1-1-2012

Decision making regarding access to training and development in medium-sized enterprises: an exploratory study using the critical incident technique

Alan Coetzer

Janice Redmond
Edith Cowan University

Jalleh Sharafizad
Edith Cowan University

Decision Making Regarding Access to Training and Development in Medium-Sized Enterprises: An Exploratory Study Using the Critical Incident Technique

Abstract

Purpose - *To develop an understanding of factors that impinge on managerial decision making processes regarding employee access to structured training and development (T&D) opportunities that are at least partially funded by the firm.*

Design/methodology/approach *- Semi-structured interviews incorporating the Critical Incident Technique (CIT) were conducted with 14 managers of medium-sized enterprises based in Perth, Western Australia. The interviews explored decisions managers have actually made regarding employee access to T&D and yielded 42 useable critical incidents that served as the unit of analysis.*

Findings – *There were three key findings. First, employee access to T&D was initiated primarily by managers; employees did not exhibit developmental proactivity. Regulatory requirements and performance deficits were the main factors triggering T&D. Second, decisions regarding employee access to T&D were influenced by a wider range of factors than the decision making factors that commonly feature in literature that discusses 'barriers' to T&D in SMEs. Third, decision makers tended to neglect the evaluation phase of the decision making process and engaged in post-decisional justification.*

Implications for Further Research - *The study holds a number of lessons that are based on an analysis of our experiences of using the CIT. The lessons are potentially important for researchers who will be using the technique to study similar topics in the years ahead.*

Originality/Value – *This study addresses the lack of research into factors that affect managers' decisions when they consider providing employee access to firm-sponsored structured T&D opportunities. We also assess the effectiveness of the CIT as a tool for studying managerial decision making processes regarding employee access to T&D opportunities.*

Key words: *Managerial decision making, training and development, Critical Incident Technique, medium-sized enterprises, Australia.*

Paper type: Research paper

1.0 INTRODUCTION

Employees in small and medium-sized enterprises (SMEs) are perceived by some commentators as a 'disadvantaged' group within the workforce (Devins *et al.,* 2004) because studies in several countries have found that smaller businesses are considerably less likely to provide formal training and development (T&D) for their employees than larger businesses (Bishop and Ritzen, 1991; Johnson, 2002; Kitching and Blackburn, 2002; Kotey and Folker, 2007; Storey, 2004). This discrepancy is attributable to several factors including the greater barriers to T&D faced by SMEs compared to their larger counterparts (Devins *et al.,* 2004; Kitching and Blackburn 2002; Kotey and Folker 2007). While several barriers are identified in the literature (see, for example, Johnson, 2002; Storey and Greene, 2010), commonly mentioned barriers include: (1) the actual cost of T&D; (2) the opportunity cost to SMEs of T&D; (3) lack of suitable T&D opportunities for employees in SMEs; (4) owner-managers fear that their staff will be 'poached' or that they will resign consequent on participation in T&D; and (5) owner-managers hold negative attitudes toward T&D.

The manager's role in making human capital investment decisions is unquestionably critical. Managers often act as the primary gate keepers to T&D opportunities for employees in SMEs (Matlay, 1999; Walton, 1999). However, there is scant empirical research into factors that impinge on actual managerial decision making processes. This is surprising, given that researchers and policy makers have invested considerable energy over a long period of time in trying to understand how small firms can be encouraged to participate more in T&D (Bishop, 2011). In this article we contend that any attempts to influence managerial decision making should be based on a thorough understanding of how decisions are actually made.

Research indicates that decision making in organisations typically involves simple heuristics because conditions for rational decision making rarely hold in an uncertain world (Gigerenzer and Gaissmaier, 2011). Simon (1990), the father of heuristics research in decision making, defined heuristics as "methods for arriving at satisfactory solutions with modest amount of computation" (p.11). Similarly, Gigerenzer and Gaissmaier (2011) define heuristics as "a strategy that ignores part of the information, with the goal of making decisions more quickly, frugally, and/or accurately than more complex methods" (p. 454). Albar and Jetter (2009) also characterize heuristic decision making as fast and frugal. In practical terms this means that because many managerial decisions are highly uncertain and involve a large number of attributes, managers tend to base their decisions on only a few attributes, such as financial criteria (Albar and Jetter, 2009; Gigerenzer and Gaissmaier, 2011). Furthermore, they do not always use systematic approaches to information gathering, but often rely on readily available internal information and intuition (Albar and Jetter, 2009; Shah and Oppenheimer, 2008). However, it is important to note that even though heuristics process less information than more

complex strategies, they do have accuracies close to more complex decision models (Gigerenzer and Gaissmaier, 2011). Therefore, decision heuristics are potentially useful for some managerial decisions (Albar and Jetter, 2009), such as decisions regarding employee access to T&D.

Prior research that is related to the topic of decisions regarding employee access to T&D in smaller firms has typically involved surveys of owner/manager opinions about barriers to training, rather than an investigation of actual decisions that they have made. To illustrate, in Marlow's (1998) study a total of 28 owners or current directors were asked: 'What are major reasons why this firm has not utilised training/development initiatives?' The most common reasons were time and money. In Matlay's (1999) study, face-to-face interviews were conducted with 200 respondents in which they were asked about factors affecting actual provision of training. Three of the most important factors were cost of training, time constraints and lack of trainee cover. Kitching and Blackburn (2002) used a telephone survey to ask 1005 respondents their reasons for not wanting to provide more training for their workforces. Lost working time while workers are being trained and the financial cost of external training were the most important reasons. These three studies illustrate the predominant approach to studying reasons for the relatively low levels of employee participation in T&D in smaller firms and suggest the need for a new approach.

Building on the idea that a novel and potentially more fruitful line of inquiry is investigating decisions managers have actually made regarding employee access to T&D, the broad aim of the current study is to develop an understanding of factors that impinge on managerial decision making processes regarding employee access to structured T&D opportunities that are at least partially funded by the firm. The focal research question and specific research objectives that helped to focus and bound the study within the framework of this broad aim are detailed in the next section.

2.0 RESEARCH QUESTION AND OBJECTIVES

To address the research gap mentioned previously, our exploratory descriptive study seeks to answer the question:

What factors are considered by managers of medium-sized enterprises when they make decisions regarding employee access to structured T&D opportunities that are at least partially funded by the firm?

We focused on medium-sized firms (firms with less than 200 employees) for two reasons. First, we anticipated that employees in such firms are more likely to request access to firm-sponsored structured T&D opportunities than employees in small firms (less than 20 employees). In fact,

findings of several studies (e.g., Kitching and Blackburn, 2002; Kotey and Folker, 2007) show an increase in adoption of formal, structured, and development-oriented training with increasing firm size. Second, little is known about factors influencing employee access to T&D in medium-sized firms because much of the SME literature focuses on small enterprises. As Marlow and Thompson (2008) have noted, managing staff in medium-sized enterprises presents challenges quite different from those identified in the small firm.

