially relevant as there are no other similar studies undertaken in India so far. The survey was conducted among 300 randomly selected SME units in Bangalore. The survey questionnaire enquired about the perceived need for training and the preferences for the topics, duration, timings, costs, training providers, etc. The findings show that the training-related attitudes and behaviour of SMEs are not very different from what is observed by the Western researchers. The overall finding of positive relationships of enterprise characteristics and the 'acquired' characteristics of entrepreneurs with the perception of training need suggests that training need perception is more a function of the developmental stage of the enterprise than the personal preferences of the entrepreneur. Specific findings of the study are discussed and their theoretical and practical implications are explained in the article.

Keywords

Small and medium enterprises (SMEs), training needs, training areas, factors influencing training needs perception, enterprise/entrepreneur demographics

Introduction

There is a growing recognition across the globe that small and medium enterprises (SMEs) have a catalytic role in the economic development of nations. In fact, they are considered to be the driving force behind the growth and vibrancy of any economy. The contributions of SMEs to employment generation, economic output, innovation in products/services, balanced regional development and

alleviation of poverty are being appreciated by governments as well as the civil societies. The role of SMEs in the economic development of nations is vital not only in the developing countries but also in the developed ones (OECD, 2004). Statistics from various countries also testify to the several contributions of SMEs to the economy. For example, SMEs in the UK account for more than 50 per cent of employment and nearly 50 per cent of turnover (DTI Statistical Bulletin, 1996). Moreover, it is

estimated that about 99 per cent of business units in the UK are small with an annual turnover of around 1,000 billion UK pounds (Jones, 2004), making it the most vital segment of the economy. Figures for other countries are not very different—it is 98 per cent for Taiwan (Ladzani & Van Vuuren, 2002), while the estimation for Ireland is that over 90 per cent of Irish firms are with less than 50 employees (McMahon & Murphy, 1999). Figures from the US reveal that small businesses contribute 90 per cent of all new jobs and 70 per cent of all new products and services; moreover, it is estimated that 97 per cent of all non-farming businesses in the US are small, accounting for 50 per cent of all business employment (Hisrich & O’Cinneide, 1996). In Australia, there are over 1.4 million SME units, which constitute 73 per cent of all business units and contribute 42 per cent of total employment and 46 per cent of GDP (Ergas & Orr, 2007).

In developing countries too, SMEs play a significant role in the economy. In fact, their share in employment is much higher in developing countries than in the developed ones. Data on the Indian economy show that there are about 30 million micro, small and medium enterprises (MSMEs) in the country, employing about 70 million people and accounting for 45 per cent of industrial output, 40 per cent of exports and about 70 per cent of employment (Manimala, 2002; MSME, 2010–2011). Proportion of SME employment in other developing countries is even higher. Indonesia, for example, has about 90 per cent of its employees in the SME sector, comprising about 48 million enterprises and constituting 99.8 per cent of the total industrial units in the country (Tambunan, 2008).

The literature on SMEs suggests that though the sector is characterized by a lot of flexibilities, it is also subject to several vulnerabilities. It is reported that even in the developed countries, a large proportion of SMEs—more than two-thirds according to some estimates—die in the first five years of start-up (Hisrich & O’Cinneide, 1996; MacMahon & Murphy, 1999). Obviously, these ventures are in need of support and assistance, a major tool for which is training. In fact, most of these SMEs are in a paradoxical situation of being in need for training and other kinds of assistance and not being able to recognize the need or payment for such services. It is against this context that a study on SMEs’ attitude towards training, especially their perception of their own training needs, was considered to be relevant and useful. Associating these perceptions with the demographic characteristics of the entrepreneur as well

as the enterprise was expected to lead to interesting theoretical propositions.

SMEs’ Attitudes towards Education and Training

Education and training of SMEs for improving their performance have become a top priority for governments in both the developed and developing countries of the world. This is because of the recognition that SMEs have a fairly large role in promoting innovation and employment and thereby stimulating the economy. While policy-makers recognize the central role of SMEs in stimulating the economy, they are also aware of their vulnerabilities. Among the many steps initiated for SME development, training has a pre-eminent position especially in stimulating enterprise growth. However, research findings even in the developed countries show that SMEs are hardly aware of their own training needs; neither do they adequately respond to the training initiatives and offers made by the universities or the government. There are a large number of research studies on the SME training initiatives of various governments and how most of them do not achieve the desired objectives (Al-Madhoun & Analoui, 2004; Chaston, Badger & Sadler-Smith, 1999; Davies, Hides & Powell, 2002; De Faoite, Henry, Johnston & Van der Sijde, 2004; Devins & Johnson, 2002; Dupray, 2001; Gulbro, Shonesy & Dreyfus, 2000; Ibrahim & Soufani, 2002; Joyce, McNulty & Woods, 1995; Ladzani & Van Vuuren, 2002; Lean, 1998; Massey, 2004; Morrison & Bergin-Seers, 2002; Patton & Marlow, 2002; Ram, 2000; Rosa, Scott & Gilbert, 1994; Simpson, Tuck & Bellamy, 2004; Smallbone, Supri & Baldock, 2000; Smith, Whittaker, Loan Clark & Boocock, 1999; Smith, Boocock, Loan-Clarke & Whittaker, 2002; Verdier, 1994; Westhead, 1998). In a recent study of 816 Taiwanese firms, it was found that the felt need for training is not as critical to training effectiveness as the alignment between the training needs and implementation (Chi, Wu & Lin, 2008). The issue is therefore more complex than it is generally considered to be. SMEs’ lack of awareness of their own training needs may not be a major problem so long as they align whatever training done with perceived needs.

