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Developing Human Capital in Small Firms: A Conceptual Framework for Analysing the Effects of Managers on Employee Learning

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ABSTRACT

Workplace learning literature recognises the significant role of informal learning in developing human capital and the role that managers should play to foster the learning of staff. However, few studies have been conducted that explore the manager's impact on learning in small firms. This article develops a conceptual framework for analysing the effects of managers on employees' learning in small manufacturing firms. The paper includes a summary of the research findings that informed the conceptual framework. The findings are based on analysis of interviews conducted in 10 firms and data gathered through questionnaires from 464 employees in 31 firms. The implications of the findings for managers of small firms are described, and future research directions are derived from the conceptual framework.

INTRODUCTION

Since the emergence of human capital theory, the idea of investing in human beings as a form of capital has fuelled growing interest in workplace learning theory and practice (Boud & Garrick 1999). The burgeoning literature on workplace learning (e.g., Billett 2004), organisational learning (e.g., Easterby-Smith 1997) and the learning organisation (e.g., Senge 1990) is evidence of this growing interest in making workplaces into effective learning environments. Moreover, there are numerous descriptive accounts of organisations striving to become learning oriented (Marquardt 1996, DiBella & Nevis 1998, Marsick & Watkins 1999). Why has learning at and through work become so important?

Many commentators argue that learning has become increasingly important to the survival of organisations (Senge 1990, Argyris 1993, Schein 1993, Nevis, DiBella & Gould 1995, Pedler, Burgoyne & Boydell 1997, Tannenbaum 1997, Marsick & Watkins 1999, Poell, Chivers, Van der Krogt & Wildemeersch 2000). They (and others) argue that the importance of learning is primarily because of the need for organisations to respond to rapid and continuous change in the organisation's external environment (Pedler, et al. 1997, Gardiner, Leat & Sadler-Smith 2001). To survive, organisations must monitor their external environments, anticipate, and adapt to continual change (Marquardt 1996). Implementation of change initiatives in organisations, such as the introduction of new technology, products or processes, usually requires the acquisition of new knowledge and skills. Some commentators believe that organisations that learn faster will be able to adapt quicker and thus avoid the economic evolutionary 'weeding out' process (Schein 1993). According to De Geus (1988), learning is important, not only for organisational survival, but also because the ability to learn faster than competitors may be the only sustainable competitive advantage.

There is also wide agreement that having entered the knowledge based era, there is increasing emphasis on human capital, rather than financial and physical assets (Dixon 1990, Ulrich 1998). For example, Nonaka (1991) contends that, in an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge. Knowledge is thus, regarded as a key asset of employees, and their ability to acquire and use it is considered a source of competitive advantage (Argyris 1991, Drucker 1992).

Learning at and through work is increasingly important for employees to ensure their employability, because of

insecurity in employment, and the proliferation of flexible contracts of employment (Swanson & Holton 2001). Organisations expect employees to be flexible, adaptable and constantly learning to perform new and changing tasks (Poell, et al. 2000). Although organisations can no longer provide employment security, the employees' ability and willingness to learn and adapt are the key determinants of their employability elsewhere (Ghosal, Barlett & Moran 1999). Thus, employability is the 'new security'. Moreover, it is argued that, as part of the 'new deal' in employment, good employers will ensure that their employees remain employable by keeping them up to date through learning and development (Swanson & Holton 2001).

Arguments for the importance of learning are not limited to economic considerations. Another line of reasoning emphasises learning at work as part of general education for citizenship and fuller participation in society as a whole.

Employees develop skills of expression and communication that spill over into their personal lives. They learn new ways of collaborating and planning that they apply in the families and community organisations to which they belong. They not only become more effective in their present responsibilities, but help transform the nature of work in which they are engaged creating new work practices and forms of production (Boud & Garrick 1999, p. 1).

These arguments for the importance of learning suggest that learning in organisational settings should be continuous, if both the economic and social goals of enhanced participation in learning are to be realised.

The growing awareness of the need to encourage continuous learning has far reaching consequences for managers, who are expected to manage the workplace as a place fit for learning. The literatures that focus on workplace learning, organisational learning and the learning organisation encourage managers to move away from a directing role and towards that of coach and facilitator, and thus, take on increasing responsibility for supporting the learning of their staff (Ellinger, Watkins & Bostrom 1999, Ghoshal, et al. 1999, Lang & Wittig-Berman 2000, Sambrook & Stewart 2000, Hughes 2004). In fact, Boud and Garrick (1999) assert that there is no place for managers who do not appreciate their own vital role in fostering learning.