For the current study, training is defined as "a planned and systematic effort to modify or develop knowledge, skills and attitudes through learning experiences, to achieve effective performance in an activity or a range of activities" (Garavan, 1997, p.40). Many of the definitions of training emphasise a current job focus (Garavan 1997). Thus, the purpose of training, in the work situation, is to enable an individual to acquire abilities in order that he or she can perform adequately a given task or job (Buckley and Caple, 1995). In contrast, development is focused more on the individual than on the task or job and is concerned with longer-term personal growth and career movement (Winterton, 2007). For the purpose of our study, development will be defined as " formal activities and processes primarily oriented towards developing individuals in ways which are complementary with the organisation and its objectives and appropriate for meeting the individual's own career and development needs" (McCauley et al., 1998, p.5). However, it is important to note that there is considerable debate within the human resource management (HRM) and development (HRD) literature relating to the distinction, if any, which exists between terms such as education, training and development (Garavan, 1997).

The overall question guiding the study has been broken into the following research objectives.

To determine the:
1. triggering factors, types of T&D being considered, and the perceived beneficiaries;
2. managers' decision making objectives;
3. reasons the managers made the decision they did; and
4. managers' evaluations of the effectiveness of their decisions, and reasons for their judgements.

Our research objectives are modelled on the standard format of a critical incident. A typical critical incident consists of three elements (Butterfield *et al.,* 2004): (a) antecedent information (what led up to it) (reflected in research objective 1); (b) a detailed description of the experience itself (reflected in research objectives 2 and 3); and (c) a description of the outcome of the incident (reflected in research objective 4). Accomplishing the specified research objectives will help to cast light on important aspects of the manager's decision making process.

3.0 OVERVIEW OF FACTORS INFLUENCING PARTICIPATION IN TRAINING AND DEVELOPMENT

Resource paucity, including reliance on usually limited internal sources of finance (Storey and Greene, 2010), has been identified as a common feature of smaller firms (Carland *et al.*, 1984; Ghobadian and Gallear, 1997; Kelliher and Henderson, 2006). The resource constraints under which many SMEs operate is likely to have a significant impact on approaches to employee T&D in the SME sector. For instance, the low take up T&D in SMEs is frequently attributed to the costs of such T&D (Kitching and Blackburn, 2002). This includes the actual cost of the T&D course, and the opportunity cost of the employee's working time when the employee is away from work on a course.

Furthermore, each SME faces unique challenges and opportunities and their owner-managers and employees require specific knowledge and skills to manage these effectively. While there might be a range of T&D opportunities available, few are perceived by owner-managers to be relevant to the challenges and opportunities that they currently face (Gibb, 1997). It is also argued that the T&D opportunities that are on offer tend to be supply-driven and do not take into account the learning and development needs of SME owner-managers and their employees (Storey and Westhead, 1997). Providers of T&D opportunities may be unwilling to offer T&D to SMEs because of the high costs of organising and tailoring training to meet customers' needs (Kitching and Blackburn, 2002).

Storey and Greene (2010) assert that small businesses are much more likely to cease trading than large businesses and therefore the uncertainty facing small businesses is considerably greater than that faced by large businesses. Uncertainty about the future might lead some SME owner-managers to adopt shorter time horizons regarding investment decisions. This includes investment in T&D, where the return is at best in the medium-term (Kitching and Blackburn, 2002; Storey and Greene, 2010). Related to the notions of uncertainty and short time horizons, SME owner-managers tend to adopt a short-term, reactive approach to employee learning and development, as opposed to a strategic approach (Hill and Stewart, 2000; Sadler-Smith *et al.,* 1998). This means that the owner-managers respond to T&D requirements as these come up. Therefore, their approach tends to be *ad hoc* and reactive.

The attitude of owner-manager towards T&D is also widely perceived as a barrier to engagement in capability development (Storey and Greene, 2010). Some managers are thought to have developed negative attitudes towards formal capability development activities because of their past experiences in formal T&D situations. To illustrate, Matlay (1999) found that training is more likely to take place where the owner-manager has educational qualifications, and SME owner-managers were less likely

to be as qualified as managers in larger businesses. Matlay argues that it is this difference in the levels of educational attainment that explains why SMEs are less likely to engage in formal training.

Finally, some owner-managers may be reluctant to provide T&D opportunities for their staff because they are aware that there are limited opportunities for career advancement in smaller firms and they fear that formally qualified staff have a greater likelihood of being poached (Storey and Greene, 2010). An important tension lies in the fact that providing access to T&D can help to retain key workers, yet it can also increase the likelihood that they will be poached or seek employment in organisations that offer greater opportunities for career advancement. During periods of skill shortage this becomes an even more critical issue for smaller firms. In Australia, Western Australia is one of only a few states where the labour market has grown over the period 2010-11 and remains higher than the national rate (Department of Education, Employment and Workplace Relations, 2011). Although skill shortages in Western Australia are not as prevalent as prior to the global recession, the increased employment opportunities in the local labour market continue the trend toward skill shortage in a range of vacancies including professions, technical and trade occupations (Department of Education, Employment and Workplace Relations, 2011).

4.0 OPPOSING VIEWS ON THE IMPORTANCE OF TRAINING AND DEVELOPMENT

The relatively low level of participation in T&D in SMEs is perceived as being problematic from several different perspectives. One such perspective is that neglect of formal HR practices might well hinder progress toward sustainable competitive advantage in smaller firms (Kotey and Folker, 2007). It is also argued that lack of access to T&D opportunities hinders innovation in smaller firms. For instance, many independent small businesses do not have the training resources and knowledge to develop their staff to exploit fully the opportunities that websites bring (Simmons *et al.*, 2008). Another perspective is that lack of access to T&D opportunities may have negative effects on job satisfaction and organisational commitment (Pajo *et al.,* 2010; Rowden and Ahmad, 2000). From the perspective of SME employees, lack of access to externally-accredited training can weaken their employability and place them at a serious disadvantage in the external labour market (Ram, 1994).

In contrast, other commentators do not appear to view the relatively low levels of employee participation in T&D in SMEs as being too problematic. These commentators argue that the available T&D opportunities are often inappropriate because the T&D activities do not focus on firm-specific problems, priorities and work practices (Gibb, 1997; Johnson, 2002; Kitching and Blackburn, 2002). This is because training providers are unwilling to offer tailored programmes that meet the needs of smaller businesses due to the costs of tailoring training (Storey and Greene, 2010). When training is not tailored, trainees are less likely to transfer their new learning to the job. This argument is

supported by findings of a substantial body of research that focuses on transfer of training from T&D programmes to job performance (e.g., Blume *et al.*, 2010; Burke and Hutchins, 2007). In particular, findings show that there is a significant gap between learning, and transfer of that learning to job performance, especially when T&D programmes have not been tailored. On the whole, high levels of learning transfer appear to be very unusual (Arthur *et al.*, 2003; Grossman and Salas, 2011).