Research findings on SME training in general confirm the perception that small firms undertake much less

training than larger firms. The British experience is documented in several studies (Blackburn & Hankinson, 1989; Cambridge Small Business Research Centre, 1992; Employment Department, 1994; Hoque & Bacon, 2008; Storey, 1994). Similar are the evidences from other countries like the USA (Gulbro *et al.*, 2000) and France (Dupray, 2001). The record of investments in education and training on the part of SMEs is notoriously poor (Dyson, 1990; Storey, 1994) and, as mentioned earlier, this is precisely why the governments and other agencies have taken initiatives that have targeted small firms for special attention (see, for example, Devins, Johnson & Sutherland, 2004b; Hoque & Bacon, 2008; Lee, 2006; Nijhof, 2004; Van den Berg, Meijers & Sprengers, 2006). After decades of government initiatives, it is still seen that SMEs do not appreciate the value of learning, and the owners/directors are reluctant to invest in training because the short-term costs of training are more apparent than the long-term benefits (Hillman, 1997). Since the owners/directors are the people who have executive control over training decisions in SMEs, many studies have investigated their attitude towards training, and it was found that though they exhibit a positive attitude towards training, they are not so keen in practice to undergo training or provide training to their employees. A large-sample survey of SMEs in the West Midlands region of the UK uncovered a 'paradox of training' (Hyland & Matlay, 1997), which showed a mismatch between the generally favourable stated attitudes of SME owners/directors

towards training, and their very poor record of actually providing training.

Among the several reasons for SME entrepreneurs' lack of interest in training programmes are the cost of programmes, the perceived ineffectiveness of training programmes, the entrepreneurs' overconfidence arising from past successes and their inability to leave their businesses to attend programmes. Of these, it is apparently the past successes that can provide the most legitimate excuse for the entrepreneur not to undertake training. However, empirical evidence shows that the majority of owners/directors are ill equipped to assess the dynamic market situations and lack skills to manage their financial or human resources for maximizing their economic output (Matlay, 2001). In other words, most entrepreneurs do not recognize the fact that many things have changed within and outside their companies necessitating the development of newer capabilities for themselves. On the other hand, there seems to be some justification for the perceived ineffectiveness of the programmes offered by universities and higher education institutions (HEIs), which may be due to a fundamental mismatch between what is done by the HEIs' training providers and what is actually needed by SMEs. In a comprehensive analysis of the learning orientations in university education as compared to the learning needs of entrepreneurs, Gibb (1993) has identified a series of mismatches. An adapted version of his list is reproduced in Exhibit 1.

Exhibit 1. HEI Offerings versus Entrepreneurs' Learning Needs

Learning Focus of Academic Institutes	Entrepreneurs' Learning Needs
<ul style="list-style-type: none"> • Critical judgement after analyzing large amounts of information • Understanding and recalling the information itself • Assuming commonality of goals • Seeking (impersonally) to verify the absolute truth by study of information • Understanding the basic principles of the society in the metaphysical sense • Seeking the correct answer, with (enough) time to do it • Learning in the classroom • Gleaning information from experts and authoritative sources for the sake of its genuineness • Evaluation through written assessment • Success in learning measured by passing of knowledge-based examinations 	<ul style="list-style-type: none"> • Gut feel decision-making with limited information • Understanding the values of those who transmit/filter information • Recognizing the widely varied goals of different stakeholders • Making decisions on the basis of judgement of trust and competence of people • Seeking to apply and adjust in practice to the basic principles of society • Developing the most appropriate solution often under time pressure • Learning while and through doing • Gleaning information from any and everywhere and assessing its practical usefulness • Evaluation through judgement of people and events through direct feedback • Success in learning measured by solving problems and learning from failures and providing useful products and services to the society

Source: Adapted from Gibb (1993).

The differences highlighted in Exhibit 1 are genuine, and one could add a few more items to the list. The basic difference is that academic institutions focus on imparting knowledge and information as against entrepreneurs' need for developing implementation skills. The long tradition of imparting knowledge-oriented education by the institutions has come in the way of faculty developing competencies in imparting skill-oriented education. Consequently, it is natural for entrepreneurs not to trust such institutions and the programmes offered by them. Additionally, the time and cost constraints come in the way of entrepreneurs making use of the programmes offered by the many training providers (Patton & Marlow, 2002).

