WORKING PAPER No. 29
October 1995

MANAGEMENT TRAINING IN SMALL FIRMS: A CASE OF MARKET FAILURE

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MANAGEMENT TRAINING IN SMALL FIRMS: A CASE OF MARKET FAILURE?

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ABSTRACT
The take-up of management training is lower in small than in large firms. A case is often made in the United Kingdom that this reflects an ignorance on the part of owner-managers in small firms of the 'benefits' of training, that the market is subject to 'failure' and so justifies the provision of subsidies. This paper explores these views. Our review shows particular market circumstances can explain the lower take-up of management training by small firms rather than 'ignorance'. We, therefore, suggest the assumption of 'ignorance' leading to 'market failure' is unreasonable.
INTRODUCTION
There is widespread agreement that skill shortages or recruitment difficulties constrain economic growth and reduce the competitiveness of an economy (Buechtemann and Soloff, 1994; Campbell and Baldwin, 1993). It is also widely assumed that workforce training enhances firm performance and competitiveness (Lynch, 1994). Further, a consistent finding from studies both in the United States and the United Kingdom is that all groups of employees in small firms are less likely to be in receipt of formal structured training than employees in larger firms. Overall, there appears to be a broadly linear relationship between formal structured training provision and firm size. However, at the 500 employee firm size point the relationship ‘flattens out’.

This paper focuses explicitly upon management training in small and medium sized enterprises (SMEs). It examines whether the relatively lower take-up of formal/structured training in small firms reflects a ‘market failure’ (Greenhalgh and Maurotas, 1993) which, in principle, can/should be addressed by provision of public subsidies to encourage more formal/structured training in small firms. Alternatively, does it instead reflect efficient markets in which some groups of firms purchase less of a product or service (i.e. formal management training) than others? Here there is no case for the provision of public subsidies to encourage more formal / structured training in small firms.

The paper begins with a brief review and some previously unpublished data on the take-up of formal/structured training schemes for all groups of employees by firms of different sizes in the West Midlands of England. It then provides some ‘explanations’ for recorded differences in formal/structured management training participation rates by firm size for several studies. The following section examines in detail the ‘market’ for formal/structured management training provision, with a particular emphasis upon management training and
small firm performance. Finally, the paper assesses, on the basis of the evidence presented, the case for public subsidies to encourage small firms to participate in 'additional' training schemes.

THE PROVISION OF EMPLOYEE TRAINING IN SMEs

In the United States, Brown et al., (1990) noted employees in large firms (with at least 100 employees) were twice as likely as those in small firms to have participated in a formal training programme in their current work place. From their review of the literature Brown et al., (1990) concluded,

"... on balance it appears that large employers provide more training. But the evidence is not overwhelming, perhaps because the most training is provided by both the very smallest and the very largest firms".

In the United Kingdom the relationship between formal training provision and firm size is also apparent. Cambridge Small Business Research Centre (1992), Deloitte, Haskins and Sells (1989), Elias and Healey (1994) and Mangham and Silver (1986) and all noted formal/structured training take-up rates increased with firm size.\(^2\)\(^3\)\(^4\)\(^5\)\(^6\)

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1 The terms 'small firm' and 'large firm' will be used liberally. There are major problems with definitions and almost all of the studies reviewed have adopted different definitions. Nevertheless, a broad rule of thumb is that 'small' firms have less than 100 employees (and generally less than 50 employees) and 'large' firms refers to those with 500 employees or more (and generally more than 1,000 employees).

2 Claydon and Green (1992) and Osterman (1995) have noted trade unions can have a significant indirect impact upon the provision of job related training. Further, union membership is more prevalent in large rather than small firms and as a result it is not surprising to note the higher take-up of training by large firms. The absence of union membership may, therefore, have a substantial impact for non-manual workers in small firms (Elias, 1994) with regard to the receipt of training.