Another argument is that the relatively low level of T&D in SMEs stems from an 'informed' assessment of the costs and benefits of training provision (Storey and Greene, 2010). According to Storey (2004), 'informed' SME owner-managers face higher costs of training provision than managers in large firms and it is these differing costs that explain why smaller firms provide less training. The training costs per worker are likely to be higher in small businesses because they have fewer workers over whom the direct and indirect costs of training can be spread (Storey and Greene, 2010). Acting in an economically rational manner and adopting a pragmatic attitude to T&D investment is especially important in SMEs. Given that small businesses are much more likely to cease trading than large businesses (Storey and Greene, 2010), the fundamental priority for most SMEs is likely to be the achievement of economic viability, as opposed to trying to build and defend competitive advantages through pursuing strategies such as innovation and quality improvement. Such strategies necessitate heavy investments in the motivation, empowerment and T&D of those who hold vital knowledge (Boxall and Purcell, 2011).

It is also argued that informal training practices and informal learning processes are ideally suited to smaller firms (Billett, 2004; Gibb, 1997). Kitching and Blackburn (2002) contend that the generally limited provision of T&D in smaller firms does not mean that employees lack skills, or that training is not taking place. Rather, studies show that smaller firms are likely to place much greater reliance on informal training and learning processes (Kitching and Blackburn, 2002; Storey, 2004). These informal approaches to learning tend to be highly situated, often with a focus on tacit learning while on-the-job (Billett, 2004). Such approaches are well suited to the requirements of many smaller firms as informal training imposes fewer direct costs, can be easily integrated into their daily operations, and is more likely to be focussed on business priorities and employees' specific needs (Curran, 2000; Johnson, 2002; Patton, 2005). This focus on specific as opposed to general training has the added benefit that employees are less likely to be poached, probably by larger firms that are able to pay higher wages (Storey and Greene, 2010).

In the light of all this, what is our position on the importance of T&D in SMEs? The following quotation neatly encapsulates the position that we take.

"While it is crucial that we recognise the importance of informal aspects of learning in small firms (as in all organisations), it would be hazardous to advance a position that accords no importance at all to formal training" (Bishop, 2008, p.661).

Thus, given our position that employee participation in T&D is important in the SME sector, we contend that there is a need for further studies aimed at developing a deeper understanding of the factors that influence managerial decisions regarding employee access to structured T&D opportunities that are at least partially funded by the firm. We also believe that the critical incident technique (CIT) will be an effective exploratory tool for increasing knowledge about factors that impinge on managerial decision making.

Our position that employee participation in T&D is important in the SME sector is supported by the widely held view that T&D is critical to improving business performance and local economic development (Green and Martinez-Solano, 2011). As Jayawarna *et al.* (2007) note, this premise underpins a significant investment in SME training through European Social Funds (Devins and Johnson, 2003) and by national governments in many OECD countries (Green and Martinez-Solano, 2011; Storey, 2004). In Australia, where 99.7% of businesses are SMEs (Department of Innovation, Industry, Science and Research, 2011), statistical evidence for the extent of employer training indicates an increasing quality and quantity of training in Australian enterprises that is partly driven by government policies aimed at making nationally recognised training more available to employers and employees (Smith, 2006).

5.0 RESEARCH DESIGN AND METHODOLOGY

Design and Method Description

To answer the focal research question and accomplish the research objectives an exploratory descriptive approach was employed. The data collection method used in this study was semi-structured interviews incorporating a variant of the critical incident technique (CIT) as described by Flanagan (1954) in a classic article. In his article, Flanagan defines the CIT as "a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles" (p.327). As this definition suggests, initially the CIT was very behaviorally grounded and focused on differentiating effective and ineffective work behaviors in executing a task. However, over time, researchers have utilized the CIT to study a wide array of psychological constructs and experiences (see, for example, Gundry and Rousseau, 1994; Ellinger *et al.,* 1999). Understandably, definitions of CIT have also evolved to reflect its expanded use. For instance, according to Chell (1998), the CIT is a qualitative interview procedure which facilitates the investigation of significant occurrences (events,

incidents, processes or issues) identified by the respondent, the way the occurrences are managed, and the outcomes in terms of perceived effects. The objective is to gain understanding of the incident from the perspective of the individual, taking into account cognitive, affective and behavioural elements.

The second way in which CIT has changed since it was introduced by Flanagan has to do with the relative emphasis put on direct observation versus retrospective self-report. Although Flanagan acknowledged that retrospective self-report could be used, virtually his entire article was written from the perspective of trained observers collecting observations of human behavior (Butterfield *et al.,* 2004). However, reviews of CIT studies (e.g. Butterfield *et al.,* 2004; Gremler, 2004) suggest that a large majority of studies have used retrospective self-reports. A limitation of such studies is that they rely on the participant's ability to accurately provide a detailed account of an event (Sharoff, 2008).

One of the characteristics of the CIT is formation of categories as a result of analysing the data (Flanagan, 1954). These categories may or may not capture the context of the situation and are reductionist by definition. However, the use of CIT to study psychological constructs and experiences has been accompanied by more interpretive approaches to data analysis (Butterfield *et al.,* 2004). Finally, over time a series of credibility checks have evolved aimed at enhancing the robustness of CIT findings (Butterfield *et al.,* 2004).

Justification for using CIT

We believed that the CIT using retrospective self-reports would be an effective exploratory tool for increasing knowledge about the little-known phenomenon of managerial decision making regarding employee access to structured T&D. We formed this view because the technique is recognised by researchers in a wide range of academic disciplines as one of the premier qualitative tools for investigating significant events (incidents) (Butterfield *et al.,* 2004; Copes and Watts, 2000; Gremmler, 2004; Redmann *et al.,* 2000; Sharoff, 2008). Another reason for using the CIT is that it focuses on respondents' accounts of significant events (incidents) that have actually happened, rather than on generalisations or opinions.

As noted previously, primarily closed-ended research methods with limited scope have been applied to the research problem. Such methods are likely to provide limited insight into the complex phenomenon of managerial decision making regarding employee access to T&D. On the other hand, open-ended approaches to studying the phenomenon are likely to be difficult to administer. The CIT is a method that balances the freedom of the respondent to react to what he or she feels is important as provided by opened-ended research methods and the speed and ease of administration provided by

closed-ended methods (Swan and Rao, 1975). In other words, the CIT allows study participants as free a range of responses as possible within the overall guiding research framework (Gremler, 2004). Thus, the CIT provides both flexibility and focus. These two qualities of the CIT make it ideally suited to studying the complex phenomenon of managerial decision making regarding employee access to T&D. We were also encouraged in the knowledge that the CIT using retrospective self-reports had been fruitfully employed in at least two other studies of decision making: (1) uncomfortable prescribing decisions by GPs (Bradley, 1992); and (2) factors that influence decisions in incidents of work-family conflict (Powell and Greenhaus, 2006).