SMEs' Approach to Training

One of the reasons why SMEs appear to be lacking in training initiatives could probably be the differences in the understanding of the word 'training' by SMEs and the external observers. The latter would place an overemphasis on 'formal training', that is, on skill-enhancing activities which take place outside the workplace and/or which lead to formal qualifications (Campanelli & Channele with McCauley, Renouf & Thomas, 1994). The process of skill development in the SME sector is very distinct and different. A wider and a more encompassing definition of training should include the informal learning processes, as may be seen in the following one that defines training as 'any process, formal or informal, by which employees acquire knowledge and skills relevant to their performance at work. These may be initiated by the employer or employee, take place on or off the job, lead or not lead to a qualification and be self directed or directed by another (Curran, Blackburn, Kitching & North, 1996). In fact, some empirical studies have shown that SMEs (especially the family-owned ones) have a preference for informal training than formal (Kotey & Folker, 2007).

This broader concept supports the argument of owners/directors that they are providing training in some way or the other to their employees and that they themselves undergo learning through trial and error methods. There is a belief among many SME owners that they are the 'right' people to fully understand their businesses and so the best suited to train their employees. It has been found that when informal training is included, the 'training' recorded in small firms is much higher, which is supported by the experience of several countries (Curran, Kitching, Abbott & Mills, 1993; De Faioite *et al.*, 2004; Fernald, Jr., Solomon

& Bradley, 1999; Goss & Jones, 1992; Hendry, Jones & Arthur, 1995; Nove, Smith & Stallwood, 1995; Vickerstaff, 1992). A specific case of such discrepancy is seen in Curran *et al.* (1993) where they found that in a survey of small firms in the service sector, nearly 90 per cent of the employers claimed to provide training to their employees but only 40 per cent stated that employees had been given formal training of any kind. Researchers' focus on formal training and the tendency to generalize from limited data have been in part responsible for the commonly held belief that the SME sector is averse to training. Most research studies have used narrow definitions of training, depending on the researchers' field of interest, which would naturally produce mixed results. In the present study, therefore, we have tried to investigate 'training' in SMEs in its broader meaning, incorporating its formal and informal aspects.

Another issue that professional literature points out about training in SMEs is that most of them do not have a training department to plan and execute their training activities. The training 'needs' of most SMEs are 'assessed' by the perceptions of the owners/directors who are obviously the decision makers. Ideally training ought to be the responsibility of a specialist. While a majority of owners/directors have positive attitude towards training, they do not have the time or functional knowledge to systematically plan and impart training. Since the owners are also in charge of the day-to-day management of their ventures, there is a chance of the urgent matters pushing out the important ones (Lovatt & Pratten, 2003). The accepted 'good practice' of training calls for a systematic approach to employee-training based on a training policy, plan and budget (Harrison, 1993). Having a formal system is found to increase the effectiveness of training (Devins, Johnson & Sutherland, 2004a). There are evidences from prior research that most SMEs do not have a formal training policy or systematic training practices (Curran *et al.*, 1993; Vickerstaff, 1992). There are also variations in practice based on the size of firms and the types of business. For example, according to Curran *et al.* (1996), service firms are more likely than manufacturing firms to have a dedicated training policy. Hence, in the present study, we have endeavoured to look at the training preferences and practices of different sizes and types of SMEs, and have made an attempt to explore the links between enterprise/entrepreneur demographics and the perception of training needs.

The renewed emphasis on training for developing the internal capabilities of SMEs indicates a paradigm shift on the issue of providing support to SMEs. It may be noted that the earlier strategies of SME development were conceived

to address the external factors affecting their performance, such as, technology access, credit facility, infrastructure support, market access, ancillarization, export subsidies and tax holidays. In spite of the multipronged strategies to facilitate the task environment for businesses, the performance of SMEs, especially in India, did not show the desired improvement. Hence there is a growing interest now to examine and address the internal factors hindering the development of SMEs, wherein education and competency building becomes crucial. In other words, the argument is that the effective development and deployment of a firm's internal and external resources would generate competitive advantage only through the development of 'hard-to-imitate' competencies. Consequently it is believed that strategies aimed at developing the intrinsic capabilities of the firm will prove to be more stable and productive (Blundel & Walley, 1996) than the facilitation of its task environment.

The evolution of SME development in India has followed a similar path as those in the developed nations. For a long time the thrust of the policy-makers has been on tackling the external factors affecting the development of SMEs. The few studies initiated in India for understanding the human resource challenges of the SME sector have also focused on evaluating the various training activities of the many agencies involved in providing Entrepreneurship Development Programmes (EDPs) and on designing curriculum for EDPs (Awasthi & Sebastian, 1996). There has been no detailed probing of the education and training needs from the perspective of SMEs or of the owners/directors.

The ever-changing market, technology and other dynamic forces also necessitate constant upgradation of skills and knowledge of all levels of personnel (not only of owners but also of managers and employees) in SMEs. Continuing professional development and lifelong learning have become a necessity not only for the large organizations but also for SMEs. Lifelong learning is apparently the only way to ensure life-time employability. Unlike in the twentieth century, there is no guarantee of life-time employment in the twenty-first century without lifetime learning (Blundel & Walley, 1996).

