



Effects of Management by Objectives

Studies of Swedish Upper Secondary
Schools and the Influence of Role Stress
and Self-efficacy on School Leaders

Erik Lindberg

Doctoral Dissertation, 2011
Umeå School of Business
Umeå University

Effects of Management by Objectives

**Studies of Swedish Upper Secondary Schools and the Influence of Role
Stress and Self-efficacy on School Leaders**

Erik Lindberg

Doctoral Dissertation, 2011
Umeå School of Business
Umeå University

Acknowledgements

There are many people that I would like to thank because they have provided encouragement in different ways. I would like to thank my supervisors Kerstin Nilsson and Joakim Wincent who supported me with their knowledge and advice. Joakim Wincent and Daniel Örtqvist for fruitful co-authoring in theoretical fields that was new to me when I started this journey.

I would particular like to thank Prof Tim Wilson for a successful co-authoring and likewise Prof George Tesar who has contributed to the writing of this thesis both with a special academic ability and friendly support.

During the journey of writing this thesis there have been many obstacles to overcome on different levels. I have been fortunate to have support from Dr Kenny Bränberg and Dr Stefan Holmström who have supported this process in a variety of different ways, the combination of which was outstanding.

Finally I would like to thank the two Håkans; Bohman for supporting me during the process over all these years, and Boter who together with Markus Hällgren was an opponents at the final internal seminar and who offered a good deal of advice. It was a pleasure having Boter as a coach during the last phase to the finish line.

Abstract

The purpose of the dissertation is to explore the impacts of Management by Objectives (MBO) and School Based Management (SBM) on upper secondary school education in Sweden. In particular the goal is to increase our understanding of how the implementation of MBO affects schools and the role of head-teachers and to generate new knowledge about the factors that influence the performance of head-teachers. The dissertation includes four separate but interconnected articles, each addressing a different aspect of the impact of MBO on schools and head-teachers. The dissertation also includes a lengthy overview chapter. This chapter introduces the research and addresses questions of theory, research design and methodology, and also summarizes the papers and discusses conclusions and future research.

The dissertation takes a multi-theoretical approach, using insights from diffusion theory, goal-setting theory and role stress theory to guide the research. The dissertation adopts a functionalist approach to research which accepts the view that society has a systematic character and that it is possible for the researcher to investigate it using empirical methods. By doing so, the researcher can develop an understanding of the world and generate new knowledge. Even though qualitative methods are used the quantitative methods dominate in the dissertation and most of the data is collected from a mail survey of all head-teachers in upper secondary schools in Sweden. The research makes several contributions, both theoretical and practical. It confirms the findings of other research that diffusion of new ideas (in this research MBO) stalls when it is introduced into local environments where day-to-day work takes place. Goal-setting and role-stress theory are integrated, which makes it possible to show that role commitment has both functional and dysfunctional effects. It shows that efficacy plays a mediating role between stressors and performance and that the relationship between stressors and self-efficacy are not linear. Finally, are the exact nature of the different stressors described and I show that role design has an impact on the level of them. All of these findings have practical implications for those responsible for education and school policy. Below I briefly summarize each article separately.

The first article in the dissertation, "Management by Objectives: The Swedish Experience in Upper Secondary Schools," looks at how well MBO has been implemented in upper secondary schools and its impact on student performance and school effectiveness. To ascertain the success of implementation a mail questionnaire was sent to every upper secondary school head-teacher in Sweden. The questionnaire was identical to one sent to the same population (i.e. all head-teachers in upper secondary schools) ten years ago when the implementation of MBO began, thus making it possible to compare developments over time. Student performance at the level of schools was then compared to implementation levels in order to assess impact. The results of the study are that head-teachers report that the effects of MBO have declined over time. Its implementation appears not to have influenced student performance. On the other hand, it seems to have reduced teacher stress but increased head-teachers' sense of frustration.

The second article is “Goal Commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influences.” In contrast to previous research, this study argues that goal commitment can have both a positive and negative effect on role performance and conceptualizes self-efficacy as a mediator between commitment and performance. A quantitative analysis of data from over 300 head-teachers is conducted to test the hypothesis. The findings of the study show that self-efficacy does act as a mediator and that high commitment can have both positive and negative consequences. In particular, high commitment can improve performance by reducing role ambiguity, but it also drives role overload, which can reduce performance.

