



What do owner-managers in small firms really do? Replicating Choran, Mintzberg, and Kurke & Aldrich

*A paper for the Small Enterprise Association of Australia and New Zealand 16th Annual Conference,
Ballarat, 28 Sept-1 Oct, 2003.*

Henrik Florén

Department for Project Management, Chalmers University of Technology
School of Business and Engineering, Halmstad University College
Box 823, 301 18 Halmstad, Sweden
Phone + 46 35 167 444, + 46 35 167 468
henrik.floren@set.hh.se

Joakim Tell

School of Business and Engineering, Halmstad University College
Box 823, 301 18 Halmstad, Sweden
Phone + 46 35 167 444, + 46 35 167 468
joakim.tell@set.hh.se



Introduction

Interest in managerial behaviour stems from the seminal work of Carlson (1951). Since Carlson's early critique of the lack of empirical studies of managers' jobs, considerable numbers of studies have been undertaken to shed light on "what managers really do" (cf. Stewart, 1967; Mintzberg, 1971, 1973; Kotter, 1982; Stewart, 1998; Tengblad, 2002). A review of the literature shows, however, that the work conducted has focused almost exclusively on managers in large organizations. Our knowledge of managerial work is therefore based almost exclusively on studies of managers in "large" organisations and our knowledge on managerial work in small firms (here defined as firms with 10-99 employees) is therefore unsatisfactory.

Mintzberg (1973) in his well-cited work on managerial work developed propositions about managerial work characteristics (see end of chapter three in his book from 1973) and a set of ten roles (see chapter four in his book), according to which managerial behaviour can be understood. Drawing on a contingency view of managerial work (see chapter five in his book), Mintzberg also discusses variations in managers' work. In the discussion about variations in managerial work, Mintzberg includes an environmental variable in which the size of the organization is one out of two variables (the other is industry). However, in his propositions on how size affects managerial work, Mintzberg draws solely on Chorán (1969), who conducted a small-scale observational study of three presidents in small firms, each observed for a period of two days. Due to the limited scope of Chorán's study it is possible to argue that the empirical base in Mintzberg's propositions of managerial work in small organizations are weak.

Ten years after Mintzberg's study (1973), Kurke & Aldrich (1983) presented a duplicate study to Mintzberg's that also included organizations that were slightly smaller than the organizations in Mintzberg's study. The organizations in Kurke & Aldrich's study were, however, still rather big (see below for a further description), which therefore leaves us with only limited empirical descriptions of what managers in small firms do.

In this paper we present a replica study of Mintzberg (1973). Our study focuses on owner-managers in small manufacturing firms, as a first step to elucidating the nature of the work undertaken by this type of managers. Hence, the primary purpose of this paper is to describe what owner-managers in small firms do, in order to complement the data presented by Chorán (1969).

A secondary purpose is to compare their behaviour to that of managers in larger organisations as described by Mintzberg (1973) and Kurke & Aldrich (1983). The aim of our study has been to conduct a full-scale replica study of Mintzberg's study in order to collect sufficient data to justify a legitimate comparison, and thereby be able to validate or invalidate Mintzberg's propositions on managerial work.

Method

The sample in the study comprised six small company owner-managers. The managers taking part in the study are managing Swedish manufacturing companies in traditional branches having between 17 – 43 employees. Before and during the observation, we collected supplementary information about the managers and their organisations. Table 1 is a summary of some key characteristics of the participating managers and their companies.



	Manager A	Manager B	Manager C	Manager D	Manager E	Manager F
Age	43	51	54	47	58	43
Sex	Male	Male	Male	Male	Male	Male
Business	Production of office chairs for disabled people	Prototype manufacturer of precision tools	Manufacturer of special design wooden windows	Manufacturer of products in stainless steel (mainly for the boat industry)	Manufacturer of special design wooden doors	Building contractor and sheet-metal shop with focus on roof works
Years in company	15	6	32	21	29	8
Years and other roles at the company	9 years as production manager	None	4 years as a production manager	Worked parallel with sales during the first years in the firm	3 years as production manager	7 years as controller
Number of years as owner-manager	5	6	28	21	26	1
Education	No university education	Post university education	No university education	University education	No university education	University education
Turnover (M US\$)/ Number of employees 2002	1,5/23	1,5/21	2/19	3,3/43	1,4/17	8,4/35

Table 1. Data for participating managers and their companies in the observational study.