Limitations of the CIT

Like all research methods, the CIT has both strengths and limitations. As noted previously, one limitation of CIT studies using retrospective self-reports is that respondents may not be able to recall details of critical incidents (decisions) (Butterfield *et al.*, 2004; Gremler, 2004). To address this limitation, managers who agreed to participate in the study were encouraged to prepare for the interview by recalling and recording a few details of actual decisions they had made regarding employee access to firm-sponsored structured T&D opportunities. To help them prepare in this way we sent them an incident form (see Appendix 1) that they could use as a memory-aide during the interview (Bradley, 1992). The form provided spaces for participants to record salient aspects of the decision making process.

As noted previously, a strength of the CIT is that it allows the study participant as free a range of responses as possible within the overall guiding research framework. However, this characteristic of the CIT can also be a potential limitation of the method because the freedom accorded to a study participant by the CIT may invoke the participant to produce an account of the decision making process that does not clearly address its most salient aspects. Using the incident form in the current study helped to counter this potential limitation of the CIT by focussing and bounding the data collection without overly constraining participant responses.

Sampling Approach and Data Collection

The database for the sample was developed using an existing public business directory (i.e., Yellow Pages) and comprised businesses that were listed as medium-sized firms (20-199 employees). Given the exploratory nature of our study, no specific business sectors were targeted. This approach ensured that the widest range of medium-sized firms possible could be invited to participate in the study. Using this sampling approach, interviews were conducted with a total of 14 managers of medium-sized enterprises based in Perth, Western Australia. (Table 1 provides profiles of the participants and their firms.) The interviews yielded a total of 42 useable critical incidents that served as the units of analysis.

During the interview, the manager was asked to provide detailed accounts of at least three decision making incidents. For each incident the manager was taken through an interview schedule designed to capture salient information about triggering factors, type of training being considered and the perceived beneficiary (research objective 1); the manager's decision making objective and reasons the manager made the decision he or she did (research objectives 2 and 3); and the manager's evaluation of the effectiveness of the decision and reasons for his or her judgement (research objective 4). To further facilitate the collection of 'rich data', probes were incorporated in the interview schedule to help the interviewer 'flesh out' the questions, and as prompts for information that the participant may have overlooked. Each interview lasted between 60-90 minutes. With the manager's permission, the interviews were digitally recorded to ensure accuracy of the interview data. The interviews were later transcribed verbatim.

Table 1

Profiles of participants and their firms

ID #	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Gender	M	M	F	M	F	F	F	M	M	M	M	F	M	M
Age	55	51	45	27	34	41	25	55	44	34	59	43	50	53
Highest education	High School	TAFE	Uni	High School	Uni	Uni	Uni	Uni	High School	Uni	TAFE	High School	High School	Uni
Position	CEO	Director	T & D Manager	Resort Manager	Co-owner/ Practice manager	General Manager	Assistant to General Manager	General Manager	Recruitment Coordinator	Associate Director	Director	General Manager	General Manager	CEO
Firm Time (yrs)	10	15	6	1.5	10	0.2	0.5	10	10	8	29	1.3	11	0.1
Business type	Mineral exploration	Electrical	Aged care	Hospitality	Legal services	Hospitality	Hospitality	Mining equipment	Engineering	Accounting services	Electronics	Chocolate manufacture	Pork processing	Fresh produce wholesale
Employee Numbers	30	25	190	30	20	40	30	25	30	150	24	45	156	120

Data Analysis

As soon as the transcript of an interview was available for review, it was checked for accuracy and carefully examined repeatedly by the researchers. Reflective remarks were recorded in the margins (Miles and Huberman, 1994; Patton 1990). The process of review of the interview transcripts was followed by sorting the interview data into six categories that were derived from the research objectives: (1) triggering factor(s); (2) type(s) of T&D being considered; (3) perceived beneficiary; (4) decision objective(s); (5) reason(s) for authorising/not authorising access; and (6) reason(s) for judging decision effective/ineffective. Category five and six each had two sub-categories: authorised/not authorised and effective/ineffective. Content analysis was used to aid in classification of the textual interview data into the categories and sub-categories. The contents of the data were classified in the category in which it most clearly belonged by writing codes directly on the relevant data passages, and then colour coding the data strips. Reliability of text classification was assessed through coding and then re-coding the same text. After the first two transcripts had been coded and later recoded by one researcher, a second researcher checked accuracy of the researchers' coding. This check showed high reproducibility.

Classifying qualitative data into categories facilitates the search for patterns and themes, within a particular setting, or across cases (Miles and Huberman, 1994; Patton, 1990). To facilitate analysis of the interview data in the current study, the data were displayed through building matrices (Miles and Huberman, 1994). Rows were devoted to numbers (1-42) assigned to the critical incidents (units of analysis), and columns to the six categories and two sub-categories mentioned previously. The main tactics for drawing meaning from data in the matrix cells were noting patterns and themes (e.g. in managers' decision making objectives), clustering (e.g. clusters of triggering factors) and counting (e.g. types of T&D being considered).

Credibility Checks

We employed two types of checks to enhance the trustworthiness of our findings. First, as noted previously, the interviews were digitally recorded to ensure participants' accounts were accurately captured. The accuracy levels of the accounts were also checked. The accuracy of an incident can be deduced from the level of full, precise details given about the incident itself (Butterfield *et al*., 2004). General or vague descriptions of incidents might mean an incident is not well-remembered and therefore should be excluded. All incidents were assessed as having sufficient detail to be reliable and were included in the analysis. Second, the researchers independently analysed and placed initial interview data into the categories and sub-categories. The researchers then cross-checked their categorisation of the interview data and differences in categorisation of the data were reconciled.

6.0 FINDINGS OF THE INTERVIEWS

Findings of the semi-structured interviews, incorporating critical incidents, are presented and illustrated with quotations in three sections that correspond with the standard format of a critical incident: (1) what led up to it (antecedent information); (2) the experience itself; and (3) outcomes of the incident.

What Led Up to the Incident (Decision-Making Situation)?

This section reports the findings on triggering factors, types of T&D being considered, and the perceived beneficiaries. A key finding of our study is that employees in the organisations studied were not proactive in seeking access to T&D opportunities. Managers initiated employee access to T&D in a majority (29/42) of the critical incident accounts. To illustrate:

> I have not had one [request] from an employee. Every training programme that I have put any of my employees through had been through senior management's decision. [ID# 2]

This may be because employees in these firms learn through socialisation processes to be reticent about requesting access to T&D opportunities. As one manager succinctly put it: "Mostly, people know not to ask". [ID# 1] Nevertheless, our analysis of the incidents that *did* involve employees seeking access to T&D opportunities suggests that employees do so when they: (a) perceive that they are stagnating in their current role; (b) have aspirations to learn and grow and become formally qualified; and (c) want to enhance their employability.

On the other hand, owner-managers or other managers in the firm tended to initiate employee access to T&D when: (a) provision of training was required for the organisation to comply with regulatory frameworks (i.e., mandatory training); (b) employees' actual performance did not match performance expectations; (c) acquisition of new knowledge and skills was necessary to exploit a potential business opportunity; and (d) the T&D opportunity (e.g. apprenticeship or traineeship) was perceived as a cost effective mechanism for retaining employees. Each of these triggering factors is illustrated with a quotation below.