The third article builds on the findings of article two in order to deepen our understanding of the impact of self-efficacy on head-teacher performance. In contrast to most of the literature, “Turning Stressors into Something Productive: An empirical study revealing non-linear influences of role stressors on self-efficacy,” hypothesizes that the relationship between stressors and other outcomes of interest is non-linear. In addition it assumes that stressors might have positive effects and that self-efficacy is involved in these relationships. The research presented in the article confirms that both role conflict and role ambiguity influence self-efficacy in a non-linear way. When self-efficacy is influenced to appropriate level it has positive impacts on performance. However, when stress levels are negative for self-efficacy – either because they are too high or too low – performance suffers.

The final article in the dissertation, “Designing the Head-Teacher Role: Economic Responsibility,” also looks at head-teacher role stress. Here focus is on the role of head-teacher in Swedish upper secondary schools and how this impacts stress levels. The results show that when the head-teacher role includes significant economic responsibility, head-teachers are better equipped to address and resolve problems in their schools, although they experience significant role ambiguity and feel that they have too little time to devote to pedagogical leadership. Head-teachers without economic responsibility experience less role ambiguity, but more role conflict and role overload. Overall the results suggest that it is important that the role of the head-teacher be designed in a way that makes it compatible with the management system used to control and govern individual schools. While doing this it would be beneficial to take into considerations the factors that this study has shown to be important for head-teachers performance.

Table of contents

1 Introduction	1
1.1 Purpose of the Dissertation	5
2 Theoretical Framework	8
2.1 Research Considerations and Conceptual Approach	8
2.2 Theories and Models	9
2.3 Final Conceptual Remarks	14
3 Philosophy of Science, Methodological Considerations and their Consequences	16
3.1 Background to the Research Project	16
3.2 Scientific Perspective	16
3.3 Research Approach	19
3.4 Pilot Testing and Sending out the Questionnaire	19
3.5 Measurements	21
3.6 Analyses Techniques	22
4 Summary of the papers	24
4.1 “Management by Objectives: The Swedish Experience in Upper Secondary Schools”	24
4.2 “Goal Commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influences”	25
4.3 “National Board of Education Stressors into Something Productive: An empirical study revealing non-linear influences of role stressors on self-efficacy	26
4.4 “Designing the Head-teachers’ Role: Economic Responsibility”	27
5 Concluding the dissertation	29
5.1 School Performance	29
5.2 Head-teachers’ performance	30
5.3 Head-teacher role design	31
5.4 Contributions to Theory and Literature	33
5.5 Practical Implications	35
5.6 Future Research	36
List of figures	
Figure 1: Theoretical relationships between the four papers and the overall aim of the dissertation	10
Figure 2: The position of the dissertation in relation to Burrell and Morgan’s (1979) framework	29

List of papers

This dissertation includes a summary and the following four papers:

Paper 1

Erik Lindberg and Timothy L. Wilson.

“Management by objectives: The Swedish experience in upper secondary schools.”

Published in the *Journal of Educational Administration*, 2011 Vol. 49, No. 1, pp. 62-75

Paper 2

Erik Lindberg and Joakim Wincent.

“Goal Commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influences.”

Accepted for publication 2009-10-02 in the *Journal of Applied Social Psychology*, in press.

Paper 3

Erik Lindberg , Joakim Wincent and Daniel Örtqvist.

“Turning stressors into something productive: An empirical study revealing non-linear influences of role stressors on self-efficacy.”

Accepted for publication 2011-01-04 in the *Journal of Applied Social Psychology*, in press.

Paper 4

Erik Lindberg

“Designing the head-teacher’s role: Economic responsibility.” First version presented at the NERA conference, Trondheim, Norway, 2009.

Submitted for publication.