Before conducting the observational study, we asked all the managers to write a diary, specifying all their activities for a period of one week, using the diary designed by Carlson (1951). This did not go according to plan, as the managers found little time to write down their activities following the format of the diary, which resulted in very brief notes on their work. In retrospect, this is not surprising; it took us almost three hours to input one day of observations, and this amount of work could of course not be expected of the managers on a daily basis¹. We did, however, receive supplementary information (albeit only partial) about the activities of the managers, which resulted in a better understanding of their situation before initiating the observational study.

As mentioned earlier this project drew on the method of structured observation as designed by Henry Mintzberg² (1973). Data was collected during the winter of 2002/2003 by both authors simultaneously. During the six weeks of observation (one week for each manager), we used Mintzberg's chronology, contact and mail records (see appendix 1-3). In total, approximately 260 hours of work and 1800 activities were observed and characterized according to their primary purpose. During the observation period extensive field notes were taken to support the recapitulation of "stories" and "events" over the weeks.

¹ Even if we did not ask them to conduct a full-scale self observation but only to briefly document their activities it will be obvious later in this paper that the possibilities for the owner-managers to collect reliable data are limited.

² For a thorough description of the use of this methodology, see Mintzberg's Appendix C (1973).



We knew all the managers prior to the study, which was a primary factor in their agreement to our shadowing of them. They had previously all been involved in another project designed to connect SMEs through learning networks in the region, which was coordinated by the university (Tell, 2001; Florén, 2003). During this collaboration, certain managers asked whether we, as representatives of the university, knew what the daily life of a small firm owner-manager entailed. Naturally, we had assumed that we did know, as we had access to, and had read a range of small business related literature and articles. During the discussions with the small firms owner-managers, however, it transpired that we knew more about what it *should* entail than what it actually did. This realisation, coupled with the desire of some of the managers to learn more about their own situation as owner-managers, was the main instigation for the launch of this observational study. The background to the project ensured that observations were done on the owner-managers “ordinary” behaviour. We would argue that our mutual knowledge of each other and our mutual history were of importance to the outcome of this research in at least two ways. First, this prior relationship was key in allowing access to the companies. Secondly, and more importantly, it made our presence more acceptable to the managers who participated. The latter is of importance as it also contributes to the validity of this study. The owner-managers felt no need to correct their behaviour. Indeed, they believed that the honest and true picture they presented of their work was an important element in the outcome of the project, and was in their interests as well.³

We asked the managers to choose a normal working week for our observation. Following the study, we asked them how much our presence had affected their work. Their comments are summarised below:

- Overall, our presence did not affect the managers’ work in any major way. However, some of the employees were reluctant to come into the office, as they felt that the manager was “busy” with us.
- Some managers worked a little bit more effectively as a consequence of our presence, and they felt that they had to make our visit worthwhile (although we had told them explicitly in advance not to change their behaviour).
- Some of the managers said that they often visit or are visited by their customers or subcontractors once a week, but during our study those meetings did not take place.

To summarise, during the observation week there were fewer scheduled as well as spontaneous meetings. The managers did not travel outside the company as much as during an ordinary week, they made more effort and dealt with issues that had been lying on their desk for weeks.

How much the presence of the researchers and the organisation of the observation in itself affect the results of the study is not addressed in depth by either Mintzberg (1973) or Kurke & Aldrich (1983), but our experience shows that this is a factor that must be taken into consideration as it has obvious implications on the results. During the observation, we took turns in observing the managers, and we also shared the time-consuming task of typing in the data from the day before on an Excel-sheet. The fact that there were two observers made it possible for us to input our hand-written observations to our database the day after the observation. This supported the process of filling-in-the-blanks and of recapping more fully what had happened during the day of observation, immediately afterwards. Based on our experience we would also argue that the iterative process of classifying all activities would have been difficult for a single researcher. In both Mintzberg’s and Kurke & Aldrich’s studies, the observations were conducted by a single observer. In carrying out an extensive observational

³ Our presence at all the companies was greatly appreciated. By the end of the week, the employees had given us nicknames like “the rubber-bands” or the two detectives Dupond and Dupont in Herge’s Tintin series, as a result of the close relations to the managers.



study such as this, we have found it important to share between two researchers the workload and all the uncertainty that has characterised the process.