3 The higher take-up of formal structured training in large firms is, in part, due to the fact that these firms are more likely to operate apprenticeship schemes (Soskice, 1994) for young employees who are...
This relationship is clear from a survey of 1,066 firms in the West Midlands standard region of England (West Midlands Business Survey, 1995). Table 1, taken from a survey conducted in 1995 shows that, for virtually all types of employees, training provision increased with firm size. This survey distinguished between 'on the job', 'external' and 'in-house' training. For almost all groupings, provision of training, both externally and internally, increased with firm size, i.e. 10% of the smallest firms provided 'on the job' training for unskilled employees, but this rose to 54% for firms with 200 or more employees. This study also noted some interesting differences between types of employees. Amongst unskilled and semi-skilled employees the prime form of training was informal 'internal' ('on the job' or in-house) training, irrespective of firm size. For managerial employees the dominant form of training provided was formal 'external' training, most notably in firms with 100 or more employees. The key issue from Table 1 is that unskilled employees in small firms were very unlikely to receive formal/structured external training. They were, however, comparatively prepared to forego some personal financial remuneration during their apprenticeship in order to gain a credentialised 'ticket' for skilled employment in internal labour markets.

"Private sector firms may be less likely than public sector firms to engage in training. To the extent that private sector firms are more constrained by the need to make profits than public sector firms, then private firms may be less willing to finance training, through fears that training investments may be lost via poaching of trained workers by rival non-training firms. Private sector firms may also be subject to greater demand fluctuations, making worker redundancies likely and expensive since the training investment would thereby be lost" (Booth, 1991, p.285).

Firm size alone is not the sole determinant influencing the take-up of training (Arthur and Hendry, 1990; Hendry, et al., 1991). For example, a variety of factors were statistically associated with manufacturing plants offering training in Canada. Baldwin et al., (1995) found manufacturing plants using advanced manufacturing technologies and with problems hiring skilled employees to work with new technologies were more likely to train. Further, plants that performed R&D, were innovative, mature, foreign owned and had already achieved strong growth were significantly more likely to train.

Ownership of a firm can also influence the take-up of training. For example, Cromie et al., (1995) in Ireland have noted family firms are less keen on formal management training programmes than non-family firms.

Following Elias and Healey (1994, p.581) "The first of these categories is not intended to represent a formal training category. It exists to differentiate those employers who have no formal training from those who do ...".
more likely to receive ‘internally’ provided training. On the other hand, managers in virtually half the larger firms with 100 or more employees received some form of informal/formal training with an equal emphasis upon ‘internal’ and ‘external’ provision.

A variety of explanations can be proposed to explain the contrasts noted in Table 1 and the wider research literature. The three prime reasons given by firms to Deloitte, Haskins and Sells (1989) for not training were that the workforce was already trained, that they only recruited experienced workers and that their employees did not require new skills. Since 24% of employees in small firms were untrained, compared with only 4% in very large firms, the above ‘explanations’ are particularly likely to reflect the views of small firms. This we call the ‘market forces’ explanation for low training take-up rates in small firms.

Several surveys report that owner-managers of small firms who have participated in training schemes regarded the experience to have been valuable (Confederation of British Industry, 1986, Cushion, 1995). On the downside, a sizeable proportion of owner-managers, particularly those with minimal formal education qualifications (Greenhalgh and Stewart, 1987) may be ‘unaware’ (or even ‘resistant’) to the ‘benefits’ of formal/structured training. This we term the ‘ignorance’ explanation for low training take-up rates.

The key issue for policy is whether it is ‘ignorance’ or ‘market forces’ which lies at the heart of the low take-up rate of training amongst small firms. If it is the former then there is some case for public subsidies to encourage ‘additional’ training. If it is the latter then the case for subsidies is weaker. To examine this question the remainder of the paper will focus specifically upon the take-up of management training in small firms.
THE MARKET FOR MANAGEMENT TRAINING IN SMALL FIRMS

The decision to provide and engage in management training is a complex investment decision which is influenced by individual and situational factors by two parties - the individual (who may or may not be represented by a union) and the firm. Both parties weigh the current 'costs' against the potential 'returns' (Greenhalgh and Stewart, 1987). They may also differ greatly in their levels of risk aversion, time horizons, information about labour markets, access to capital and preferences (Lynch, 1994).

Nevertheless, at the most simple level, the take-up (or demand) for formal/structured training in small and large firms is shown in Figure 1. Based on the evidence reviewed earlier, it shows the quantity of management training purchased by small firms ($Q_s$) is less than the quantity purchased by large firms ($Q_l$). This stems from the assumption that the costs of supplying management training to small firms ($S_s$) are greater than those to large firms ($S_l$).