1 Introduction

In the 1980s and 1990s, the Reagan Administration in U.S. and the Thatcher government in the U.K. argued that implementation of New Public Management (NPM) was the best solution to problems in public administration. For most scholars, NPM refers to a series of reforms that were implemented from the late 1980s to improve the performance and efficiency of public sector organizations. It was argued that the reforms would change traditional bureaucracies into transparent, results-oriented organizations with efficient and effective management. The public sector was supposed to be influenced by the private sector, and arguments for implementing NPM were difficult to resist. According to its supporters, NPM's benefits included improving public services, the emergence of customer-oriented organizations characterized by clear goals, decentralization, and the separation of policy making from operations. Canada, Australia, and New Zealand were among the countries that assimilated the idea of NPM. The OECD and other governmental organizations also joined the movement to implement it. Many scholars were early critics of the ideas and policy recommendations of NPM, but in the end no arguments were convincing enough to hinder its implementation in the U.S., U.K., Canada, New Zealand and later in Sweden.

One scholar who can be seen as seminal in theory building of NPM, including Management by Objectives (MBO), is the management guru Peter Drucker (1954; 1986). According to Drucker, an organization must build a team and unite the individuals in it behind a common goal. Individuals might contribute to the attainment of the goal in different ways, but their efforts must operate in the same direction, and their contributions must fit together to produce a whole. Avoiding gaps and friction was one of the challenges that had to be solved to achieve a successful implementation into complex organizations in the public sector.

One of the issues that was intensely debated among scholars and consultants of NPM was how to best re-define goals into clear objectives so that it would be possible to measure goal attainment and effectiveness. Research initially focused on how MBO could be used to enhance business efficiency and on the difficulties of implementing it in private industry. Drucker's early work on the topic related to manufacturing and efforts to make manufacturing companies more effective and integrated. Against this background of practical efforts to apply MBO, scholarly work on the issue exploded, and MBO was introduced into the public sector. According to Hood's (1991) widely cited article "A public management for all seasons", one clear and important impetus behind this expansion was a desire to create more value for tax money. Applied to the public sector, MBO meant that an organization was supposed to identify explicit goals, prioritize among them and evaluate the degree to which they were achieved (Hood, 1995; Brorström et al., 1998).

A few years after its introduction into the public sector, there was significant scholarly interest in MBO. During the 1990s, however, discussions and published articles devoted to it became increasingly sparse and the interest in it declined. Today, after nearly a decade of silence, some scholars have again begun to study how successful the implementation of NPM and MBO has been and whether the original purposes were

achieved. For example, in their edited volume “New Public Management in Europe; Adoptions and Alternatives,” Pollitt et al., (2007) brought together authors who described and compared the implementation of seven specific NPM reforms in different countries. The scholarly debate concerning NPM and MBO started a new wave about implementation and effects. Critical researchers like Brunsson (2007) became if possible even more relevant, making the case for lack of the basic assumptions and its various implications for practical implementation. Scholars like Björklund et al., (2010) reported about difficulties and they focused on problems with applying goals-based grading in upper secondary schools, which was an MBO-inspired reform.

The reason for the great interest in MBO in the Swedish educational system can be traced back many years. In his book from 1990, “Competitive Advantage of Nations”, Porter suggested that education is a very important factor for countries that have been successful in creating wealth. However, he also discussed a problem that was emerging in Sweden. The educational system could no longer provide successful international Swedish industries with the rising standards of competence that they needed. Porter argued that if the education system could not produce competent graduates, Sweden would have difficulty maintaining its competitive advantage. Several public investigations in Sweden had already started examining the situation, identifying problems and investigating whether MBO might be a helpful solution (e.g. SOU 1988:20; 1992:94, Lundgren, 1999).

A decision to implement ideas from NPM and MBO implied accepting changes in the Swedish school system. Traditionally, the education system in Sweden has been influenced by central planning. It was created at the top of the national public sector hierarchy, in the National Board of Education (Skolöverstyrelsen). This was one of several national authorities charged with helping to attain the political intentions of education, which were focused on equal opportunity and solidarity. The state was the ultimate authority, controlling both resource allocation and operations. Funding for schools was earmarked, and a very detailed regulatory system enabled the state to control schools through the National Board of Education. A basic feature of the system was that all children in Sweden should receive equivalent education, regardless of where they lived in the country. For all pupils to have same conditions and all schools the same regulatory framework meant that all schools in Sweden allocated resources in a similar way, and the state exercised financial control. For example, there was a limit on the number of students per class, and all students had free access to textbooks of the same quality. Regional officials kept track of local operations, reviewed the allocation of funds and monitored the quality of schools. Obligatory standardized tests in core subjects were introduced to facilitate comparison of students’ levels of knowledge in schools throughout the country (Popkewitz, 2000).