Similarly, managers in small firms could play an important role in fostering employee learning (Hendry, Arthur & Jones 1995, Sadler-Smith, Gardiner, Badger, Chaston & Stubberfield 2000). Small firms (however defined) represent a very significant part of the workplace learning context in New Zealand (Cameron & Massey 1999), and in other developed economies (Field 1998, Curran & Blackburn 2001, Storey 2004). Small business researchers (e.g., Gibb 1997, Field 1998, Kerr & McDougall 1999, Hill & Stewart 2000, Chaston, Badger & Sadler-Smith 2001) all emphasise the importance of learning for small business in order to ensure success in the long term. These authors and other social scientists also agree that formal training is generally not suited to small businesses for a variety of reasons (Gibb 1997, Marlow 1998). Instead, informal learning processes are preferred (Billett, Hernon-Tinning & Ehrich 2003). Given the importance of learning for the competitive performance of small businesses, and the strong preference towards informal learning processes in this sector, the actions that managers in small businesses take to support and encourage employee learning are thus matters of major interest.

This paper presents a preliminary conceptual framework for analysing the effects of managers on employees' learning in small manufacturing firms. It also reports a summary only of the major qualitative and quantitative findings (from which the conceptual framework was synthesised) of research examining the question: In selected small manufacturing firms, what effects, if any, do managers have on employees' work related learning? For this study, a manufacturing firm is defined as small if it has 10 to 49 full time equivalent employees. Firms with these numbers of employees are likely to have a recognisable management structure, and therefore, demonstrate the phenomenon of interest to the researcher. This size category also matches the Cameron and Massey (1999) and European Union (*European Commission* 1996) definitions of the small firm (10 to 49 FTE employees). This should promote comparability with other studies.

RESEARCH OBJECTIVES AND QUESTIONS

The primary aim of this study was to contribute to an understanding of the effects of managers on employees' learning in small manufacturing firms. Numerous commentators have suggested that developmental interventions by the manager and work environment contextual factors interact to affect employee learning (Knowles 1990, Tannenbaum 1997). Developmental interventions by the manager include on-the-job training, coaching, mentoring, delegation, and performance appraisal. Contextual factors influencing employee learning include managers providing rewards for learning, and managers providing modelling influences (i.e., demonstrating a personal commitment to learning). Employee learning experiences lead to outcomes for individuals and the organisation (Kirkpatrick 1998).

Three specific research objectives were distilled from the study's primary aim. The objectives were:

1. To establish if managers in selected small manufacturing firms affect employees' workplace learning.

2. To determine in what ways managers foster employees' workplace learning.
3. To explore outcomes of learning experiences for individuals and the organisation.

Table 1 shows the relationships between the research objectives and the specific research questions. The overall research question was partitioned into six specific research questions.

Table 1 Research Objectives and Related Research Questions

Research Objectives	Related Research Questions
Objective 1. To establish if managers in selected small manufacturing firms affect employees' workplace learning.	<ol style="list-style-type: none"> 1. To what sources and methods of learning do employees attribute development of their work related knowledge and skills?
Objective 2. To determine in what ways managers foster employees' workplace learning.	<ol style="list-style-type: none"> 1. Are managers perceived as creating conditions in the work environment that are favourable to employee learning? 2. What kinds of developmental interventions are managers using to foster employee learning? 3. Do workplace supervisors enact behaviours, in one on one settings, likely to foster employee learning?
Objective 3. To explore outcomes of workplace learning experiences for individuals and the organisation.	<ol style="list-style-type: none"> 1. What are outcomes of employee learning experiences for the individual? 2. What are outcomes of employee learning experiences for the organisation?

METHODOLOGY

Sampling and Study Context

The initial exploratory qualitative study used purposeful (judgemental) sampling (Patton 1990). The sample was drawn from the population of the Wellington region, which represents the capital city of New Zealand and has a population of 451,700. The contact details of manufacturing firms located in the Wellington region that matched the specified size category (10 to 49 full time equivalent employees) were purchased from a commercial database supplier. A small 'sample' (N=17) comprised of owner managers, managers, and employees in ten small manufacturing firms were interviewed in depth using the face to face semi structured interview method.