Managerial behaviour in small firms

Some of the preliminary results from the six observational weeks are summarised in table 2 below. We have chosen to present the data according to the categories used by Mintzberg in order to be able to compare our results with those of Mintzberg and Kurke & Aldrich.

Florén & Tell study (2003)	Manager A	Manager B	Manager C	Manager D	Manager E	Manager F	Average
Number of activities per day	64,4	52,6	60,4	60,0	63,6	43,6	57,4
Desk work sessions							
Number per day	20,0	13,8	13,8	12,2	10,2	8,0	13,0
Proportion of time	53,2	45,4	52,3	42,4	33,8	48,0	45,9 %
Average duration	10,8	11,6	19,0	16,2	16,6	21,6	16,0 min
Telephone calls							
Number per day	12,8	19,2	17,8	19,2	23,2	12,2	17,4
Proportion of time	10,7	22,4	9,8	12,7	15,6	7,0	13,0 %
Average duration	3,4	4,1	2,8	3,1	3,4	2,1	3,2 min
Scheduled meetings							
Number per day (no per day/no per week)	1,8	0,2	0,6	1,0	1,4	0,8	1,0
Proportion of time	12,1	9,3	12,9	15,8	21,9	17,6	14,9 %
Average duration	27,1	165	107,7	73,6	78,1	79,0	88,4 min
Unscheduled meetings							
Number per day	24,6	11,6	25,6	24,8	22,0	20,8	21,6
Proportion of time	18,1	9,0	20,4	23,8	17,0	25,0	18,9 %
Average duration	3,0	2,7	4,0	4,5	3,9	4,3	3,7 min
Tours							
Number per day	5,2	7,8	2,6	2,8	6,8	1,8	4,5
Proportion of time	5,9	13,8	4,6	5,3	11,7	2,4	7,3 %
Average duration	4,6	6,3	8,9	8,8	8,6	4,8	7,0 min
TOTAL	100	100	100	100	100	100	100%
Proportion of activities lasting less than 9 min	81,1	80,2	79,2	76,0	79,6	80,9	79,5 %
Proportion lasting more than 60 min	0,3	0,4	0,3	0,3	1,3	2,7	0,9 %
Proportion of scheduled meetings with more than three participants	70%	100%	100%	86%	66%	79%	83,5 %



Table 2. Distribution of time of small firm owner-managers

In table 2 we can see that the typical owner-manager in our study spend almost half of his their time (45%) in deskwork sessions (although frequently interrupted, on average the managers in the study worked for 11 minutes before being interrupted). They have few scheduled meetings; only 1 out of 22 meetings is scheduled, i.e. decided upon at least one day in advance. Of these meetings 83% have more than three participants. During a working day they have about 22 unscheduled meetings, which take up almost a fifth of their day. They undertake about five tours through the production facilities daily. Most tours have a specific purpose, and do not relate to general (“open-ended”) inspection. Out of their 61 daily activities, 78% last less than nine minutes, while only 2% are longer than one hour.

Proportion of time in verbal contact with;	Manager A	Manager B	Manager C	Manager D	Manager E	Manager F	Mean
Subordinates	62%	44%	45%	51%	32%	72%	51%
Clients	3%	15%	19%	9%	11%	3%	10%
Suppliers and associates	28%	33%	29%	31%	33%	15%	28%
Others	7%	8%	7%	9%	24%	10%	11%

Table 3. Verbal contacts of small firm owner-managers.

A closer analysis of the owner-managers’ verbal contacts shows considerable differences between the executives observed. On an aggregated level, however, they spend over half of their verbal contacts with subordinates, one third with suppliers and associates, and about ten percent with clients and “others” respectively.