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8 “From an exchange theory perspective, training may be viewed as an investment in the relationship between a company and a person and can contribute to an employee’s organizational commitment... Employees may view an effective training experience as an indication that the company is willing to invest in them and cares about them; thus, training may enhance their commitment to the organization” (Tannenbaum et al., 1991, p.760).

9 For example, drawing upon the work conducted by Noe (1986) Facteau et al., (1995 p.3) identified three incentives for attending a training course: “... intrinsic incentives (the extent to which training meets internal needs or provides employees with growth opportunities), extrinsic incentives (the extent to which training results in tangible external rewards such as promotions, pay rises, and higher performance evaluations) and compliance (the extent to which training is taken because it is mandated by the organization).

10 Porter and Lawler (1968) have suggested certain types of individuals are more likely to benefit from a training programme. Notably, ‘trainability’ is hypothesised to be a function of ability, motivation and perceptions of the work environment.

11 A recent study of 967 managers and supervisors in the United States conducted by Facteau et al. (1995, p.19) most notably noted, “... individuals who are highly committed to the organization may be more likely to benefit from available training programs than less committed employees”.

12 The need for training is dependent upon the specific levels of employees which are, in part, influenced by the formal education obtained and the skills possessed by employees before entering the firm (Greenhalgh and Stewart, 1987; Lynch, 1994). Some firms, particularly large firms, may avoid the need for employee training by initiating recruitment policies which carefully screen/match individuals with specific organisational needs (Elias, 1994).
and further, that the demand for management training by large firms \( (D_L) \) is higher than small firm demand \( (D_S) \). The key issue here is that, whilst \( Q_S > Q_L \), the market is in equilibrium and does not imply market failure. Figure 1 also shows \( P_s > P_L \) but this merely reflects assumptions made on relative elasticities.

i) The Demand for Management Training in Small and Large Firms

Figure 1 assumes \( D_L > D_S \). Five reasons for this relationship can be identified. The first is that management training provides a long term, rather than a short term, benefit for the firm with firms recovering a large part of their training expenditures well after employees have completed their training (Lynch, 1994). Unfortunately, the smaller the firm the less likely it is that it will survive to take advantage of any presumed benefits from formal management training provision. Survival rates of small firms are significantly lower than those of large firms (Storey, 1994). Hence it is perfectly rational for small firms to favour investments with a short term payback, rather those where the returns are longer term. Other examples of small firms favouring the short term over the longer term are reflected in their capital investment decisions. Hughes and Cosh (1994) in their analysis of Balance Sheets, showed that Fixed Assets in small firms are a smaller proportion of Total Assets than is the case in larger firms. Investments therefore which yield benefits in the longer term are (because of the greater external uncertainty faced by smaller firms) likely to be less attractive to small firm owners. Instead, small firm owners favour investments which are ‘flexible’ over those which are ‘long-term’, and currently management training is generally viewed as a long term investment.

A second reason is that small firms are more likely to be at risk of losing their managers due to ‘poaching’ to non-training firms (Booth, 1991; Stanworth et al., 1992) once
they have received formal management training. Elias and Healey (1994, p.578) suggest this argument is

"... based upon the premise that an employee will be more productive as a result of job-based training in the post-training period, and that the employer costs of training can only be recovered by the employer giving the employee a post-training pay increase which is less than the value of the increase in the ex-trainee's realised productivity. If, however, the increased productivity is not organization specific it will benefit employers who do not provide job-related training to offer higher wages to ex-trainees, 'poaching' trained labour from those firms that undertake job-based training (Greenhalgh and Maurotas, 1993).

In addition, large firms pay higher wages to managers than owners of small firms, even taking account of human capital differences between managers in these two types of firms. North American studies by Kruse (1992) and Morisette (1993) confirm the Brown et al., (1990) findings that, on a direct comparison, large firm workers earned 30% more than small firm workers. Even taking account of employee characteristics by industry, the size/wage premium remained between 10% and 13%. Small firm owners, therefore, will take account of the risk of losing managers (Bòoth, 1991) to firms who are able to pay higher wages - a problem likely to be particularly acute when the labour market is tight. Hence it is rational for