The sampling procedure used for the quantitative study was a combination of systematic sampling on the one hand, and judgemental sampling on the other. Lists containing contact (and other) details of a sample of 400 small manufacturing firms (with 10 to 49 full time equivalent employees) located in the central to lower North Island, were purchased from a reputable commercial database supplier (UBD). It was recognised, that like any database of small businesses, UBDs would be incomplete and inaccurate, since the accuracy of contact information is likely to deteriorate rapidly in a highly fluid economic environment (Tweed & Massey 2001). Therefore, before drawing a sample from the sampling frame lists, the lists were carefully examined to identify and remove elements that clearly did not belong to the target population. Using these 'clean' lists as the sampling frame, a systematic sampling procedure that involved selecting every third firm on the lists (Zikmund 2000) was employed to randomly select firms that would be invited to participate in the study. The number of firms, which were selected from the sample frame, was 120.

During the recruitment of firms to participate in the quantitative study, inevitably, some firms (from the 120 selected) were unsuitable as they fell outside the specified size category. This was because they had changed size since the database was last updated. In such cases, other firms on the database were substituted. The owner/managers of 31 firms agreed to allow their staff to participate in the study. Within these firms, sample members were selected using judgemental sampling (see Zikmund 2000). In practice, this meant that all employees in the operating cores of these firms were invited to complete a questionnaire. Using these sampling procedures, 464 useable questionnaires were received from employees in the 31 participating firms. Response rates within these firms varied between 50 to 100 per cent. Most respondents were male (63%) and almost all respondents (94%) were employed full time. The majority of respondents (60%) had no post secondary school formal education qualifications. European/New Zealand European (74%) was the largest ethnic sub sample. Notably, 68 per cent of the respondents had tenures of five or less years.

The qualitative and quantitative data used in this study were gathered from participants in mostly small batch

manufacturing firms that produce products designed to customer specifications, such as special order machine tools, custom clothing and printing. It could be reasonably assumed that workplace learning is particularly important in such firms. Small batch manufacturing is close to traditional skilled craft work, because people are a large part of the production process. Furthermore, employees are often likely to encounter novel work problems when products are made to customer specifications. Situations that prompted learning in these firms included the arrival of newcomers and their needs to be socialised and trained, the need to comply with health and safety requirements, novel work problems, and continuous improvement efforts.

Mail Questionnaire Items

A mail questionnaire was developed to capture employees' perceptions of their workplaces as learning environments. Development of the questionnaire items drew on primarily three sources. These three sources were (1) findings of the initial exploratory qualitative study, (2) relevant theory and research, and (3) questionnaires used in other studies. The questionnaire used for this study was comprised of six sections (A to F).

In sections A, B and C, responses were recorded on a seven point scale (7 = strongly agree, 1 = strongly disagree). The response keys in these three sections of the questionnaire used a mid point neutral response category ('neither agree nor disagree'), placed between the 'somewhat disagree' and 'somewhat agree' responses. Section A used 13 items (statements) to measure employee perceptions of work environment characteristics that have been found to have positive or negative effects on an individual's learning (Two negatively worded items in this section were reverse coded). Section B contained seven positively worded statements to gauge employees' perceptions of their workplace supervisors' proximate support for employees' learning. These items focus on supportive behaviours workplace supervisors enact in one on one settings (such as providing constructive feedback on performance and providing on-the-job training) that are likely to foster learning. Section C measured respondents' perceptions of outcomes of their learning experiences in terms of (dis)satisfaction with on the job learning and self rated competency. To produce the four item (dis)satisfaction with on the job learning measure, two items were added to Tannenbaum's (1997) two item 'Satisfaction with Development' index measure (One negatively worded item in this section was reverse coded). Tannenbaum's (1997) three item 'Self Rated Competency' index measure was adapted to produce the four item self rated competency measure that was used in this study. A word (proficient) in one of the three items Tannenbaum used was replaced with a synonym (capable), and one item was added.

Section D gauged respondents' perceptions of work group performance in terms of five typical 'results' measures: quality, complaints from internal or external customers, quantity and costs. Development of these items drew on team performance scales used in Edmondson's (1999) study of psychological safety and learning behaviour in work teams. Responses were recorded on a seven point scale (7 = strongly agree, 1 = strongly disagree). It was anticipated that respondents in some firms would lack information about the performance of their work group. Therefore, a mid point of a 'not sure' response category was placed between the 'somewhat disagree' and 'somewhat agree' responses.