	Manager A	Manager B	Manager C	Manager D	Manager E	Manager F	Mean
Working hrs/week	39,5	42	52	44	51	45	45,5
Hrs during evenings	0	0	0	0	6	0	1
Hrs during weekends	0	0	0	0	0	0	0
Place (%) Office/factory/other	89/6/5	77/9/14	76/6/18	77/12/21	68/14/18	83/2/15	78/8/14
Initiative (%) Own/others	64/36	55/45	49/51	57/43	69/31	55/45	58/42

Table 4. Working hours, overtime, location, and on whose initiative small firm owner-managers act.

The managers in our study acted in six out of ten cases on their own initiative. They spend most of their time (almost 80%) in the office, and only 8% in the factory. The average working hours per week total 45,5 and evening work is rare. Working at weekends happens occasionally, and varies according to the owner-manager concerned (although there was none during our weeks of observations). All the managers studied stated that they tried not to bring work home.

The research community is in unanimous agreement on one characteristic of small companies, namely that any research group is very heterogeneous. The group of managers participating in this study is no exception. Some differences worth highlighting are as follows:

- The company of manager A has one large customer that accounts for almost 80 % of his company’s turnover.
- Manager B is a “sleeping” PhD student, which is unusual for a SME owner-manager within this type of industry.



- Managers C, D and E have been managers for more than 25 years, while manager F has only been a manager for one year.
- Manager F has a well-developed support structure as this company downsized from almost 80 employees to 40 with all white-collar workers retained in the administration (whereas all the other managers have only limited managerial support).

Some of the differences between the managers' work patterns might be explained by their different backgrounds or by the way in which their companies are organised: In this paper however, we do not try to explain any of the differences between the managers' behaviour, as this is not within the scope of the paper. Although quite different, we – and the participating managers – are surprised at the similarities between the group of managers in our study. This supports the finding of Mintzberg, namely that managerial work is programmed and also to some extent predictable.

Comparing managerial behaviour in small, intermediate and large firms

Below we will compare in some detail managerial behaviour in small firms as presented above, and in large organisations as presented by Chorán (1969), Mintzberg (1973) and Kurke and Aldrich (1983).

Mintzberg's study is well documented and known by almost everyone within the field of management research. In this study, five chief executives in different types of – with Mintzberg's terms – “middle to large-sized” organisations are observed for a period of 25 days. Mintzberg do, however, not give any detailed information on firm characteristics and size. Also in Chorán's study (1967) the exact size of the companies studied is unclear; only for two of the three companies Chorán gives accounts of size (50 and 150 employees).

Kurke & Aldrich's study involved the observation of four top managers in intermediate organisations for 20 days. The number of employees in the organisations is not stated in their presentation, but we can assume that the organisations in their study were larger than 100 employees on the following facts revealed in the study. Operating expenses for the hospital are cited (\$10 million per year), goods produced by the manufacturing firm totalled \$100 million (retail), the tax revenues for the school amounted to \$15 million, and the assets of the bank totalled \$50 million (all figures in 1984 US dollars).

Although there are some differences between the studies included in our comparison, the strength of our comparison lies in the fact that, in each study, the methodology of structured observation as developed by Mintzberg was used to collect data on managerial work: This makes a comparison possible as well as meaningful⁴.

In our comparison, we have chosen the approach adopted by Kurke & Aldrich (1983), and present abbreviated versions of the tables presented in Mintzberg's work, which means that we do not include the mail records. In table 5⁵ only the five main activities as defined by Mintzberg; *deskwork sessions*, *telephone calls*, *scheduled meetings*, *unscheduled meetings* and *tours* are presented. The table is organized with organizational size as guiding variable; the longer to the right in the table, the larger the organization.

⁴ It would have been relevant to include an analysis of how the time span between our study and the other three studies included in this paper effect the comparison. Another aspect that would have been worth some consideration is the cultural aspect as our study was conducted in Sweden while the other three in US. Due to the limited scope of this paper these analysis have, however, been left out of the paper.

⁵ Time for transport, lunches and activities classified as private are not included in this table.