Although the Swedish education system was initially successful, rapid social change made central planning more difficult. A debate about education began in the 1970s, and in 1974 a national government report (SOU, 1974:53) concluded that the existing educational system had deficiencies and proposed a decentralization of responsibility and authority. The report was an early indication that the old model of controlling the education system through centralized authority was under review and a likely target for reform.

During the 1980s, Sweden was also affected by the international debate about NPM. Discussions about the weaknesses and ineffectiveness of the public sector, arguments in favour of NPM and the need to adopt new management techniques became more intense. The Swedish debate echoed arguments similar to those expressed in other countries in favour of importing MBO from the private into the public sector. In the end, these arguments won the day and MBO was accepted as a tool that could be used to promote effectiveness, decentralization, long-term commitment and accountability in Swedish public administration (Holmblad-Brunsson, 2002; Brignall & Modell, 2000). A number of Swedish scholars who were active in the debate about NPM and MBO argued that it was difficult to apply MBO to the public sector in Sweden, and they opposed doing so (Ramström & Schäfer, 1992; Brunsson, 1993; 1995; Rothstein, 1994; Broadbent, 1999; Frölich, 2005). Nonetheless, in 1994 a decision was taken at the national level to replace the old system of public administration with MBO and the new curriculum (LGY 94) was introduced in upper secondary school.

The essence of the new MBO control system was that authorities at the national level set curricula objectives and delegated to municipalities the main responsibility for organizing and delivering education. The municipalities developed their own school plans outlining how schools are to operate and delegated responsibility for implementation to head-teachers. The system of tightly regulated school funding, under which money specifically earmarked for education was transferred from the national to local levels, was abandoned. Under the new system, money for education became part of the general pool of resources that the state allocates annually to the municipalities. Local municipalities started to exercise authority over priorities and levels of funding for their schools which mean that some municipalities started to allocate more resources for their schools, some less and it started to become more difficult to receive an equivalent education regardless of where the children were living (Helgøy & Homme, 2006). In short, command-and-control was replaced by MBO and most detailed regulations were eliminated. This created a possibility for the local municipalities to prioritize education and to increase or reduce the budget as long as the formulated goals were achieved. The earmarked funding was replaced by decentralized priorities.

Such significant shifts in policy required the establishment of new organizations. One of these is the new central authority, the Swedish National Agency for Education (“Skolverket”), which was established to monitor and review the country’s schools. The quality of teaching, budgets and financial control became municipal matters, and responsibility for them was delegated to head-teachers. Mandatory centralized tests were initially abolished and the knowledge levels of students throughout the country could therefore no longer be compared with the same degree of precision (Popkewitz, 2002).

The national curriculum is the overarching instrument with which the Swedish Parliament controls the way schools operate and sets the goals that pupils are to attain. In order for the curriculum to perform this control function, it must include clear guidelines for schools. To this end, it outlines values that schools are to foster in pupils as well as other learning outcomes. The curriculum also includes a statement of the responsibilities of schools (Lundgren, 1983). Curriculum theories identify appropriate learning goals for education and the conditions that shape the processes of teaching and/or rearing

children. The two main elements found in every curriculum theory are command and control. The degree to which curricula actually has an impact on schools has been the subject of scholarly research. Lundgren (1983) also describes general trends, the formation of the Swedish school system and how Swedish curricula have been developed. A common theme in much of his work is that it has been difficult for curricula to fully reach out and influence activities in the classroom. In related research, other scholars have identified conditions that they argue complicate the implementation of MBO and make it difficult for schools to live up to the intentions of the reforms.