In section E, questionnaire items measured the employees' perceptions of the usefulness of seven 'aids to learning'. These 'aids to learning' consisted of three sources of learning (immediate supervisor; other managers; and workmates) and four methods of learning (everyday work activities; on the job training; observing and listening; and trial and error). Responses were recorded on a five point scale (5 = extremely useful, 1 = not at all useful). The response keys provided a 'not sure' response option at the end of the scale. Development of the items drew on results of empirical work by Billett (2001) and Tannenbaum (1997). In these studies, workplace supervisors, other managers, and co-workers, were supported as being important sources of work related learning. These studies also highlighted the importance of direct instruction, observation and listening, and learning through direct experiences, of both the challenge of everyday work activities and trial and error, as methods of learning in the workplace.

Section F (General Information) collected information about the respondent in seven areas believed to be relevant to studying informal workplace learning processes: gender, ethnicity, employment status, tenure, nature of work, education level, and age. Results by demographic variables are not reported in this paper.

The study did not adopt complete published scales to measure the variables of interest, as suitable scales were not available. However, when developing the items and scales that were used in this study careful attention was paid to existing theory, prior research in the area, and the individual items used in published scales. Nine respondents from two manufacturing firms also pre-tested the questionnaire. Furthermore, results of the internal reliability analysis indicated that the performance of each scale was acceptable. In each case, the measure of internal consistency reliability of the scale items was satisfactory and exceeded the generally agreed upon lower limit for Cronbach's alpha (.70).

Mail Survey Implementation

Three methods of mail survey implementation were used: (1) on site group administration; (2) the drop and collect method; and (3) the postal system. Giving questionnaires to an assembled group of staff to complete was the most efficient method of survey implementation. Following Dillman (2000), a protocol for group administration of the questionnaires was developed to keep the questionnaire completion environment the same for all groups and individuals. The in person drop and collect method of survey administration involved visiting managers at their firms to drop off questionnaires and to agree on suitable times to collect completed questionnaires. Some managers preferred to have the questionnaires delivered and returned by mail.

Analysis

The verbatim expressions of the interview participants were analysed using content analytic procedures. Using the Statistical Package for Social Sciences (SPSS), a range of statistical methods was employed to analyse the mail survey data. Univariate, bivariate and multivariate analysis was conducted. Descriptive statistics helped explore, understand and describe the characteristics of individual variables through measures of central tendency and spread. Correlation analysis and multiple regression analysis were used to analyse associative relationships between the measures of work environment characteristics, supervisors' support for learning, and sources of learning on the one hand, and the measures of satisfaction with learning on the other.

FINDINGS

The focal point of this paper is the conceptual framework that was synthesised from the qualitative and quantitative findings of the study. Thus, this section presents a summary only of major qualitative and quantitative findings of the study, with the aim of setting the stage for presentation of the emergent conceptual framework for analysing the effects of managers on employees' learning in small manufacturing firms. The summary findings are presented according to the three research objectives and related research questions (as presented in Table 1).

Research Objective 1 To establish if managers in selected small manufacturing firms affect employees' workplace learning.

Research Question 1 To what sources and methods of learning do employees attribute development of their work related knowledge and skills?

With regard to sources of learning, the findings suggest that managers in the small firms studied do make useful contributions to their employees' work related learning, through developmental interventions such as delegation and coaching. From the perspective of the employees, workplace supervisors were useful sources of learning. However, workmates were perceived by employees to be more useful sources of work related learning than were the managers. In other words, employees attributed more of their learning to their workmates ($\bar{x} = 3.77$), than to their current workplace supervisor ($\bar{x} = 3.62$), or to other managers in the organisation ($\bar{x} = 3.22$).

The findings of the employee survey in relation to methods of learning are suggestive that workplace supervisors and other managers have only a moderate level of direct personal involvement in fostering employee learning. The findings suggest that the learning environments in the sample firms are inquiry based, as opposed to transmission based. In other words, the process of acquiring work related knowledge and skills seems to be mainly informal and self directed. Respondents attributed most of their work related learning to 'natural' learning processes, rather than to learning through receiving direct instruction (on the job training). The findings suggest employees acquire knowledge and skills primarily through observation of knowledge embedded in the actions of workplace models, and through their direct experiences, of everyday goal directed work activities and trial and error. These findings in relation to methods of learning provide further support for findings of other studies of learning at work (Tannenbaum 1997, Billett 2001, Boud & Middleton 2003), which suggest that formal systematic learning is of less importance than informal learning.