13 "Human capital theorists distinguish between training which provides 'general' transferable skills and the provision of 'specific' non-transferable skills training (Becker, 1975). Firms are less likely to provide the former type of training because of the difficulty of capturing the returns to training in the absence of deferred compensation schemes". Job-related training provided by employers is more likely to be of a non-transferable variety..." (Elias, 1994, p.563). Further, firms are more likely to take-up 'firm-specific' training rather than 'general'/generic' training training (OECD, 1991) without the need for government subsidies because the expenditure on 'firm-specific' training accrues directly to the firm (Baldwin et al., 1995).
the owner of a small firm to invest less in training managers who are likely to be employed in their business for a short time period.14

A third reason refers particularly to managers (but not owners of small firms) or those with managerial aspirations in small firms. Drawing upon a study of fast-growth firms in the United Kingdom, Wynarczyk et al., (1993) noted the absence of an internal labour market (ILM) in small firms. In marked contrast, supervisors and managers in large firms were found to be trained not only to enhance their current job performance but also to enable them to do their next job better. In particular, the next job of the non-owner manager in a large firm was found by Wynarczyk et al., (1993) to be more likely to be within the same large firm, whereas non-owner managers within small firms generally perceived their next job to be outside the firm from which they had received their formal training. Furthermore, the small firm owner expected their manager's next job would be outside his/her firm. As a result, small firm owners have comparatively little incentive to provide training to managers. The presence (absence) of an ILM is, therefore, likely to be positively (negatively) correlated with provision of management training (Creedy and Whitfield, 1988).

The fourth reason is that the cost of training varies by firm size. Small firms have higher training costs per employee than large firms primarily because they cannot spread fixed costs over as large a number of employees (Lynch, 1994). Deloitte, Haskins and Sells (1989) found the total cost per employee of providing training in firms with between 10 and 49 employers was £962, compared with £721 for those with between 50 and 499 employees. This difference primarily reflects non-labour costs such as supervision, payments to training providers, etc. But even these costings do not fully reflect firm size differences. This is

14 Elias and Healey (1994), however, find evidence that employees in receipt of formal training in the Coventry region, England, were less likely to move to another employer over a one year period. It is not clear whether this result is applicable to all sizes of firms or simply to larger firms.
because the recipient firms not only incur the costs of the training, but also the opportunity costs of the trainee either being away from their place of work or being unable to conduct their normal duties (Kirby, 1990, Lynch, 1994). These opportunity costs are likely to be higher in small rather than in large firms. At the most simplistic level, in a two-person firm, the absence of one person on a training course clearly has a direct impact upon the firm, whereas one person's absence has a minute impact on a thousand employee firm. An alternative perspective is provided by the concept of X-inefficiency (Liebenstein, 1966). In the Leibenstein models larger firms with market power are more likely to exhibit X-inefficiency than smaller firms operating in competitive market places. They are also more likely to provide training courses for their employees than organisations without employment slack.

These four reasons all suggest $D_L > D_S$. The key issue is that, as yet, no reference has been made to the real or imagined impact of the management training upon the performance of the firm or the ‘awareness’ / ‘ignorance’ of the owner manager of these benefits. The remainder of this section considers the implications of these later two factors.

Some limited research has been conducted surrounding the character, availability and effectiveness of small business education (Curran and Stanworth, 1989). Storey and Westhead (1994) and Westhead (1996) failed, however, to identify careful research which has demonstrated a clear relationship between the provision of management training and enhanced small firm performance. Despite the claims in influential reports by the Confederation of British Industry (1993), Midland Bank (1993) and the Small Business Bureau (1993) that such a relationship exists, the authors were unable to track the source of these claims. In their review Storey and Westhead (1994) examined the literature surrounding the Enterprise

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15 Indeed, we have now been informally told that the Department of Trade and Industry (DTI), which was cited in all three reports as the 'source', now recognises the claims to be baseless.
Allowance Scheme (EAS) and its successor the Business Start up Scheme (BSUS) in the United Kingdom. They highlighted the finding by Tremlett (1993) that individuals who had established new firms and had participated in training had a (non-significantly) higher probability of operating businesses that subsequently closed. They also quoted the work of Stanworth et al., (1992) who were unable to identify, partly because of changes in macro-economic conditions, any significant relationship between participation by firms on business development workshops and subsequent firm performance. The review of Business Growth Training (BGT) in the United Kingdom by Marshall et al., (1993, 1995) was equally inconclusive in this respect. Marshall et al., were unable to highlight an impact upon firm performance (with regard to growth in sales, labour productivity or employment) as a result of participation in the scheme. On a more positive note, recipient firms did indicate they were less likely than matched ‘comparison’ firms to regard recruitment from the labour market as a means of obtaining additional management skills. In addition, after the programme, recipient firms were more likely to be aware of the skills to manage their business successfully. Marshall et al., (1995, p.88) concluded,

"Management training projects are less effective in the very smallest firms; they work best in firms that have the managerial capacity to make the necessary commitment and absorb both management and business development".