There are, as we have seen earlier, enough arguments to propose that Indian SMEs need training. But the question is whether the SMEs themselves feel the need for training. The available indications, especially based on their responses to training programmes offered, show that they are not particularly keen on getting themselves or their employees trained. It was in this context that we decided to make an assessment of SMEs training needs as per their

own perception, and undertook this survey in Bangalore. Though it would have been very useful to collect information from a national sample, the time and resource constraints have persuaded us to restrict this survey to the city of Bangalore. Since Bangalore is perhaps industrially the most active city in the country now and is the location that best represents the changes taking place in the industrial sector of the country, the information gathered from this city can rightly be treated as representative of the emerging SME landscape of India.

Research Objectives

The objectives of the present study, therefore, are:

1. To assess the perceptions of SMEs on their own training needs
2. To identify the association, if any, between enterprise/entrepreneur demographics and the perception of training needs

Methodology

In order to assess the felt need for training on the part of SME entrepreneurs, it was proposed that the best method would be to interview the SME entrepreneurs with the help of a structured questionnaire. Mailed surveys and telephone interviews were ruled out, as SME entrepreneurs would not easily respond to them. Besides, we also wanted to get a random sample so as to have representation from all types of enterprises, and hence could not take the views of only those who might voluntarily respond.

One of the problems we encountered in the process was that there was no definition of SMEs in India at that time. What was available then was only a definition of small scale industries (SSIs) based on the criterion of the size of investment (which is now extended to micro, small and medium enterprises—MSMEs). Since it is legitimate to believe that the perception of training needs would be more directly related to the number of employees rather than the size of investment, we decided to adopt the definition used by most of the SME researchers (and officially accepted by the European Union), namely, the one based on the number of people employed by the units. Accordingly, we included under SMEs only those companies with less than 250 employees, which were further subdivided into: Tiny/Micro (0–9 employees), Small (10–49 employees) and Medium (50–249 employees).

Table 1. Sample Profile—Representation of the Respondents in Size/Nature of Business Sub-categories

Size of Venture	Nature of Business						Total
	Manufacturing		Trading		Services		
	Low-tech	Hi-tech	Low-tech	Hi-tech	Low-tech	Hi-tech	
Medium	14	7	2	0	8	13	44
Small	50	6	10	14	23	22	125
Tiny	53	2	26	7	37	6	131
Total	117	15	38	21	68	41	300

Though the definitional issue was thus settled, it was not easy to find a database containing the entire population of enterprises with less than 250 employees. A list of SSIs available with the government sources was the nearest approximation. Since this list was based on the investment criterion, there was a possibility of this containing some enterprises with more than 250 employees and leaving out some having less. Besides, as the failure rate among SMEs is quite high, the list might contain many non-existent units. Hence, we had to devise some method for identifying the right kind of database, so as to include all deserving members in the population and select a random sample from it for further investigation.

With a view to preparing a more comprehensive database of SMEs in Bangalore, we combined three data-bases, namely, (a) the SSI list (which contained mainly the smaller enterprises, (b) the Provident Fund (PF) list (which contained mainly the medium and large enterprises having more than 20 employees) and (c) the IT companies list (which contained several new technology ventures that were left out from the other two lists for various reasons). The master list thus generated contained more than 48,000 enterprises. Obviously there were possibilities of non-existent units, repetitions as well as inclusion of enterprises with more than 250 employees. As it was very tedious to check for these problems in the master list of 48,000 odd enterprises, we did such checking after selecting a random sample.

Since it was legitimately expected that a good number of enterprises in the master list would be thrown out after scrutiny, we selected a much larger random sample (2,000) than what was needed for the study (300). The random sample of 2,000 was progressively cleaned up until we got about 450 units from the list. These were then subjected to a physical verification so that we were finally able to get a sample of 300 units which actually existed and were willing to participate in the survey. The profile of the finally selected sample—categorized on the basis of their size,

nature of business and the level of technology used—is given in Table 1.

The classified profile of the sample of 300 is provided here only to highlight the types and range of SMEs represented in the sample, and not to suggest that the training needs perception would be analyzed based on these sub-categories. As the article deals with the training needs perception of SMEs as a whole, the analysis for the present article would be for the entire sample. It may be noted that the sub-category analyses could be interesting and could be the subject matter for other papers.

As mentioned earlier, we collected the data through personal interviews of the owners/directors of the enterprises and recorded the same on a structured questionnaire. The type of data was mostly nominal and in some cases ordinal, and was amenable only to simple, non-parametric analyses. The questions were about two categories of variables: (a) entrepreneur/enterprise demographics and (b) perceptions of the need for training in general and the preferences for contents, timings, duration and costs. (In view of the space restrictions for this article, the latter aspects of the second question—that is, the specific preferences—are not discussed here). There are two types of analyses used in this article. In order to understand the overall perceptions and preferences of the total sample, we have used a simple percentage analysis, which is presented in the first part of the 'Findings'. The second part is devoted to an investigation of whether the entrepreneur/enterprise demographics would influence the perceptions of training need. For this purpose we have used the responses of entrepreneurs on one question, namely, on whether SMEs need training or not. These were then classified according to the different demographic variables, such as, the type of business activity, level of technology used, size of the enterprise, legal form of the business, age of the entrepreneur at the time of start-up, gender of the entrepreneur, education of the entrepreneur, length and nature of prior work experience of the entrepreneur, and so on. Cross-tabulated numbers of such

demographic groups with their response on the perceived need for training were subjected to Chi-square analysis to test the differences among the subgroups on their perceptions of training need.