The general research question guiding this study asked: In selected small manufacturing firms, what effects, if any, do managers have on employees' work related learning? Analysis of the interview data gathered during the qualitative part of the study suggests that the informal employee recruitment and selection practices used by managers in some of the firms studied seem to have unintended positive 'side' effects on employees' informal workplace learning. Specifically, these managers encouraged their existing staff to recruit new employees from their familial and social milieu, and used employee selection methods that required job candidates to demonstrate their skills on the job. The findings of the qualitative part of this study suggest that when existing staff are involved in recruiting newcomers through social networks, they are also likely to take the initiative in supporting these newcomers on their pathways of work related learning. Furthermore, employee selection methods that require candidates to demonstrate their skills on the job are likely to yield, as a by product, information about their learning

needs. Such information can assist those who will guide their learning to select tasks appropriate to the learners' level of development.

In summary, the results relating to sources and methods of learning suggest that managers are an important part of the employee's learning network. However, workmates were perceived by employees to be more useful sources of work related learning than were the managers. The process of acquiring work related knowledge and skills appeared to be mainly informal and self directed. The supervisor's direct involvement in employee learning processes seemed constrained. The findings of the interviews are suggestive that the informal employee recruitment and selection practices used by managers in some of the firms studied, seem to have unintended positive 'side' effects on newcomers' informal workplace learning.

Research Objective 2 To determine in what ways managers foster employees' workplace learning.

Research Question 1 Are managers perceived as creating conditions in the work environment that are favourable to employee learning?

Findings of the employee survey relating to conditions in the work environments of the sample firms suggest that, in general, managers may (in all probability unintentionally) be failing to create some important facilitating conditions. These include opportunities for employees to choose their own methods of working (i.e., autonomy) ($\bar{x} = 4.68$), access to training ($\bar{x} = 4.98$), incentives for learning ($\bar{x} = 3.86$), modelling influences ($\bar{x} = 4.58$), and conditions favourable to innovative (as opposed to operational) learning ($\bar{x} = 4.88$).

The findings relating to conditions in the work environments also suggest that the learning potential of the work systems is enhanced primarily by managers providing opportunities for employees to access a wide range of workplace activities ($\bar{x} = 5.54$). Admittedly, this may be motivated by the owner manager's desire to have a flexible workforce, rather than a desire to foster employee learning. In addition, in small firms, it is likely that employees will be assigned to broadly defined roles (Ghobadian & Gallear 1997), because there are insufficient economies of scale to assign them to specialised roles.

Through content analysis of the verbatim expressions of the interview participants, this study did uncover several other ways managers (in the firms studied) intentionally seek to foster employees' learning in an indirect manner, through the effects of managers on salient elements of the work environment that influence informal workplace learning. These are: supporting apprentice learning; sponsoring programmes that facilitate organisational socialisation; promoting communication in the workplace; facilitating access to direct guidance from workplace models; designating learning facilitators; and providing resources for learning.

Research Question 2 What kinds of developmental interventions are managers using to foster employee learning?

Findings of the interviews suggest low level managers, such as supervisors and foremen, have a moderate level of personal involvement in the learning of staff through providing on the job training and coaching. Conversely, more senior level managers, such as the owner manager, appear to use delegation of developmental tasks and assignments more frequently than do low level managers. Recipients of such 'stretch' tasks and assignments were usually a lower level manager, such as the production manager, foreman or supervisor, or a key member of the administration staff. The findings suggest that mentoring, in the context of career development, and formal performance appraisal, are both uncommon developmental interventions. Other New Zealand research (Knuckey, Leung-Wai & Meskill 1999, Gilbert & Jones 2000, Knuckey, et al. 2002), also suggests that formal performance appraisal is uncommon in small firms.

Research Question 3 Do workplace supervisors enact behaviours, in one on one settings, likely to foster employee learning?

Findings related to the workplace supervisors' proximate support for employees' learning suggest that there is considerable scope for improvements in the ways supervisors are enacting their staff development role. The employee survey findings suggest that, overall, workplace supervisors are perceived not to be adopting a proactive stance in supporting the learning of staff, and that they are providing only low levels of learning support (There was only weak agreement ($\bar{x} < 5.0$) with each of three statements that collectively imply a proactive stance to fostering employee learning). In particular, the potential to learn through feedback from social sources, specifically workplace supervisors, is not being realised in the sample firms. Workplace supervisors may lack motivation, or the required knowledge, skills and attributes, to effectively enact their staff development role.