Debates about the use of MBO in the public sector in general and in the Swedish education raise a number of questions. One of these is the role of head-teacher. Before MBO was introduced into the Swedish education system, the role of the head-teacher was designed according to the demands of Management by Rules, and centrally-placed authorities devised many detailed rules to be followed. Head-teachers could rely on volumes of instructions and paragraphs to tell them how to act in different situations and how to respond to various problems. With the introduction of MBO, head-teachers' responsibilities and authority changed. The role of head-teacher became much more difficult once there were no thick volumes of centrally-mandated rules on which to rely (Lundahl, 2002). The decentralization of authority, which was a central aspect of the new system for governing schools, changed the demands on head-teachers. They became responsible for dealing with situations and problems which that had not previously been part of the role of the head-teacher.

This new role was developed without clear instructions about the appropriate way to respond to a given problem. This was something quite new. Head-teachers were now charged with attaining goals formulated by national and local level governments. As part of this, they were also responsible for formulating goals at the level of the school and ultimately responsible for the educational and pedagogical development. This way of working meant that head-teachers could no longer simply rely on rule-books, but had to use their own judgment to decide how to act in different situations. The way their professional role is designed affects the head-teacher's work situation and their ability to achieve high-quality performance. In light of this, it is important to identify factors that impact on the role performance of head-teachers. Other important research topics include the significance of the head-teacher for both school success and school performance.

One effect of the change in the role of head-teacher was that the new role was influenced by goals and a prerequisite was a commitment to those goals. When goals are formulated, managers must develop a commitment to them if they are to influence day-to-day work. The emphasis on goals and decentralized responsibility and authority – all hallmarks of the new method of control and governance of schools – also makes head-teacher stress an important issue. Many studies (e.g. Jackson & Schuler, 1985) have found that role stress influences the performance of managers, and this raises the question of how stress impacts the ability of head-teachers to effectively manage their schools.

The research questions and issues discussed above are current topics that could gain from more attention in the scholarly literature. Addressing them will improve our knowledge about the way in which schools and head-teachers function and the impacts of MBO on the school system and education outcomes. With the implementation of MBO, the Swedish school system changed a lot. It is important to conduct more research on the results of MBO. MBO has indirectly affected the educational experiences of several hundred thousand students in Swedish upper secondary schools. These individuals will soon take up leading positions in politics, business, education, engineering, science and healthcare. Thus, in the near future, the consequences of the reform will be felt throughout the Swedish society.

1.1 Purpose of the Dissertation

This study will broaden our knowledge about the impact of MBO as a new steering device, one that emphasizes the importance of decentralization, goals and performance. The overall purpose of the dissertation is to increase our understanding of the effects of the implementation of MBO in upper secondary schools at the local school level in Sweden. This includes not only examining student performance, but also how MBO affects the situation of head-teachers and their role performance and how the design of the role influences them. The dissertation is built on four separate but interconnected articles. Each one of these articles highlights different aspects of the research question and can be seen as a free-standing piece of research. Despite this, the four articles are closely related and connected, and together they achieve the overall purpose of the dissertation as depicted in Figure 1.