Findings of the Study

As we have mentioned earlier, the findings of the study are presented in two parts: (a) perceptions on training needs and the related preferences; (b) enterprise/entrepreneur demographics associated with a felt need for training. The former has two subsections—one dealing with SMEs' general perception of training needs, and the other with the preferences for the broad functional areas in which training is sought. The latter presents and discusses the association of entrepreneur/enterprise demographics to the perception of training needs.

Perception of Training Needs by SME Entrepreneurs

Prior studies on SME training activities have been undertaken mostly in the developed countries. Their findings show a general lack of interest in training activities among SMEs. Some studies show that training is a low-priority activity for SMEs, especially when compared to large organizations (Blackburn & Hankinson, 1989; Cambridge Small Business Research Centre, 1992; Employment Department, 1994; Storey, 1994). For SMEs, the cost of training would appear to be more than the benefits because the former is an immediate outflow while the latter would take time to materialize (Hillman, 1997). For this as well as a few other reasons (such as, the product market conditions, non-availability of suitable training programmes and providers, time-constraints, personal attitudes), there are very few SMEs that actually get their people trained, even though they profess to such intentions (Hyland & Matlay, 1997). The issue becomes more complicated because of a difference in perception between researchers and entrepreneurs about what constitutes training; the former normally count only the formal training programmes, while the latter has several informal ways of getting their employees trained (Campanelli *et al.*, 1994; Curran *et al.*, 1996; Goss & Jones, 1992; Hendry *et al.*, 1995; Nove *et al.*, 1995; Vickerstaff, 1992). Thus, the overall findings of the research conducted in developed countries can be summed up in one sentence that SMEs

Table 2. SMEs' Perception about the Need for Training in General

Perception about the Need for Training in General	Number	Per cent (%)
SMEs need a lot of training	46	15.4
SMEs need training in some areas	139	46.3
SMEs do not need any training	115	38.3
Total	300	100.0

are generally not interested in training. Our findings on SMEs' felt-need for training appear to be slightly different, as more than 60 per cent of our respondents express a positive attitude towards training. This, however, is not supported by their responses to the subsequent questions, especially those on the actual training undertaken by them—which was 6 per cent for the directors, 3 per cent for the managers and other employees! Contrast this with the acceptance of training need by more than 60 per cent of SME entrepreneurs (see Table 2). The findings of the present study on SMEs' perceptions on training needs and their associations with enterprise/entrepreneur characteristics are briefly summarized in the following subsections.

Table 2 presents an overall picture of SMEs' attitude towards training. It appears that the owners/directors have a favourable attitude towards training, with about 62 per cent stating there is need for some training in the SME sector. Nearly 46.3 per cent (139 out of 300) felt that SMEs need training in some areas, and 15.3 per cent felt the need for regular training in all the aspects of SME work. The disturbing fact, however, is that most of them clarified that this was a generic statement and need not imply that their own unit or people needed training. Moreover, a significant percentage of respondents (nearly 38 per cent) categorically stated that SMEs do not need any training as most of their working was customized and could be learned only through experience on the job. The prevalence of this view is apparently more widespread than the percentage shown in Table 2, as may be inferred from the data on practice mentioned earlier.

The apparent discrepancy can be explained by the possibility that most of the owners/directors were referring only to formal classroom training. They also clarified that the nature of work at SMEs is different from that of the larger firms and so there was no need for regular training in SME units. Besides, they pointed out that the profile and career aspirations of employees in SMEs was different from those of corporate sector employees—especially in

terms of their education, culture, attitudes, motivations and work ethic—because of which it is rather ‘risky’ to provide training to them, as they may often leave the firm after developing their competencies either to start his own venture or to join competitors or other large organizations.

One other reason mentioned by SME owners for their ‘aversion’ to external training is that most of these programmes are perceived to be irrelevant and theoretical. They also felt that the benefits of investing in training are not available immediately, but the costs will surely make a dent in one’s profits. Moreover, SMEs are almost always engaged in fire-fighting activities like managing the cash flow, taxation issues, fast-changing markets and competition, and hence are unable to spare themselves or their employees for training activities.

Broad Areas of Knowledge to be Improved by Training

In order to identify the preferences of SMEs about the broad areas of training, the knowledge content was broadly classified into Technical, Managerial, Behavioural and Legal/Procedural areas, and the respondents were asked to rank them according to their priorities. Though there was an option for the respondents to mention ‘Any other’, very few of them exercised that option, and so in Table 3 we present their preferences for the four areas mentioned, along with a note on the method of computing the average rank.