To summarise, findings relating to the work environment characteristics indicated that managers might have been failing to create some important facilitating conditions in the work environments. Moreover, in general, workplace supervisors in the sample firms did not seem to regard supporting the learning of staff as a priority. Nevertheless, it seems that some managers make effective (indirect) contributions to their employees' learning through, for example, providing access to a range of work activities, supporting apprentice learning, and sponsoring programmes that facilitate organisational socialisation. In general, managers seemed to have only a moderate level

of personal involvement in the learning of staff. On the job training and coaching seem to be the most common types of interventions used by managers, especially first level managers.

Research Objective 3 To explore outcomes of learning experiences for individuals and the organisation.

Research Question 1 What are outcomes of employee learning experiences for the individual?

The results of the employee survey in relation to satisfaction with on the job learning suggest that, in general, the respondents were only moderately satisfied with their informal workplace learning experiences. Nonetheless, results related to self rated competency indicate that most survey participants perceived themselves to be competent at their jobs. The results of the regression analysis also cast light on outcomes of employee learning experiences at the individual level. In this study, regression analysis was employed to identify specific work environment conditions and supervisor support behaviours (independent variables) that had a statistically significant association with employee satisfaction with on the job learning (dependent variable). Each regression model was significant at a very high level (.000).

The regression results indicate that perceptions of five work environment characteristics were significant in explaining variation in satisfaction with learning (The cut off point for a significant independent variable in this analysis was $p < .01$). These were, managers providing: (1) access to a variety of work activities, (2) opportunities to use skills and abilities, (3) encouragement to experiment to discover new and better work practices, (4) rewards for learning, and (5) modelling influences (i.e., demonstrating a personal commitment to learning). In addition, two supervisor behaviours seemed to be especially important in explaining variation in satisfaction with informal workplace learning. These behaviours were (1) providing on the job training when needed by subordinates, or (2) alternatively, arranging guidance from others when subordinates encountered work related problems.

Research Question 2 What are outcomes of employee learning experiences for the organisation?

In this study, outcomes of employee learning experiences at the organisational level were gauged in terms of typical 'results' measures of work group performance: quality, complaints from internal or external customers, quantity, and costs. Results of the employee survey relating to work group performance suggest that managers in the sample firms are not providing sufficient staff access to information related to work group 'results' measures (Large numbers of respondents selected the 'not sure' response option). Access to such information would help work groups to monitor their performance and progress, and this may foster learning at the individual and team levels (Sligo 1996). The apparent lack of staff access to information, relating to 'results' measures, is also suggestive that employees in these firms may not be empowered.

In summary, the results of the employee survey suggest that, in general, the respondents were only moderately satisfied with their informal workplace learning experiences. Nonetheless, most survey participants perceived themselves to be competent at their jobs. Additionally, specific managerial actions and behaviours that have the potential to increase employee satisfaction with workplace learning were identified. The results indicated that employees lacked access to information, about their work group's performance, necessary for learning.

CONCEPTUAL FRAMEWORK SYNTESISED FROM THE FINDINGS

On closer examination of the qualitative and quantitative findings, a pattern emerged which showed that the effects of managers on employees' learning could be classified on two dimensions: (1) the manager's probable level of intention (unintended/intended); and (2) the likely nature of effects on learning (constraining/fostering). Generally, it is unlikely that managers will intentionally act to constrain workplace learning, and no evidence of this was found in the study (There may be some exceptions, for example, managers may be reluctant to invest in employee learning and development because they have concerns about competing firms 'poaching' their staff). Thus, there appear to be three possible combinations of conceptualising the twin issues of probable level of intention and likely effects on informal workplace learning. These are illustrated in Figure 1, and each of the three combinations is discussed.