Mandatory training:
The only formal training we tend to do is what's legislated or required by law. [ID# 6]

Performance deficits:
There were some issues of how he dealt with people, and not necessarily internally either. I'm trying to say client issues, but I didn't want to say that! [ID# 9]

Business opportunities:

We put three people through the fibre-optics course. With the national broadband coming out, fibre-optics is going to be required. I was hoping to steer our company into that field. [ID# 2]

Retention:

You're giving someone the opportunity to follow a dream. They've always wanted to be a nurse ... but things have got in the way...family life, and they've become secondary. So we're up-skilling our staff, we're retaining them while they're gaining their qualification. [ID# 3]

The types of T&D being considered by the managers and employees in our study included conferences, seminars and workshops, traditional classroom-based training, and structured on-site training provided by external training providers. There were just a small number of decision making situations (9) where the type of T&D opportunity being considered matched the definition of 'development' that we employed in our study. Regarding the perceived beneficiaries, in a vast majority of the critical incident accounts (38/42), both the employer and the employee were perceived as the potential beneficiaries of the T&D opportunities that were being considered.

We looked at what our needs were – this is my business partner and I – and we felt that there were two benefits out of this. One was he would feel as though we appreciated his need to develop, but also that we would get some improved product out of it. [ID#11]

Some participants included clients as beneficiaries:

We had a client who wanted our engineers to work on a different type of engineering package. They were willing to go fifty-fifty on the payment to train them. That was a win for them, and it was a win for us, and it was a win for the personnel. [ID# 8]

The Experience Itself

This section reports findings of our analysis of the decision making objectives and the key factors influencing decisions. Specifying the objective(s) to be achieved is considered an important step in the decision making process (Nelson and Quick, 2011). The objective(s) for a decision determine what is to be accomplished by it. We sensed that the participants in our study were unwilling, or more likely unable, to fully explicate the objectives of their decisions. Nonetheless, our analysis of the interviews suggests that there were four overarching decision making objectives. These were to: (a) comply with regulatory frameworks; (b) ensure cost-effectiveness in the management of human resources; (3) retain employees perceived as 'stars' or 'solid citizens' (Boxall and Purcell, 2011); and (d) exploit potential business opportunities. Compliance with regulatory frameworks was unquestionably the

dominant theme in the interviews. Decision makers tried to ensure cost-effectiveness in the management of human resources through encouraging employees to participate in low cost T&D options, such as government-sponsored traineeships and apprenticeships. Such T&D schemes were also perceived as mechanisms for retaining key staff. While exploiting potential business opportunities did emerge as a theme in decision making objectives, it was not a strong theme.

Table II shows the multiplicity of factors influencing decisions regarding employee access to T&D that emerged from our analysis of the critical incidents. The several factors have been grouped into four categories – factors related to the employee, decision maker, T&D opportunity, and the organisation. Each factor is illustrated with a quotation below.

The employee:
We look at the abilities that they show ...try to select the most practical, confident and loyal workers for the training. Do we see them as a long term potential employee who wants to grow with the company? You try to pick staff that you think are going to stay with the company. They are the people that we actually put through the training courses. [ID# 2]

The decision maker:
I don't do online training. I don't believe in it. I've done some myself and fallen asleep. It's not hands-on enough. [ID# 4]

The T&D opportunity:
When it comes to nebulous stuff, where people wish to do non-core training, I would have to be in a very good mood, or flush with money. It's a disruption to the workplace, and there is little tangible benefit to the company or even the employee, because the employee would soon forget. [ID# 1]

The organisation:
The company has to have an immediate and direct need for somebody to have a certain skill. When faced with that you either have to go fishing outside the company to employ somebody, or we will train him to do it because he can take on those skills. [ID# 1]

Table II

Factors influencing decisions regarding employee access to T&D

The employee:	The decision maker:
• personal characteristics, such as loyalty, commitment to the organisation, and work-related attitudes* • readiness for learning • performance on previous training courses	• amount of discretion in the decision making situation (i.e., for mandatory training the decision-maker typically had very little discretion)* • need to retain employees perceived as 'solid citizens' or 'stars'* • beliefs about the improvability of skills and abilities • attitude toward various modes of training delivery (e.g. online training) • concerns about low levels of learning transfer back to the workplace
The T&D opportunity:	The organisation:
• cost-effectiveness (i.e., publicly-funded and franchise-sponsored training were considered cost-effective)* • specificity (i.e., specific training was preferred to general training)*	*Facilitating factors:* • immediate demands in jobs* • potential business opportunities that require acquisition of new knowledge and skills *Constraining factors:* • limited financial resources available for T&D*

Notes:

1. Factors within each category are listed in rough rank-order of influence. The first-mentioned factor was assessed as having a greater influence on managerial decision making than the second-mentioned factor and so forth.

2. Our quantitative and qualitative analysis of the 42 critical incident accounts suggests that these factors* were the most influential in decision making.

Of the 42 critical incidents, just three relate to decision making situations where employees' requests to access T&D opportunities were declined. In these critical incident accounts decision-makers provided strong justifications for their decisions. For example:

She's known for doing a lot of external training...she put forward a proposal, she wanted to go to a training session last year and it was in a really busy period. The topic was quite irrelevant to what she actually does on a day-to-day basis. So when you look at her [application] form there's a fair commitment on the cost, her time out of the office. The reason she wanted to go wasn't overly relevant and her sharing [of learning] was probably not that important because it was a topic that didn't apply to many. So she really struck out in all categories. [ID# 10]

Outcomes of the Incident

Participants' accounts of outcomes of the incidents were typically brief and non-specific. For example:

There was the reinforcement, and the new stuff that she learnt. Now she is confident to just get it done, and she's not stressing about it. [ID# 9]

Decision makers tended to judge the effectiveness of their decisions by looking to the effectiveness of the training itself. Training effectiveness was assessed by relying on the workplace supervisor's observations of employee performance back at the workplace and employees' reactions to the training (Did they like it? Did they think it was useful?). Comments from the participants suggest that, on the whole, they did not proactively seek feedback on the effectiveness of mandatory training. As one participant commented somewhat tongue-in-cheek, "the thing is that we need the piece of paper, we don't actually require them to safely operate the machine". [ID# 1]

7.0 DISCUSSION

Findings regarding triggering factors suggest that the approach to T&D in a majority (12/14) of the sample firms can be described as a 'deficit model' (Boxal and Purcell, 2011). This is a short-term, reactive approach in which T&D is used primarily as a mechanism to comply with regulatory frameworks and to bridge obvious performance gaps. Such a conceptualisation is consistent with the views of other commentators (e.g., Hill and Stewart, 2000; Sadler-Smith *et al.,* 1998) who have similarly characterised the approach that SMEs take to T&D.