The scores show an expected pattern, where the strongest preference for SMEs is for technical training. Based

Table 3. Broad Areas of Knowledge to be Improved by Training

Broad Areas	No. of Respondents Who Ranked	Weighted Mean Score*	Rank
Technical	172	3.3547	1
Managerial	175	3.1886	2
Behavioural	123	2.3902	3
Legal/procedural	123	2.0569	4
Total number of respondents	300		

Note: *As the respondents were asked to rank the training areas in the order of their importance for their enterprises, we computed the rank scores for the different areas using the following method. A rank of 1 was given a score of 4, a rank of 2 to a score of 3, a rank of 3 to a score of 2 and a rank of 4 to a score of 1. For each item, each of the rank scores was multiplied with the number of respondents who have given that rank. The four rank scores thus obtained were added up and divided by the total number of respondents who gave the ranks for that item. This is the ‘Weighted Mean Score’ given in the third column of the table, which is out of 4. The ranks in the fourth column are given according to the magnitudes of these scores.

Table 4. Nature of Prior Work Experience of Principal Promoters

Nature of Prior Work Experience	Number	Per cent (%)
No experience	49	16.3
Similar	160	53.3
Not similar	91	30.3
Total	300	100.0

on the data on the promoters’ technical background (see Table 4), we may offer some explanation for such high preference for technical training. It may be noted that about 53 per cent of the sample have started their business in the technology area of their prior experience. Naturally, this group may be acutely aware of the need for continuous technological improvement as a necessary tool to keep the firm competitive. The promoters without the experience in the relevant technology may also feel the need for technical training, probably for a different reason of covering up their own deficiencies.

Close on the heels of ‘technical training’ is the managerial training with a difference of only 0.2 in the weighted mean score (see Table 3). While the score is slightly low for managerial training, it may be noted that the number of respondents who chose to rank managerial training is slightly larger. We may thus presume that the importance given by SMEs to technical and managerial training is more or less equal. This is also supported by their choice of topics shown in the next section and is probably the most sensible approach to SME management. The priority is obviously for technology and management.

Behavioural issues may not be a major problem in a small unit where employees generally operate under the direct gaze and close supervision of the entrepreneur. The legal and procedural issues emerged as the least important for training, probably because these are often managed by external consultants (such as the chartered accountants) for the firm. It should be noted that there is a clear break between the first two and the last two ranks, with a gap of almost one point, thus setting a clear hierarchy of training issues.

Enterprise/Entrepreneur Demographics Associated with the Felt Need for Training

In this subsection we discuss the results of our analysis of the association of enterprise/entrepreneur demographics on the perception of training needs among SMEs. Among the enterprise demographics, the variables considered are:

(a) size of the venture, (b) type of business activity, (c) level of technology used, (d) nature of business (combining the type of business with the level of technology) and (e) the legal form/constitution of the enterprise. The variables in the second category of entrepreneur demographics are: (a) the age of the principal promoter at the time of start-up, (b) gender of the principal promoter, (c) level of education, (d) type of education (technical/non-technical), (e) prior work experience, (f) length of prior work experience and (g) the number of years of involvement with the venture by the principal promoter. The differences in perceptions among the various demographic categories were tested using the Chi-square test. The results are presented under the two subheadings discussion their association with: (a) enterprise demographics; and (b) entrepreneur demographics, respectively.

Enterprise Demographics and their Association with the Perception of Training Needs

Tables 5–9 show the results of Chi-square analysis on the enterprise demographics categories with the perception of training needs. It may be noted that all the five results are significant at $p \leq .05$ (that is, at a confidence level of 95 per cent or more). Specifically the following results deserve to be highlighted.

- Size of the venture is a significant influence on the perception of training needs. The result is in conformity with the expectation (and the findings of prior research) that the larger units are more inclined to conducting training for their employees (see Table 5).
- The type of business activity has also a bearing on the perception of training needs. The felt need for training is the highest among the manufacturing units followed by services and trading. This is probably because manufacturing is the most complex

Table 5. Size of SMEs and Perception on Need for Training

Size of SMEs (by total number of employees)	Perception on Need for Training		
	SMEs Need Training	SMEs Do not Need any Training	Total
Tiny (0–9 employees)	63 (48%)	68 (52%)	131
Small (10–49 employees)	88 (70%)	37 (30%)	125
Medium (50–249 employees)	34 (77%)	10 (23%)	44
Total	185	115	300

Note: Chi-square value = 18.779; df = 2; significance (2-sided) at $p = .000$.

Table 6. Type of Business Activity and Perception on Need for Training

Type of Business Activity	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Manufacturing	95 (72%)	37 (28%)	132
Trading	29 (49%)	30 (51%)	59
Services	61 (56%)	48 (44%)	109
Total	185	115	300

Note: Chi-square value = 11.336; df = 2; significance (2-sided) at $p = .003$.