	Small firms Florén & Tell study (2003) 6 owner-managers, 30 days of observ.	Small firms Choran study (1969) 3 presidents, 6 days of observation	Intermediate organis. Kurke & Aldrich study (1983) 4 top managers, 20 days of observation	Large organisations Mintzberg study (1973) 5 chief executives, 25 days of observ.
No. of activities per day	57,4	77	34	22
Desk work sessions				
Number per day	13,0	22	11	7
Proportion of time	45,9 %	35%	26%	22%
Average duration	16,0 min	6 min	12 min	15 min
Telephone calls				
Number per day	17,4	29	10	5
Proportion of time	13,0 %	17%	8%	6%
Average duration	3,2 min	2 min	4 min	6 min
Scheduled meetings				
Number per day	1,0	3	4	4
Proportion of time	14,9 %	21%	50%	59%
Average duration	88,4 min	27 min	65 min	68 min
Unscheduled meetings				
Number per day	21,6	19	8	4
Proportion of time	18,9 %	15%	12%	10%
Average duration	3,7 min	3 min	8 min	12 min
Tours				
Number per day	4,5	5	6	1
Proportion of time	7,3 %	12%	3%	3%
Average duration	7,0 min	9 min	11 min	11 min
Proportion of activities lasting less than 9 min	79,5 %	90%	63%	49%
Proportion lasting more than 60 min	0,9 %	0.02%	5%	10%
Proportion of time in verbal contact with:				
Subordinates	51%	56%	50%	48%
Clients	10%	7%	7%	3%
Suppliers and associates	28%	31%	6%	17%
Others	11%	6%	37%	32%
Proportion of scheduled meetings with more than 3 participants	83%	0%	44%	43%

Table 5. Selected comparisons of the work of top managers of small, intermediate and large organisations.

The owner-managers in our study spend relatively little time in scheduled meetings. Managers in large and intermediate organizations spend 50 to 59 percent of their time in scheduled meetings while the managers in Choran's study of small firms only spend 21 percent of their time in this kind of meetings. The owner-managers in our study, however, spend less time (less than 15 percent) than those in Choran's study in scheduled meetings. On the other hand, the scheduled meetings of the



owner-managers in our study were longer than those in Mintzberg and Kurke & Aldrich, and not shorter as could be expected. The number of scheduled meetings per day is also lower than figures for Choran, Kurke & Aldrich, and Mintzberg. A remarkable difference is however found concerning the proportion of scheduled meetings with more than three participants. Choran found in his study that none of the scheduled meetings included more than three participants. In our study we found that over 80 percent of the meetings included more than three participants, which is almost twice the figure of both Kurke & Aldrich and Mintzberg.

As found by Choran, we found that deskwork sessions was the most common activity, which differ small firm owner-managers from managers in larger organizations for whom scheduled meetings was most common.

Evaluating Mintzberg's propositions on managerial work

In the following we will compare and discuss seven of Mintzberg's propositions on managerial work (Mintzberg, 1973, pp. 51-53). As Mintzberg's proposition no.12 (which was used by Kurke and Aldrich in their comparison) deals with superiors, directors and co-directors that the small firm owner-managers in our study do not have, it has been excluded in this comparison. The argument for choosing the eight (seven in our study) propositions on managerial work, originally presented by Mintzberg, is well expressed by Kurke & Aldrich: "*The eight propositions are used as an organising principle because they represent the heart of his observational study*" (1983, p. 6). Mintzberg's original numbers of the propositions are kept in the account below, while the propositions in themselves have been shortened.

Prop 1: Top managers perform a considerable quantity of work, with little free time for breaks, and must put in time after daily working hours. In our study, we found no evidence to support the belief that managers work evenings and weekends. Only one manager worked one evening out of 30 studied. Neither did any of the managers work at the weekend. They all stated that this was typical for an "ordinary" week. Nor did we find that they did not have time for breaks: Instead, breaks are a rather common activity.