As noted previously, managers in the organisations studied initiated employee access to T&D in a majority (29/42) of the critical incident accounts. This finding is suggestive that employees in medium-sized enterprises may need to exhibit higher levels of developmental proactivity. Interestingly, the literature that discusses the reasons for relatively low-levels of SME engagement in T&D does not mention lack of developmental proactivity on the part of employees as a potential

reason. Proactive employees self-assess their future knowledge and skill needs and actively look for opportunities to expand their knowledge and skill base (van Veldhoven and Dorenbosch, 2008).

The findings in relation to factors influencing decisions regarding employee access to structured T&D highlights the wide range of factors that the decision makers in our study considered. This is in contrast to the smaller number of decision making factors that are featured in the literature that discusses 'barriers' to T&D. In our view, too much of the SME literature is pre-occupied with a small number of factors that act as barriers to SME engagement in T&D – such as costs, lack of time, and fear of newly qualified staff being poached – and fails to pay sufficient regard to the wide range of idiosyncratic factors that influence managerial decision making, such as their attitudes toward various modes of training delivery (e.g. online training) and beliefs about the improvability of skills and abilities. A preoccupation with a narrow range of factors creates a distorted and simplistic view of managerial decision making regarding employee access to T&D.

Our analysis of the critical incidents indicates that, on the whole, the decision makers did not pay much attention to evaluating their decisions. Similarly, decision makers did not give much attention to evaluating the effectiveness of structured T&D events. One interpretation of these findings is that the managers were not acting in accordance with good practice in both managerial decision making and T&D. Evaluating the outcomes are important elements of both the managerial decision making process (Nelson and Quick, 2011) and the systematic training process (Kirkpatrick, 1998). Another interpretation is that the managers were using simple heuristics in their decision making and judgement. As mentioned previously, some commentators argue that heuristics are sophisticated reasoning tools based on cognitive schemas that experts hone over years of experience and that help them solve everyday problems and make fast and frugal decisions and judgements (Albar and Jetter, 2009; Gigerenzer and Gaissmaier, 2011).

In addition to developing an understanding of factors impinging on decision making processes regarding employee access to structured T&D opportunities, our study also provided an opportunity to assess the effectiveness of the CIT as a tool for studying managerial decision making processes. Based on our experiences, we believe that the CIT has the potential to provide fresh perspectives on the phenomenon of employee participation in T&D in SMEs, or at least raise doubts about the significance of some previously identified barriers to participation. For instance, lack of suitable T&D opportunities for smaller firms is a frequently cited barrier to participation (Storey and Greene, 2010; Storey and Westhead, 1997). Yet, in our study this barrier did not emerge as an important factor in the managerial decision making process. Another strength of the CIT as a tool for studying managerial decisions regarding employee access to T&D is that it generates data which gives the researcher a holistic view of decision making situations. This includes data about factors leading up to the decision

making situation, data about the actual decision that was made, and data about outcomes of the decision. As noted previously, a typical critical incident consists of three similar elements (Butterfield *et al.,* 2004): (a) antecedent information (what led up to it); (b) a detailed description of the experience itself; and (c) a description of the outcome of the incident. This close correspondence between the broad elements of a decision making situation and the elements of a typical critical incident is suggestive that the CIT is ideally suited to the study of managerial decision making situations. In addition to the strength associated with holism, a further strength of the CIT is the potential realism of the approach. The CIT enables the researcher to capture the complexity and idiosyncrasies of the managerial decision making process. This would not be possible using closed-ended approaches such as mail questionnaires or internet surveys.

The CIT also has some important limitations that should be taken into account by researchers intending to use this method to pursue a similar line of enquiry. Gathering an adequate number of critical incident accounts that are also sufficiently accurate is likely to be difficult. Feedback from the participants suggests that decisions regarding employee access to structured T&D opportunities that are at least partially funded by the firm are not a frequent occurrence in medium-sized enterprises. Additionally, the research participants are not likely to recall each element of the decision making process with the same levels of accuracy. For instance, in our study managers accurately recalled factors that triggered an employee's request to attend a training course and the factors that influenced his or her decision to approve or decline the request. However, several managers provided somewhat general or vague descriptions about outcomes of their decisions, presumably because limited evaluation of decisions was conducted. As suggested by Butterfield *et al.,* (2004), general or vague descriptions of incidents might mean an incident is not well-remembered and therefore should be excluded from the data analysis. This 'wastage' of critical incident accounts adds to problem of gathering an adequate number of critical incident accounts.

The findings of studies employing the CIT to investigate managerial decision making regarding employee access to T&D opportunities may be prone to social desirability bias (Chung and Monroe, 2003; Zikmund, 2003). In general, this means that some research participants may have a propensity to respond in a way that creates a favourable impression of their T&D practices. We expect that this was indeed the case in our study because of the 42 critical incidents that we collected, just three relate to decision making situations where employees' requests to access T&D opportunities were declined. Furthermore, in these three critical incident accounts the decision-makers provided strong justifications for their decisions.

Findings of critical incident studies that use retrospective self-reports to investigate managerial decision making regarding employee access to T&D may also be prone to confirmation bias.

According to Nickerson (1998, p.175) confirmation bias "...refers usually to unwitting selectivity in the acquisition and use of evidence." Confirmation bias is also known as post-decisional justification in the context of decision evaluation (McShane *et al.,* 2011). As a consequence of confirmation bias, decision makers tend to make an overly optimistic evaluation of their decisions. The effects of confirmation bias appeared to be evident in our findings because in a large majority of the critical incident accounts the participants judged their decisions to be effective.

8.0 IMPLICATIONS FOR POLICY AND PRACTICE

We argue that any attempts to influence managerial decision making by T&D providers, or by organisations trying to build capability for SME growth through promoting the concept of life-long learning and associated policy initiatives to the traditionally resistant SME sector, should be based on a thorough understanding of how decisions are actually made. According to Bishop (2011), most government agencies and providers of T&D tend to be viewed as being outsiders, culturally remote and lacking in credibility by smaller businesses. This may explain why their attempts at persuading businesses in the SME sector to engage more with T&D have tended to fail. Findings of research aimed at developing a more nuanced and intimate understanding of actual managerial decision making processes regarding employee access to T&D opportunities could contribute knowledge that would help to improve the efforts of government agencies and T&D providers to promote participation in T&D within the SME sector. The current exploratory qualitative study makes a contribution by starting the important process of identifying factors that impinge on actual managerial decisions regarding employee access to T&D opportunities, developing a categorisation scheme of the factors and assessing the effectiveness of a tool for studying managerial decision making processes.