Table 7. Level of Technology Used by the SMEs and Perception on Need for Training

Level of Technology Used	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Low-tech/traditional	130 (58%)	93 (42%)	223
High-tech/modern	55 (71%)	22 (29%)	77
Total	185	115	300

Note: Chi-square value = 4.176; df = 1; significance (2-sided) at $p = .04$.

among the three types of business and, therefore, has to manage many more functions and agencies compared to the other two. In service enterprises there is generally a dominant expert (often the promoter himself), who can and does provide the training to other employees. Trading, in any case, is the least complex, especially because most of them are tiny and small operators, and naturally their training needs would be limited (see Table 6).

- Table 8 presents a combination of the previous two tables, namely, the nature of business and the nature of technology. Naturally the differences are significant (as the two categories were individually significant). The perceived training needs are in the following order (highest to lowest) with reference to the six categories based on the nature of business: high-tech manufacturing (80 per cent), high-tech services (71 per cent), low-tech manufacturing (71 per cent), high-tech trading (67 per cent), low-tech services (47 per cent) and low-tech trading (39 per cent). It appears that the level of technology has a greater influence on training needs perception than the type of business activity. Even the traders feel

Table 8. Nature of Business and Perception on Need for Training

Nature of Business	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Low-tech manufacturing	83 (71%)	34 (29%)	117
High-tech manufacturing	12 (80%)	3 (20%)	15
Low-tech trading	15 (39%)	23 (61%)	38
High-tech trading	14 (67%)	7 (33%)	21
Low-tech services	32 (47%)	36 (53%)	68
High-tech services	29 (71%)	12 (29%)	41
Total	185	115	300

Note: Chi-square value = 22.092; df = 5; significance (2-sided) at $p = .001$.

relatively high need for training (67 per cent)—in comparison with low-tech services (47 per cent)—if they are dealing in high-tech products.

- The results on the legal form are also in the expected lines (see Table 9)—limited companies feel the highest need for training (82 per cent), followed by partnerships (71 per cent) and proprietorships (49 per cent). It is likely that the legal form is influenced by the size of the venture and the technology being used. When the enterprises are relatively large and use higher levels of technology, it is natural that they have to adopt a company or partnership form to bring in funds as well as expertise. The 'entrepreneur' demographics of such partners (see next subsection) can also bring in a change in the perception of training needs.

Table 9. Legal Form/Constitution and Perception on Need for Training

Legal Form/ Constitution	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Proprietorship	83 (49%)	86 (51%)	169
Partnership	34 (71%)	14 (29%)	48
Limited company	68 (82%)	15 (18%)	83
Total	185	115	300

Note: Chi-square value = 27.388; df = 2; significance (2-sided) at $p = .000$.

Table 10. Age of Principal Promoters at the Time of Start-up and Perception of Training Needs

Age of Principal Promoters	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Young	50 (68%)	23 (32%)	73
Middle aged	99 (57%)	74 (43%)	173
Old	36 (67%)	18 (33%)	54
Total	185	115	300

Note: Chi-square value = 3.454; df = 2; significance (2-sided) at $p = .178$. (Not significant at 90 per cent confidence level.)

Entrepreneur Demographics and their Association with the Perception of Training Needs

Tables 10–16 present the analysis of entrepreneur demographics in terms of their associations with training needs perception. It is interesting to note the following points.

- Age at the time of start-up does not differentiate the promoters in terms of their perception of training needs (see Table 10). It means that both the young and the old are more or less equally disposed towards training—the young may feel that they are inexperienced and therefore have to learn a few things, and the old may feel that they have become obsolete and therefore would need an updating on the latest technologies as well as knowledge and skill inputs.
- Gender is the least significant differentiator of training needs perception, for which the confidence level is lower than 50 per cent (see Table 11). We should also remember here that the sizes in the categories were heavily skewed, as there were very few women in the sample. Despite this we can confidently conclude that there is no difference between male and female entrepreneurs in terms

Table 11. Gender of Principal Promoter and Perception of Training Needs

Gender of Principal Promoter	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Male	174 (62%)	106 (38%)	280
Female	11 (55%)	9 (45%)	20
Total	185	115	300

Note: Chi-square value = 0.403; df = 1; significance (2-sided) at $p = .526$. (Not significant at 90 per cent confidence level.)

Table 12. Non-graduates/Graduates/Postgraduates among the Principal Promoters and Perception of Training Needs

Non-graduates/ Graduates/ Postgraduates	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Non-graduates	50 (49%)	53 (51%)	103
Graduates	101 (65%)	54 (35%)	155
Postgraduates	34 (81%)	8 (19%)	42
Total	185	115	300

Note: Chi-square value = 14.913; df = 2; significance (2-sided) at $p = .001$.

Table 13. Technical/Non-technical Education of Principal Promoter and Perception of Training Needs

Technical/Non-technical Education of Principal Promoter	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Technical	74 (72%)	29 (28%)	103
Non-technical	111 (56%)	86 (44%)	197
Total	185	115	300

Note: Chi-square value = 6.874; df = 1; significance (2-sided) at $p = .009$.

of their perception of training needs for their enterprises.