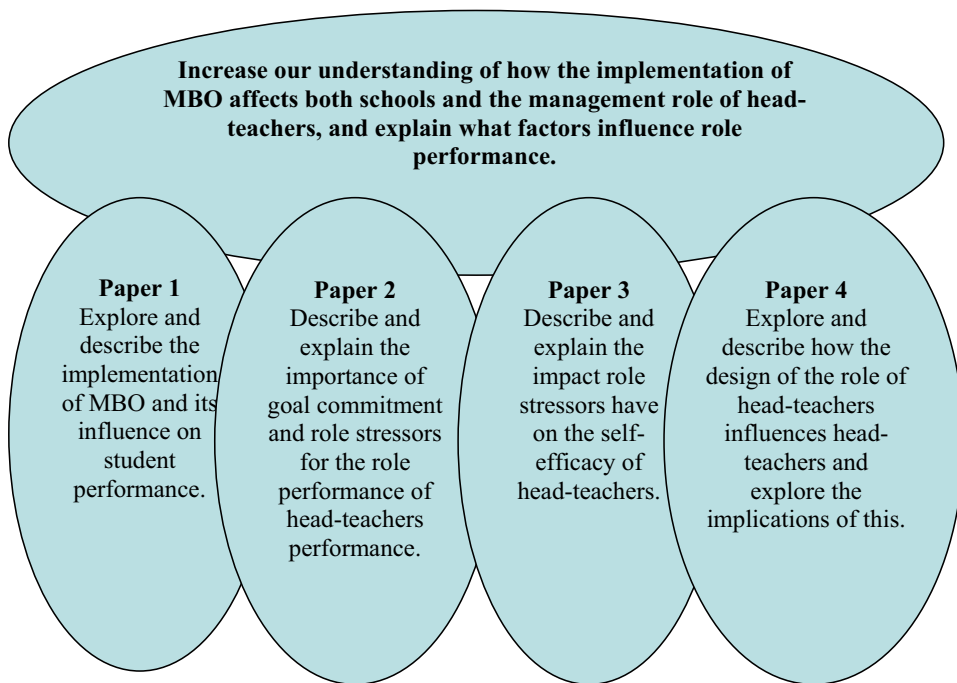


Figure 1: An illustration of how the four papers are connected and together contribute to answering the overall aim of the dissertation.

The first paper uses a longitudinal approach to describe the extent to which MBO has been implemented. As noted in Figure 1, the paper also analyzes the impact of the implementation on student performance. In the second paper, focus shifts from the aggregated level of the school in order to examine the importance of goal commitment and its impact on role stressors and the role performance of head-teachers. The third paper clarifies the impact that increased levels of role stress have on head-teachers' self-efficacy. The design of the role of head-teacher and its impact on the role-stress experienced by head-teachers and on their working conditions is the subject of the fourth paper. Together, the articles explore the way in which the implementation of MBO in upper secondary schools in Sweden has affected different phenomena. All of them focus on local schools and adopt a local management perspective.

As Figure 1 makes clear, the first and fourth papers broaden our understanding of the effects of MBO on school performance. The second and third contribute to our understanding of the impacts of MBO at the management level. In the latter papers where the characters of the research questions are wider we found it appropriate to participate in the research dialogue in the fields penetrating dimensions regarding social psychology. The complexity of the research questions raised high demands regarding theoretical contributions and skilled methodology and this has influenced the point of departure adopted in the articles as well as theoretical and methodological choices. In particular, these decisions were guided by a desire to connect the articles to recent research and to make scientific contributions, both necessary prerequisites for getting published. The research questions of paper one and four are about management and control aspects in the school sector, and this sector-specific focus makes these articles more suitable for journals penetrating questions regarding school leadership and educational administration. Articles in such journals use theories that are more closely connected to the empirical environment of schools and applied methodologies.

2 Theoretical Framework

2.1 Research Considerations and Conceptual Approach

To study the effects of MBO in Swedish schools it is necessary to pay attention to processes of implementation and adoption. Scholars like Weick (1976) argue that schools can be seen as loosely coupled systems, and that there may be discrepancies between goals and the everyday practices in schools (Meyer & Rowan 1977, March & Olsen 1976). According to Lundgren (1983), historically it has been difficult to implement curricula in a way that ensures that they successfully function as steering instruments that fully influence daily actions in the classroom. An important prerequisite to studying the impact of a new steering device is to establish a base-line value that can be used to assess how far the process of implementation has come. Diffusion theory, which focuses on the spread of innovation and ideas through cultures and organizations, can be helpful here. The theory has been used extensively in many disciplines and has also been applied in contexts influenced by MBO and goal-steering.

According to the Swedish National Agency for Education (“Skolverket”), MBO will only function properly if an entire chain of links is in place and functioning. This chain includes the existence of stated objectives, teachers who know and understand them, activities guided by them, evaluation of schools on a regular basis and reform and change to address shortcomings (Lindberg, 1998). Diffusion theory facilitates the study of how far the implementation has come and its influence on action in the classroom. It is also helpful for studying the role of the head-teacher, because if activities in the classroom have not been affected, the influence of the new steering instrument on the role of head-teachers will be minimal. In addition, both goal-setting theories and role stress theories also have important roles to play in such research.

The intentions behind MBO imply that two types of performance are important – student performance and head-teacher performance. With MBO, goals are important. Attention must be paid to how they are formulated at both the national and municipal level, how they are communicated to head-teachers and how head-teachers formulate and communicate them to the schools for which they are responsible. Additional theoretical perspectives are thus important. For example, theories about goals and goal-setting and their influence on performance are quite important. Goal setting theory focuses not only on how goals are set or communicated, but also addresses their direct impacts and the impact of individuals’ expectations of success and goal-commitment.