9.0 FUTURE RESEARCH

Clearly, more empirical studies are needed to further enhance understanding of factors impinging on managerial decision making regarding employee access to T&D opportunities. Although there are several potential avenues for future research, just four are mentioned here. First, the CIT provides a potentially fruitful method for confirming findings of previous research into barriers to employee participation in T&D and for casting new light on barriers to participation. Such research should involve analysis of incidents when employees requested access to T&D and their managers *denied access* as well as incidents when managers were *uncertain* about whether to grant or deny access. Second, the CIT could also help to reveal design features of T&D programmes that appeal to managers in SMEs. To reveal these design features researchers should analyse incidents when employees requested access to T&D and their managers almost *immediately granted access*. Third, researchers who prefer not to confine their work to the SME context could employ the CIT to

investigate managerial decision making regarding employee access to T&D in relation to other 'disadvantaged' groups in the workforce, such as older workers (National Centre for Vocational Education Research, 2011). Fourth, the CIT could be fruitfully employed to capture employees' perspectives of factors that affect managers' decisions when employees request access to T&D opportunities. Findings of such a study could also help to (dis)confirm the finding of our exploratory study that employees in smaller firms lack developmental proactivity. Obviously, much work remains to be done.

Appendix 1: Interview Preparation Work Sheet

Factors Influencing Managerial Decision Making Regarding Employee Access to Structured Training and Development Opportunities that are at least Partially Funded by the Firm.

(Instructions: Please make notes on this worksheet prior to the interview and use it as a memory-aide during the interview.)

Decision Making Situation	What factor(s) triggered the decision-making situation?	What type of T&D was being considered?	Perceived beneficiary of T & D?	What were your decision objectives?	What were reason(s) you authorised access to T&D?	What were reason(s) you did not authorise access to T&D?	Looking back, what are your reason(s) for judging the decision effective?	Looking back, what are your reason(s) for judging the decision ineffective?
#1								
#2								
#3								

REFERENCES

Albar, F. M. and Jetter, A. J. (2009), "Heuristics in Decision Making", in PICMET 2009 Proceedings, August 2-6, Portland, Oregon USA, pp. 578-584.

Arthur, W., Bennett, W., Edens, P.S. and Bell, S. T. (2003), "Effectiveness of training in organizations: a meta-analysis of design and evaluation features", *Journal of Applied Psychology,* Vol. 88, pp. 234-245.

Billett, S. (2004), "Workplace participatory practices: Conceptualising workplaces as learning environments", *Journal of Workplace Learning,* Vol.16 No. 6, pp.312-324.

Bishop, D. (2008), "The small enterprise in the training market", *Education + Training,* Vol. 50 No. 8/9, pp. 661-673.

Bishop, D. (2011), "The importance of being an insider: How networks influence the small firm's engagement with formal training", *Journal of European Industrial Training*, Vol. 35 No. 4, pp. 326-344.

Bishop, J.H. and Ritzen, J. (1991), "On the job training of new hires", in Stern D (Ed.) *Market failure in training? New economic analysis and evidence on training of adult employees*, pp. 61-98, Spring-Verlag, Berlin.

Blume, B. D., Ford, J. K., Baldwin, T. T. And Huang, J. L. (2010), "Transfer of training: a meta-analytic review", *Journal of Management,* Vol. 39, pp. 1065-1105.

Boxall, P. and Purcell, J. (2011), "*Strategy and human resource management"* (3rd ed.) Palgrave MacMillan, United Kingdom.

Bradley, C.P. (1992), "Factors which influence the decision whether or not to prescribe: the dilemma facing general practitioners", *British Journal of General Practice,* Vol. 42, pp. 454-458.

Buckley, R. and Caple, J. (1995), "*The theory and practice of training* (3rd ed.), Kogan Page Ltd, London.

Burke, L. A. And Hutchins, H. M. (2007), "Training transfer: an integrative literature review", *Human Resource Development Review,* Vol. 6, 263-296.

Butterfield, L., Borgen, W.A., Amundson, N.E. and Maglio, A.T. (2004), "Fifty years of the critical incident technique: 1954–2004 and beyond", *Qualitative Research,* Vol. 5 No. 4, pp. 475-497.

Carland, J.W., Hoy, F., Boulton, W.R. and Carland, J.A.C. (1984), "Differentiating entrepreneurs from small business owners: A conceptualization", *Academy of Management Review,* Vol. 9 No. 2, pp. 354-359.

Chell, E. (1998), "Critical Incident Technique", in Symon G and Cassell C (Eds.) *Qualitative Methods and Analysis in Organizational Research: A Practical Guide*, pp. 51–72. Sage, London.

Chung, J. and Monroe, S. G. (2003), "Exploring social desirability bias", *Journal of Business Ethics,* Vol. 44, pp. 291-302.

Cope, J. and Watts, G. (2000). "Learning by doing: An exploration of experience, critical incidents and reflection in entrepreneurial learning", *International Journal of Entrepreneurial Behaviour & Research,* Vol. 6 No. 3, pp. 104-124.

Curran, J. (2000), "Journal of Small Business and Enterprise Development (Review)", *International Small Business Journal,* Vol. 18 No. 3, pp. 78-81.

Department of Education, Employment and Workplace Relations. (2011". "Skill Shortages Western Australia), available at http://www.deewr.gov.au/Employment/LMI/SkillShortages/Documents/WASkillShortages2011_06.pdf (accessed 12 January 2012).

Department of Innovation Industry, Science and Research. (2011). "Key Statistics – Australian Small Business", available at http://www.innovation.gov.au/SmallBusiness/KeyFacts/Documents/SmallBusinessPublication.pdf (accessed 12 January 2012).

Devins, D. And Johnson, S. (2003), "Training and development activities in SMEs", *International Small Business Journal,* Vol. 21 No. 2, pp. 213-228.

Devins, D., Johnson, S. and Sutherland, J. (2004), "Employer characteristics and employee training outcomes in UK SMEs: A multivariate analysis", *Journal of Small Business and Enterprise Development,* Vol. 11 No. 4, pp. 449-457.

Ellinger, A. D, Watkins, K. E. and Bostrom, R. (1999). "Managers as facilitators of learning in Learning Organizations", *Human Resource Development Quarterly,* Vol. 10 No. 2, pp. 105-125.

Flanagan, J.C. (1954), "The critical incident technique", *Psychological Bulletin,* Vol. 1, pp. 327-358.

Garavan, T.N. (1997), "Training, development, education and learning: different or the same?" *Journal of European Industrial Training,* Vol. 21 No. 2, pp. 39-50.

Ghobadian, A. and Gallear, D. (1997), "TQM and organisation size", *International Journal of Operations & Production Management,* Vol. 17 No. 2, pp. 121-63.

Gibb, A.A. (1997), "Small firms' training and competitiveness. Building upon small business as a learning organisation", *International Small Business Journal,* Vol. 15 No. 3, pp.13-29.

Gigerenzer, G. and Gaissmaier, W. (2011), "Heuristic Decision Making", *The Annual Review of Psychology* Vol. 62, pp. 451-482.

Green, A. E. and Martinez-Solano, E. (2011), "Leveraging training skills development in SMEs – An analysis of the West Midlands, England, Uk", available at http://www.oecd.org/dataoecd/52/47/49180418.pdf (accessed 12 January 2012).