Finally, the work by Baldwin et al., (1994) in Canada found labour issues, and training in particular, played a very minor role in discriminating between more successful and less successful groups of smaller firms. Baldwin et al., found the most successful smaller firms tended to train fewer employees than a less successful group of firms. Quite simply, therefore,
a fifth reason why small firm owners may be unwilling to provide management training is that it does not enhance the performance of the firm and so cannot be justified as an investment. None of the above reasons assume 'ignorance' on the part of the small firm owner surrounding the availability and benefits of training, yet 'ignorance' is clearly crucial to the 'market failure' justification for public subsidies. This is not to imply perfect information exists as demonstrated by Birley and Westhead (1992). The key point, however, is that the low demand for management training in small firms can be explained without undue reliance upon the 'ignorance' argument.

ii) The Supply of Management Training in Small and Large Firms

Turning now to supply-side factors to explain $S_S < S_L$, there are two major influences at work. The first is that contact with, and filling courses for, managers in small firms is more time consuming and hence costly for training providers than providing courses for managers in large firms. For large firms the training provider deals normally with only one or two individuals in the business (for example, the managing director or the personnel director) who have authority to sanction a contract which provides training for a large number of trainees. On the other hand, providers of training for smaller firms have to contact a large number of individuals and enter into separate and individual negotiations and agreements. In each of these cases the number of trainees is generally very small (Vickerstaff, 1992). Furthermore, there are positive costs of contacting many small firms, a lower proportion of which will ultimately purchase any training. Contact costs per trainee are therefore likely to be very much higher for those providing training for small rather than large firms.

Secondly, the material taught on small business training courses needs to be clearly focused upon the specific needs of individual firms (Kirby, 1990; Vickerstaff, 1992). Whilst
this is also the case for larger firms, for them, it is more worthwhile for trainers to provide tailored or ‘customised’ courses to their needs since the fixed costs of customising can be spread over a larger throughput of trainees. This is not possible for training provided to managers in small firms, since trainees come from a number of different firms and are engaged in a variety of markets and industrial sectors. It is expensive for the trainer to get to know in detail the individual firms in which the managers are employed, yet a failure to do so means those attending the course often feel it is ‘too general’ to be of any ‘real world’ relevance. Small business trainers, therefore, have to strike a balance between understanding the detailed needs of the particular recipient firm - which is expensive because the costs can only be ‘spread’ over very few trainees - and merely delivering ‘general’ material, which is viewed as unacceptable by the trainee. For these reasons it is cheaper, on a unit cost basis, to provide training for the large firm.

The heterogeneity of small firms also adds to the unit costs of supplying training. Fewer employees per firm are in similar posts in a small firm than in a large firm. Furthermore, the firms in which they work are often in different sectors or at very different points along their growth trajectory. Table 2 illustrates this diversity. The rows in Table 2 are the stage or status of the firm and the columns are the personnel in receipt of training. Table 2 suggests providers of training need to take into account, not only the characteristics of the employees potentially in receipt of training; but also the stage, or status of the recipient firm.

Table 2 indicates training for owners is provided often at the pre-start up stage - perhaps as part of the package on a Business Start Up Scheme - and is provided, in some instances, at start up. The Warwick Centre for Small and Medium Sized Enterprises, for

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Kirby (1990, p.85) in his study of the take-up of management training by small firms in Gwent, Wales also noted some firms did not participate on a management training programme because ‘... there was a widespread doubt about the quality of what was on offer and the credibility of the providers.’
example, provides many training packages for owners in the growth phase of their business
but, until the recent City of Norwich College scheme was implemented (Cushion, 1995), there
has been comparatively little focus on owner-manager training in established small firms. For
this reason this category has been left blank in Table 2. Training of non-owner managers is
probably irrelevant in most firms until they are either at a growth or at an established stage, on
the grounds that such firms will be of insufficient size to even justify the employment of a non-
owner manager.