Figure 1 Conceptual Framework for Analysing Effects of Managers

		Likely Effects on Learning	
		<i>Constraining</i>	<i>Fostering</i>
Probable Level of Intention	<i>Intended</i>	(No intentional constraints on employee learning were found in this study)	Quadrant Three: Managing Learning
	<i>Unintended</i>	Quadrant One: Unrealised Potential	Quadrant Two: Small Firm Characteristics

Figure 1 shows the conceptual framework that was synthesised from the qualitative and quantitative findings of this study (Reflecting on a tentative model of how small business operatives learnt [see Ehrich, Billett & Hernon-Tinning 2003] how to implement a new practice [Australian Government mandated Goods and Service Tax] was beneficial in developing the conceptual framework). This framework can be used for interpreting and analysing the effects of managers on employees' informal workplace learning in small firms. The framework can also help to evaluate the current state of research in the field, and where gaps remain – that is, where more research is needed. In the discussion that follows, the three possible combinations of conceptualising the twin issues of probable level of intention and likely effects on learning are explained using findings of the study as illustrations.

Quadrant One: Unintended/Constraining

Arguably, of the three combinations, unintended/constraining represents the most problematic learning situation for those seeking to increase the quantity and quality of workplace learning. Thus, this quadrant is labelled as 'unrealised potential'. It is problematic because the potential of these workplaces as sites for learning is not being fully realised. The owner managers and other senior managers, through their actions and the models they provide, are omitting to create conditions in the work environments that foster informal workplace learning, in all probability unintentionally.

In this study, these work environment conditions included, lack of: (1) supervisor support for learning, (2) incentives for learning, (3) modelling influences, (4) sufficient access to information necessary for learning, and (5) conditions favourable to innovative learning. Possible reasons for these omissions on the part of managers are numerous and varied. Reasons include the possibility that managers:

- lack knowledge and skill in fostering informal learning;
- place more emphasis on performance than learning;
- are not recognised and rewarded for their people development efforts; and
- believe that employees are primarily responsible for their own learning and development.

Quadrant Two: Unintended/Fostering

The category unintended/fostering reflects two small firm characteristics that, in this study, seemed to have significant unintended positive 'side' effects on informal workplace learning. These two small firm characteristics are low levels of specialisation and formalisation. Concerning a low level of specialisation, the findings suggest that employees have broadly defined task roles (high task variety), because they perceive that they have access to a wide range of workplace activities. In addition, results of the regression analysis showed that variation in the survey respondents' perceptions of task variety was statistically significant in explaining variation in self reported satisfaction with on-the-job learning.

In regard to a low level of formalisation, findings of the qualitative phase of this study, and findings of other New Zealand studies (see, for example, Gilbert & Jones 2000), suggest that informal staff recruitment and selection processes are common in small firms. In small firms, managers tend to use 'word of mouth' recruitment and encourage their existing staff to recruit new employees from their familial and social milieu. Workers hired tend to share characteristics of those who recommend them, and are thus likely to 'fit in' with the organisational culture. The sponsor also seems to play important roles in socialisation of the newcomer, especially pre-employment socialisation, and in the initial on the job training of the new recruit. Furthermore, employee selection practices, used by managers in some of the firms studied, require candidates to demonstrate their skills on the job, and yield, as a by product, information about the new recruits' learning needs. Such information can assist those who will guide the new recruit's learning to select tasks appropriate to the learner's level of development. Thus, the informal employee recruitment and selection practices used by managers in some of the firms studied, seem to have unintended positive 'side' effects on newcomers' informal workplace learning.

Quadrant Three: Intended/Fostering

This combination was reflected in the findings of primarily the interviews and is described here as 'managing learning'. The interviews uncovered several ways managers intentionally seek to foster employees' learning, in both a direct and indirect manner. For example, low level managers in particular had a direct hand in providing on the job training and coaching. In more indirect ways, owner managers and other senior managers made significant contributions to employees' learning by supporting apprentice learning, sponsoring programmes that facilitate organisational socialisation, promoting communication in the workplace, facilitating access to direct guidance from models, designating learning facilitators, and providing resources for learning.

Given the centrality of workplaces as sites for engaging in learning in the small business sector, at least two important issues emerge from the above conceptualisation. These are: (1) on the whole, small firms have intrinsic characteristics that have the potential to enhance (or constrain) informal workplace learning; and (2) managers have a critical role in augmenting such learning by managing learning. If managers neglect this role, the potential of workplaces as sites for learning and human capital development is unlikely to be fully realised.

IMPLICATIONS: MANAGEMENT PRACTICE AND FUTURE RESEARCH

Management Practice

Quadrant one of Figure 1 represents the most problematic learning situation for those seeking to develop human capital in small firms through increasing the quantity and quality of workplace learning. It is problematic because the owner managers and other senior managers, through their actions and the models they provide are omitting to create conditions in the work environments that foster informal workplace learning, in all probability unintentionally. This highlights the importance of managers periodically examining characteristics of work environments and ensuring that these characteristics support informal learning. In order to foster learning, managers are encouraged to attend to those factors in the work environments that appear to be constraining learning.