As previously mentioned, steering guided by MBO suggests that goals can influence school performance, but it is also likely to influence the role of the head-teacher. Understanding about the new expectations of the role might differ between the head-teacher and others. Role stress theory addresses questions of how head-teachers should perform their jobs as well as the possibility of negative consequences. This theory conceptualizes an organization as a system of roles and emphasizes that there are two different perspectives on role expectations. One is attached to the organization and the other is linked to the holder of the role. Role theory calls attention to the fact that when an organization changes, expectations about roles do not necessarily change to the same

extent. As a result, someone who holds a role in the organization might experience role stress, which might then impact role performance. Because head-teachers have a significant impact on school success, their role performance is important. Understanding what affects it is therefore a priority.

When a phenomenon to be studied is complex and important, research questions can hardly be answered using a single theory. This is because a one-theory approach often restricts our ability to develop deep and broad knowledge. The effect of MBO on schools is just such a complex phenomenon. An investigation that combines goal-setting theories and role stress theory is therefore a more promising point of departure than relying on any single theory. The conceptual approach used in this dissertation combines the three theories discussed thus far. By integrating several theories, we can illuminate from several perspectives the impact that the shift from old instruments of steering to MBO has had on head-teachers in their role as local managers. The use of multiple theoretical lenses contributes to an understanding of the effects of MBO in a broader context. The individual studies in this dissertation are thus based upon different theories. A review of each of them follows.

2.2 Theories and Models

The decision to implement MBO was made at the national policy level. Neither local governments nor schools had called for the adoption of MBO. Nonetheless, head-teachers were made responsible for implementation and improving the effectiveness of their schools. The logic of MBO presupposes strictly rational decision making during the implementation process. A second generation of rationalist implementation theory has argued that implementation is also affected by structures or processes that are overlooked in traditional rationalist understandings of integration as a top-down process. These rational implementation theories include incrementalism (cf. Lindholm, 1959). Rationalist perspectives of implementation consider the process to be both complex and demanding, but not impossible. However, it has been suggested that the rational implementation theory supported by proponents of MBO, or the MBO model extensively applied in NPM, may have been based on an overly naïve, traditional rationalist understanding of the implementation process (Frederick & Johnston, 1999).

Diffusion theory. To address this criticism, it is necessary to empirically study the implementation process in order to properly understand its overall success (Frederick & Johnston, 1999). In a longitudinal approach, diffusion theory is a helpful tool. This dissertation extends prior research by examining how MBO has influenced the organizational level where action takes place – in our case the school unit. The empirical data was collected from head-teachers of Swedish secondary schools both 1998 and 2008. Using a longitudinal approach, we compare their perceptions of how MBO has changed the organizations for which they were responsible.

Twenty years ago Meyer and Goes (1988, pp. 897) posed the question: “Why and how do organizations evaluate, adopt and implement innovations?” They argued that few research questions spanned so many social science disciplines. Many studies have been conducted since their work, but the question retains its relevance. One thing that most researchers

agree on is that the primary source for management innovation is the private sector (Jackson & Lapsley, 2003). Diffusion to the public from the private sector has therefore become a topic of interest among researchers and policymakers. The latter have played a central role in encouraging the use of new management ideas to bring about change in the public sector (Lapsley & Wright, 2004). Diffusion studies used to focus on the initial phase of adoption (Daft, 1978; Kimberly & Evanisko, 1981), but many researchers (e.g. Wenisch, 2004) argue that there is more to diffusion than the initial decision to adopt. Moreover, most problems arise after the initial adoption phase, during the second phase (Gallivan, 2001).