- Education is indeed a differentiator (Tables 12 and 13). The more educated entrepreneurs tend to feel greater need for further training: (non-graduates, 49 per cent; graduates, 65 per cent; and postgraduates, 81 per cent). Similarly entrepreneurs who have had technical education are more inclined to appreciating the need for further training (see Table 13). The results are apparently in line with a fundamental characteristic of learning itself—the more you have it, the more you want it.
- Prior work experience, on the other hand, seems to have the reverse impact (compared to education). Those who have no experience or have short experience tend to feel a greater need for training (see Tables 14 and 15). One could interpret this finding by viewing prior work experience as on-the-job training. Hence the experienced entrepreneurs are likely to feel that they have already received some training and so would need less of ‘supplementary’ training in the venture.
- Length of experience of the promoter in the venture has a contrasting impact on the perception of

Table 14. Prior Work Experience of Principal Promoter and Perception of Training Needs

Prior Work Experience of Principal Promoter	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
No experience	36 (73.5%)	13 (26.5%)	49
With prior work experience	149 (59.4%)	102 (40.6%)	251
Total	185	115	300

Note: Chi-square value = 3.451; df = 1; significance (2-sided) at $p = .063$.

Table 15. Length of Prior Work Experience of Principal Promoter and Perception of Training Needs

Length of Prior Work Experience of Principal Promoter	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Short or no experience (less than 5 years)	84 (71%)	34 (29%)	118
Long experience (more than 5 years)	101 (55%)	81 (45%)	182
Total	185	115	300

Note: Chi-square value = 7.457; df = 1; significance (2-sided) at $p = .006$.

training needs when compared with the length of prior work experience (see Table 16). Longer involvement with the venture may probably create a sense of getting obsolete, which may push for a greater need for further training. It is also possible that a venture that has existed for a longer period may have reached its growth phase, which would bring in additional learning needs.

It appears that among the entrepreneur demographics one can make a distinction between the ‘innate’ characteristics (like age and gender) and the ‘acquired’

Table 16. Years of Involvement of Principal Promoter with Enterprise and Perception of Training Needs

Years of Involvement of Principal Promoter	Perception on Need for Training		Total
	SMEs Need Training	SMEs Do not Need any Training	
Short (less than 10 years)	104 (57.1%)	78 (42.9%)	182
Long (10 years and above)	27 (68.6%)	12 (31.4%)	39
Total	185	115	300

Note: Chi-square value = 4.006; df = 1; significance (2-sided) at $p = .045$.

characteristics (like education and experience). Of these the 'innate' ones do not seem to influence the perception of training needs whereas the 'acquired' ones do. As we may see from the literature on motivation theory, it is the secondary or learnt motives (as compared to the primary or innate ones) that have a greater influence on work behaviour. In the same way, it is the acquired demographics that promote greater learning in enterprises, which reinforces the need for interventions in social/economic development by way of providing education and opportunities for work to individuals. This would, in the long run, improve not only the quality of individuals in the society but also the quality of entrepreneurship in the economy. Finally, taking a combined perspective of the findings presented in the two sections on demographics, one could probably say that it is the organizational exigencies of the venture (than the individual preferences of the entrepreneur) that have a greater influence on the perception of training needs. It seems that the primary consideration in this matter is whether the enterprise needs it and can afford it.

Conclusion

SME development, in recent times, has undergone a paradigm shift from facilitating the external environment to building the internal capabilities of the ventures. One of the major tools employed for the latter is the training and development of SME personnel. Government agencies and other training providers strongly believe in the efficacy training in improving SME performance. However, the SME owners apparently do not share this view. Their performance on providing training to themselves and their employees is worse than their stated intentions. The present study was, therefore, designed to assess the training needs perceptions of SMEs and identify the associations, if any, between these perceptions and the enterprise/entrepreneur demographics. The major findings of this study are briefly listed here:

- A majority of the respondents (62 per cent) were of the view that SMEs need training. At the same time, it should be borne in mind that a large proportion of them (38 per cent) categorically denied the need for training.
- Even among those who had a positive attitude towards training, there was a mismatch between the stated intentions and the actual behaviour. The actual provision of training by the SMEs was 6 per cent for

owners/directors, and 3 per cent for managers and 1 per cent for other employees.

- The test of association between enterprise/entrepreneur demographics and training needs perception showed that it is the enterprise characteristics that have stronger association with training needs perception than the entrepreneur characteristics. Among the various dimensions of the latter (entrepreneur demographics), it was interesting to note that the 'innate' characteristics (like age and gender) did not show any association with training needs perception, but the 'acquired' ones did, which may be a pointer to the value that training and development can bring to SMEs.

The overall findings of the study would suggest that training providers should focus more on the specific situation of the enterprise while designing the programmes. The 'one-size-fits-all' theory will not be a suitable philosophy for SME training. The findings about the positive relationship of enterprise characteristics and the 'acquired' characteristics of entrepreneurs with the perception of training need is of special relevance for designing context-specific programmes for SMEs. In fact, this is a field that calls for a lot of creativity and innovativeness on the part of the designers of training programmes for SMEs.

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