Prop 2: Managers' jobs are characterised by brevity, variety and fragmentation. The managers in our study performed 57,4 activities per day, compared to 77 for Choran, 34 for Kurke & Aldrich and 22 for Mintzberg. About 80 % of the manager's activities lasted less than 9 minutes in our study (90% for Choran, 63% for Kurke & Aldrich and 48% for Mintzberg), while only 0,9 % lasted longer than one hour. This picture gives support of the proposition, and strengthens the picture of fragmentation in managers' work. It is, however, worth noting that the degree of fragmentation is lower in our study than in Choran, which to some extent is surprising.

Prop 5: Of the five media constituting the managers' prime tools, top managers clearly favour verbal over written contacts. This proposition was supported by Kurke & Aldrich's study in which deskwork (written contacts) took up 26 % of their time (35% in Choran's study and 22% in Mintzberg's). In our study we found that deskwork takes up 46 % of the managers' time. The rest of their time was spent in verbal contacts (65 % in Choran's study, 74 % in Kurke & Aldrich study, 78 % in Mintzberg's study but only 54 % in our study). On an overall level, our study strengthens this proposition, but it should be noted that it seems that the amount of time in deskwork increases when the organization gets smaller.

Prop 8: Scheduled meetings consume more of top managers' time than any other activities. In the studies by Mintzberg and Kurke & Aldrich, the managers averaged four scheduled meetings per day (representing 50% of their time in Kurke and Aldrich and about 59% in Mintzberg), of which roughly half involved three or fewer people. We found no support for this proposition. In our study, there was only one scheduled meeting per day (representing 15 % of their time). Instead unscheduled meetings numbered as many as almost 22 daily on average, taking up about 19 % their time, therefore being the



most common activity. The average duration of the scheduled meetings was however longer (88 minutes) than found by Choran (27 minutes), Kurke & Aldrich (65 minutes), and Mintzberg (68 minutes). Another difference in our study is that the proportion of the scheduled meetings with more than three participants was significantly higher than in the earlier studies (83 % in our study, while 0 % in Choran, 44 % in Kurke and Aldrich, and 43 % in Mintzberg).

Prop 9: The manager spends little time touring his (or her) factory, even though such activity would provide him (or her) with opportunities to observe organizational activities informally. In the studies by Mintzberg, and Kurke & Aldrich, touring consumed three percent, compared with 12 percent in Choran's study and just above seven percent in our study. Whether or not this proposition should be supported is a matter of interpretation; the amount of time that the managers in our study spend on tours is still relatively low, but they spend more than twice as much time on tours as their peers in Mintzberg and Kurke & Aldrich's studies. Considering the amount of time in tours spend by the managers in Choran, one might draw the conclusion that tours is a more commonly used by managers in small firms than by their peers in larger organisations. Worth noting is that Choran's figure are higher than in our study which is surprising as the firms in our study smaller than the ones included in Choran.

The average length of the tours in our study are however shorter than in Choran (9 minutes), Kurke and Aldrich (11 minutes), and Mintzberg (11 minutes).

Prop 10: Top managers are boundary spanners, linking their organisations with outsiders in a variety of ways. This proposition was supported, as external contacts with clients, suppliers, trade organisations and others consume about half the managers' verbal contact time

Prop 11: Subordinates generally consumed about one-third to one half of top managers' contact time in Mintzberg's study, from about one third to three-quarters in Kurke & Aldrich's study, and 56% in Choran's study. In our study, the subordinates consumed from one-third to three-quarters of the time. This proposition was therefore supported by our study. The general figures in the three four studies, gives a rather consistent picture of the interaction with subordinates, where the managers in our study on average interact with their employees 51 percent of their time, while the managers in the studies of Choran, Kurke & Aldrich, and Mintzberg interact with their employees 56 %, 50 %, and 48 % respectively.