The third column in Table 2 shows non-managerial employee training may be provided
at all stages other than the pre-start up stage. Overall, the value of this table is to demonstrate
the heterogeneity of training provision; it also points to our lack of knowledge of whether in
some sense there are more substantial ‘returns’ both to the firm and to the nation by focusing
upon training for certain groups or at particular stages in the development of the business.
Our earlier review (Storey and Westhead, 1994; Westhead, 1996) could find no evidence of
attempts even being made to answer this vital question.

The format in which the training is provided is also a factor influencing its take-up.
For example, it may be provided on day-release courses, one day courses, evening classes or
distance learning formats of a variety of types. Account has to be taken of these differences
since some formats, in some circumstances, may be more effective than others (Facteau et al.,
1995; Greenhalgh and Stewart, 1987; Tannenbaum and Yukl, 1992).

CONCLUSIONS

Over the last decade, there has been huge growth in the ‘training industry’, much of it
supported from the public purse. Small firms have been shown to be consistently less likely to
provide training both to their managers as well as their other employees. Those which have
participated in management training schemes, however, generally suggest their business had derived benefits from participation, often in the form of providing greater confidence to the staff in receipt of training. Yet careful empirical research has failed to consistently link the provision of (management) training in small firms with enhanced performance in the recipient firm.

The positive responses of training participants, combined with low take up, have encouraged training providers and some policy makers to emphasise the lack of awareness amongst owners of small firms of the 'benefits' of training. Training providers have used the 'ignorance' argument to explain the lower take-up rates by small firms, and have implied a market failure, so justifying the provision of subsidised training for small firms. The objective appears to be to seek to raise training take-up rates amongst smaller firms, at least to the level recorded in larger firms.

This paper accepts the evidence of lower management (and wider employee) training take-up rates amongst small firms, but argues this lower take-up does not necessarily reflect any market imperfection. Instead, our view is that the lower take-up reflects the operation of the market place in an entirely predictable manner, although we do acknowledge that awareness of training provision is much lower amongst small firms. The lower management training participation rates recorded by small firms are, therefore, more likely to reflect the particular market circumstances of small firms themselves and those supplying the training, than 'ignorance' of small firm owners about the benefits of training.

Additional careful research is still required to explore the complex investment decision to provide and engage in management training. Future research should monitor the variety of management training packages currently available in the market-place. Additional research
should explore why particular management training programmes are effective for some managers (and firms) and ineffective for others (Noe, 1986). Careful evaluations of training schemes will provide policy makers with more accurate assessments of the direct and indirect benefits as well as the costs of the policy decision to subsidise management training from the public purse (Booth, 1991). There is a need for more in-depth longitudinal research exploring the ‘supply’ and ‘demand’ for management training as well as the ‘costs’ and the ‘beneficial outcomes’ (Buechtemann and Soloff, 1994). Future research should explore not only whether management training enhances firm growth and competitiveness but also whether the recipient managers have personally benefited from the human capital investment (for example, increased salaries or executive compensation after attending a training course).

and supplies, financial resources, etc.) (Mathieu et al., 1992; Noe, 1986; Peters et al., 1983) facilitates or constrains a recipient of management training to transfer their new skills back to their employer (Facteau et al., 1995). The effects of trainee characteristics should also be considered when exploring the impact of management training on firm performance. For example, “These might include trainees’ job and organizational tenure, level of skill obsolescence and plateauing, self-efficacy, and job satisfaction. In addition, broader contextual variables germane to the organization or environment could be added to assess the factors that may influence training effectiveness” (Facteau et al., 1995, p.21).
REFERENCES


<table>
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<th>Type of employee / Type of training</th>
<th>Employment Size of the Firm</th>
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<td>External</td>
<td>1</td>
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<tr>
<td>On the job</td>
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<td>In-house</td>
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<tr>
<td>On the job</td>
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Table 2  Receipt of Formal Training Across the Life Cycle of a Small Firm

<table>
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<th>Stage or status of the firm</th>
<th>Type of Personnel in Receipt of Formal Training</th>
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</tr>
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<td>Start up</td>
<td>X</td>
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<td>Growth</td>
<td>X</td>
</tr>
<tr>
<td>Established</td>
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Figure 1

The Supply and Demand for Management Training