The findings of this study suggest that there is vast potential for improving the context to support informal workplace learning, and managers may be neglecting their employee development role. In discussing the manager's employee development role, Quinn, Faerman, Thompson and McGrath (2003) note that social science research has clearly demonstrated the importance of this role in overall managerial effectiveness. Thus, management development programmes aimed at managers in small firms should embody elements that reflect the importance of the manager's people development role. For example, principles of adult learning and the skills of facilitating learning could be built into management development programmes. The performance of their people development role should also be managed.

Future Research

The framework presented in Figure 1 can be used for interpreting and analysing the effects of managers on employees' informal workplace learning in small firms. This framework can also help to evaluate the current state of research in the field, and identify where gaps remain – that is, where more research is needed. As Figure 1 illustrates, the effects of managers can be grouped in terms of probable level of intention and likely effects on learning, and analysed in terms of three major aspects: (1) unrealised potential, (2) small firm characteristics, and (3) managing learning. In regard to unrealised potential, results of the employee survey are suggestive that several owner managers (and other senior managers) are failing to develop the human capital in small firms by omitting to create some conditions in the work environments that foster informal workplace learning. The possible reasons for

these omissions on the part of owner managers are numerous and varied. Future research might attempt to unveil such reasons.

For the small business literature, the findings of the current study with regard to small firm characteristics suggest at least three specific questions that are in need of further investigation. (1) What are the effects, if any, on employees' learning of informal human resource management practices? The findings suggest that informal (low formalisation) employee recruitment and selection practices used by managers in some of the small firms studied may have significant unintended positive 'side' effects. (2) What are the effects, if any, on newcomers' learning of pre employment socialisation agents? This question is related to 'word of mouth' recruitment, which seems to be common in small firms. The findings of the content analysis of the verbatim expressions of the interview participants suggest that the newcomer's sponsor seems to play important roles in both the socialisation of the newcomer, especially pre employment socialisation, and the initial on the job training of the new recruit. (3) What are the effects, if any, on employees' learning of low specialisation? Learning is embedded in work, and findings of this study suggest that managers in small firms tend to provide access to a wide range of workplace activities. Future research might investigate other small firm characteristics that also have the potential to either foster or constrain learning.

The findings in relation to managing learning invite small business researchers to further explore the several ways managers in the sample firms intentionally seek to foster employees' learning, in both a direct and an indirect manner. Future research may productively address two questions: (1) What is the nature and extent of mentoring in small firms? The findings of this study suggest that mentoring, in the context of career development, is an uncommon developmental intervention. (2) How do managers intentionally seek to indirectly foster employees' learning? The interviews uncovered several ways managers intentionally seek to indirectly foster employees' learning by managing salient elements of the work environment that influence employee learning. Future work could confirm these findings, and further enhance understanding of these multiple ways of fostering employees' learning.

CONCLUSION

Clearly, there is a need for empirical studies to further enhance understanding of the effects of managers on employees' learning. Although the discourses of workplace learning, organisational learning and learning organisation suggest that learning should be a central concern in the workplace, evidence from this study would seem to indicate that the potential of small business organisations as sites for learning is not being fully realised. Thus, there appears to be a need to raise the capacity of New Zealand businesses to develop the human capital in these organisations. In this regard, the preliminary conceptual framework presented here provides a potentially useful means to: (1) interpret and analyse the effects of managers on employees' informal workplace learning in small firms, and (2) evaluate the current state of research in the field, and determine where gaps remain.

The Asia-Pacific Economic Cooperation (APEC) regards small and medium enterprises (SMEs) as the vehicle that creates most of the employment in the Asia-Pacific region, and the backbone for regional economic growth. Accordingly, development of SMEs in the Asia-Pacific has a crucial role in both new employment creation and sustained economic growth in the region. The actions that managers in SMEs do take to support and encourage workplace learning are thus matters of major interest, particularly because of the strong contention that there is a connection between how firms manage their people and the economic results achieved. This study and the emergent conceptual framework contributes to an understanding of learning processes in SMEs and how management practices in SMEs may influence employee learning. It suggests practice that might, if addressed, improve both managerial performance and the quantity and quality of workplace learning.

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