Gremler, D.D. (2004), "The critical incident technique in service research", *Journal of Service Research,* Vol. 7 No. 1, pp. 65-89.

Grossman, R. and Salas, E. (2011), "The transfer of training: what really matters", *International Journal of Training and Development,* Vol. 15 No. 2, pp. 103-120.

Gundry, L.K. and Rousseau, D.M. (1994), "Critical incidents in communicating culture to newcomers: The meaning is the message", *Human Relations,* Vol. 47 No. 9, pp.1063-1088.

Hill, R. and Stewart, J. (2000), "Human resource development in small organizations", *Journal of European Industrial Training,* Vol. 24 No. 2, pp. 105-117.

Jayawarna, D., Macpherson, A. and Wilson, A. (2007), "Training commitment and performance in manufacturing SMEs: Incidence, intensity and approaches", *Journal of Small Business and Enterprise Development,* Vol. 14 No. 2, pp. 321-338.

Johnson, S. (2002), "Lifelong learning and SMEs: Issues for research and policy", *Journal of Small Business and Enterprise Development,* Vol. 9 No. 3, pp. 285-295.

Kelliher, F. and Henderson, J.B. (2006), "A learning framework for the small business environment", *Journal of European Industrial Training,* Vol. 30 No. 7, pp. 512-28.

Kirkpatrick, D.L. (1998), *"Evaluating training programmes: The four levels"* (2nd ed.), Berrett-Koehler Inc., San Francisco.

Kitching, J. and Blackburn, R.A. (2002), *"The nature of training and motivation to train in small firms",* Small Business Research Centre, Kingston University, London.

Kotey, B. and Folker, C. (2007), "Employee training in SMEs: Effect of size and firm type - family and nonfamily", *Journal of Small Business Management,* Vol. 45 No. 2, pp. 214-238.

Marlow, S. (1998), "So much opportunity – so little take up: the use of training in smaller firms", *Journal of Small Business and Enterprise Development,* Vol. 5 No. 1, pp.38 – 48.

Marlow, S. and Thompson, A. (2008), "Growing pains: managing the employment relationship in medium-sized enterprises", in Barrett R and Mayson S (Eds), *International Handbook of Entrepreneurship and HR,* Edward Elgar, Cheltenham UK.

Matlay, H. (1999), "Employee relations in small firms: A micro-business perspective", *Employee Relations,* Vol. 21 No. 3, pp. 285-295.

McCauley, C.D., Moxley, R.S. and Van Velsor, E. (1998), *"The Center for Creative Leadership handbook of leadership development",* Jossey-Bass Publishers, San Francisco.

McShane, S., Olekalns, M., and Travaglione, T. (2010), *"Organisational behaviour on the Pacific Rim"*(3rd ed.), McGraw-Hill, North Ryde, NSW.

Miles, B.M. and Huberman, A.M. (1994), *"Qualitative data analysis"* (2nd ed.), Sage Publications, CA.

National Centre for Vocational Educational Research. (2011), *"Older workers research readings",* Department of Education, Employment and Workplace Relations, Australia.

Nelson, D.L. and Quick, J.C. (2011), *"Organizational behaviour: Science, the real world, and you"* (7th ed.), South-Western Cengage Learning, Mason, Ohio.

Nickerson, S. R. (1998), "Confirmation bias: A ubiquitous phenomenon in many guises", *Review of General Psychology,* Vol. 2 No. 2, pp. 175-230.

Pajo, K., Coetzer, A. and Guenole, N. (2010), "Formal development opportunities and withdrawal behaviours by employees in small and medium enterprises", *Journal of Small Business Management,* Vol. 48 No. 3, pp.281-301.

Patton, D. (2005), "Training in smaller firms", in Marlow S Patton D and Ram M (Eds.) *Managing labour in small firms,* pp. 83-108, Routledge, London.

Patton, M.Q. (1990), *"Qualitative evaluation and research methods"* (2nd ed.), Sage Publications, California.

Powell, G.N. and Greenhaus, J.H. (2006), "Managing incidents of work-family conflict: A decision making perspective", *Human Relations,* Vol. 59 No. 9, pp. 1179-1212.

Ram, M. (1994), "*Managing to survive: Working lives in small firms",* Blackwell, Oxford.

Redmann, D. H., Lambrecht, J. J., and Stitt-Gohdes, W. L. (2000). "The critical incident technique: A tool for qualitative research" *The Delta Pi Epsilon Journal,* Vol. 42 No. 3, pp. 132-153.

Rowden, R.W. and Ahmad, S. (2000), "The relationship between workplace learning and job satisfaction in small to mid-sized businesses in Malaysia", *Human Resource Development International,* Vol. 3 No. 3, pp. 307-322.

Sadler-Smith, E., Sargeant, A. and Dawson, A. (1998), "Higher level skills training and SMEs", *International Small Business Journal,* Vol. 16 No. 2, pp. 84-94.

Shah, A. K. and Oppenheimer, D. M. (2008), "Heuristics Made Easy: An effort-reduction framework", *American Psychological Association,* Vol. 134 No. 2, pp. 207-222.

Sharoff, L. (2008), "Critique of the critical incident technique", *Journal of Research in Nursing,* Vol. 13 No. 4, pp. 301-309.

Simon, H. A. (1990). Invariants of human behavior. *Annual Review of Psychology,* Vol. 41, pp. 1–19.

Simmons, G., Armstrong, G.A. and Durkin, M.G. (2008), "A conceptualization of the determinants of small business website adoption: Setting the research agenda", *International Small Business Journal,* Vol. 26 No. 3, pp. 351-389.

Smith, A. (2006), "The development of employer training in Australia", *Education + Training,* Vol. 48 No. 4, pp. 252-261.

Storey, D.J. (2004), "Exploring the link, among small firms, between management training and firm performance: a comparison between the UK and other OECD countries", *InternationalJournal of Human Resource Management,* Vol. 15 No. 1, pp. 112-130.

Storey, D.J. and Greene, F.J. (2010), "*Small business and entrepreneurship",* Prentice Hall, Harlow, England.

Storey, D.J. and Westhead, P. (1997), "Management training in small firms: A case of market failure?" *Human Resource Management Journal,* Vol. 7 No. 2, pp. 61-71.

Swan, E. J. and Rao, C. P. (1975). "The critical incident technique: A flexible method for the identification of salient product attributes", *Journal of the Academy of Marketing Science,* Vol. 3 No. 3, pp. 296-308.

Van Veldhoven, M. and Dorenbosch, L. (2008), "Age, proactivity and career development", *Career Development International,* Vol. 13 No. 2, pp. 112-131.

Walton, J. (1999), "*Strategic human resource development",* Prentice Hall, Harlow, England.

Winterton, J. (2007), "Training, development, and competence", in Boxall P Purcell J and Wright P (Eds). *The Oxford handbook of human resource management,* pp.324-343, Oxford University Press, Oxford.

Zikmund, W.G. (2003), "*Business research methods"* (7th ed.), The Dryden Press, Orlando, FL.