Hence, five out of the seven propositions are supported although with some hesitation. One might say that the overall picture of managers' work as presented by Mintzberg correlates to that sketched in our study. Of Mintzberg's seven propositions, we found support for four propositions (2, 5, 10 and 11), even though the situation for the small firm owner-manager differed significantly from that of the manager in a large organisation (which also to some extent is foreseen by Mintzberg). For three of the propositions (1, 8 and 9) we found no or unclear support. Mintzberg's propositions are unsuccessful in describing managerial work in small firms in the following ways:

- (Proposition 1) Small firm owner-managers do not work evenings and weekends and their weekly working hours are moderate, and in contrast to their large organization peers they do have free time for breaks during their working day.
- (Proposition 8) Mintzberg anticipated that small firm managers should engage to a lesser extent in formal communication, which also is our finding. Surprisingly in our finding, though, is that scheduled meetings rarely occur for owner-managers in small firms.
- (Proposition 9) Time spent touring the factory is more than twice as common for owner-managers in small firms than for managers in larger organisations.

For propositions 5 and 9, our study do find support but with some questions. This means that only three out of seven of Mintzberg's propositions are supported without doubt. This does question some of the argued generality of Mintzberg's propositions.



Discussion

The research carried out in the area of leadership/management is mostly based on studies of managers at large companies: Our study indicates that it is difficult – or at least not unproblematic – to assume that our understanding of managerial jobs, acquired from earlier studies, is transferable to the managers' jobs in small firms as there are too much dissimilarity between the two groups.

Drawing on our study we are inclined to say that Choran's early conclusions seems to hold on a overall level (although the correlation between our study and Choran's study not on all points are evident); however, a closer analysis of the individual cases in our studies shows some remarkable differences that cannot and should not be disregarded when analysing the data on managerial behaviour in small firms. The differences indicate that further research is necessary to develop our understandings of what managers do in smaller enterprises.

Our analysis also shows that there seems to be some myths about what small firm owner-managers really do. These possible myths need to be considered further in future research.

Although our analysis at this point is shallow, our suggestion is that we need to continue to research managerial work in small firms separately if we wish to gain full understanding of the scope of their management role.

References

- Carlson, S. (1951), *Executive Behaviour*, Stockholm: Strömbergs.
- Choran I. (1969), *The manager of a small company*, Montreal: McGill University, Unpublished M.B.A. thesis.
- Florén, H. (2003), "Collaborative Approaches to Management Learning in Small Firms", forthcoming in *Journal of Workplace Learning*.
- Kotter, J. P. (1982), "What effective general managers really do", *Harvard Business Review*, 60, pp. 156-67.
- Kurke, L B.; Aldrich, H E. (1983) "Mintzberg was Right!: A Replication and Extension of the Nature of Managerial Work. *Management Science*, 29, 975-984.
- Marshall, J N.; Alderman, N.; Wong, C. & Thwaites, A. (1995), "The impact of management training and development on small and medium-sized enterprises", *International Small Business Journal*, Vol. 13, Iss. 4; pp. 73-90.
- Mintzberg, H. (1971), "Managerial work: Analysis from observation", *Management Science*, 18(2): 97-110.
- Mintzberg, H. (1973), *The Nature of Managerial Work*. New York: Harper & Row.
- Stewart, R. (1967), *Managers and their jobs*, London: McMillan.
- Patton, D; Marlow, S. & Hannon, P. (2000), "The relationship between training and small firm performance; research frameworks and lost quests"; *International Small Business Journal*, Vol. 19, Iss. 1; pg. 11-27.
- Stewart, R. (ed.) (1998), *Managerial Work*, Ashgate Publishing Company.
- Tengblad, S. (2002), "Time and space in managerial work", *Scandinavian Journal of Management*, Vol. 18, pp. 543-565.
- Tell, J. (2001), *Organising University-Led Learning Networks Among Small-Enterprise Managers*, Thesis for the Degree of Doctor of Philosophy Chalmers University of Technology, Department of Work Organisation, Gothenburg, Sweden.



Appendix 1. Chronological record

CHRONOLOGICAL RECORD		Date:	Managers name:	
Time of day	Medium		Reference	Time (minutes)

Appendix 2. Mail record

MAIL RECORD		Date:	Managers name:		
Reference	Form	Sender/-recipient	Purpose	Measure	Action

Appendix 2. Contact record

CONTACT RECORD		Date:	Managers name:			
Reference	Medium	Purpose	Participants	Initiative	Time (min.)	Place