There is a considerable body of research about innovation diffusion. The work has been influenced by many theoretical frameworks, and Gallivan (2001) provides a useful summary. One thing they all have in common is their point of departure. They identify something new – an idea or an innovation – that is to be diffused and a population of potential adopters. The process of diffusion starts with someone getting access to information about a "new" idea (Rogers 1983, 1995). Marketing research applied diffusion theories early, and Webster (1971) defined diffusion as a social process by which an innovation spreads through a social system. He emphasized the supply side of the process. Many of the early studies had an individualist perspective and focused on the initial adoption of a concept (Kimberly & Evanisko, 1981). The connection between idea and diffusion was strong, as was the emphasis on 'newness'. A few researchers, like Bradford and Kent (1977), re-conceptualized newness as a situation in which a given social system perceives an idea as new. This definition makes it possible to define old ideas applied in new settings as innovations.

The theory of diffusion has been used in many disciplines during the last decades, including the natural sciences, geography and management accounting. The growth of the diffusion literature has prompted some researchers to develop typologies that summarize the different ways the concept is used. Slappendel (1996) presents a classification model with three perspectives on the adoption of innovations: the individualist, the structuralist and the interactive. The individualist perspective sees individual actions and characteristics as the cause of innovation. In the structuralist perspective, innovation is attributed to structural factors. The focus of such studies is the overall organizational level, and multiple organizational factors are included in the analysis. The manager's role is seen as reactive. The interactive process approach sees innovation as a result of the interaction of structural influences and individual activities in the diffusion process over time.

Gallivan's (2001) stage-based concept is closely connected to this interactive perspective. He found that the primary decision, which is made at the highest level of the firm in the early stage of innovation, can be characterized by centralized, decisive, top-down action. However, in the second stage of diffusion, difficulties related to organizational context, cultural norms and work responsibilities must be confronted. Gallivan's model emphasizes the second stage of the adoption process, and it encourages researchers of the diffusion process to focus on the local environment, where the individuals whose daily work is influenced by the innovation are to be found. The model, in which the decision to adopt an innovation is made at the top (centralized) level of an organization and where

diffusion therefore comes entirely from above, creates a point of departure for a longitudinal study aimed at increasing our knowledge and understanding of the public sector, which is itself characterized by formal hierarchical structures. As mentioned above, most diffusion studies have focused on the private sector, but they provide useful insights for the public sector (Lapsley & Wright, 2004). Webster's definition of diffusion also provides a motive for studying the public sector when it "imports" a private sector innovation. Each such import can be seen as an innovation vis-à-vis the (new) social system, thus providing new opportunities to investigate the diffusion process. A focus like Gallivan's, i.e. on the second phase and at the level at which action to adopt the new innovation takes place, is a promising foundation for penetrating the research questions of interest in this dissertation.

Goal-setting theory. Goal-setting studies are based on the research of Ryan (1970) and have their roots in organizational theory. McClelland (1953), McClelland et al. (1953) and others argued that individuals have subconscious, internal motives, one of which is "the need for achievement." Atkinson (1958) went further and showed that the level of the difficulty of a task was related to performance, and when Ryan (1970) showed that conscious goals affect action, the basis for formulating and working with goal-setting theory was founded. Further development of the theory and its application in empirical research soon followed. The founders and most active researchers for four decades were Gary Latham and Edwin Locke. They studied the relationship between conscious performance goals and level of task performance. The research field has developed further since the work of these pioneers. The core premise is a solid and well developed theory, and it is used to study different contexts (Locke & Latham, 2006).

Goal-setting theory is one of the dominant motivational theories in the study of organizational behaviour (Feather, 1990). The goal mechanism is built on the fact that goals affect performance through several mechanisms. It is not enough to ask people to do their best. Goals direct attention and have an energizing function. Bandura and Cervone (1983) have shown that ambitious goals lead to greater effort than modest ones. Goals also affect persistence, and LaPorte and Nath (1976) argue that when participants have control over time they can achieve a goal. If goals are ambitious, they influence performance such that efforts to achieve them are prolonged. Wood and Locke (1990) have found that the use of strategies, task-relevant knowledge and discovery are indirectly and positively affected by goals. According to Locke (1991a), the importance of goals can be summarized by emphasizing that goals influence action by affecting intensity, duration, and direction of action. According to Appelbaum and Hare (1996), the influence of goals is far-reaching because their importance impacts on the interactions, self-efficacy and performance of individuals. When situations become complex and individuals must develop new strategies for solving problems, goal-setting must change character. This is because in such contexts, learning goals are more efficient than performance goals (Earley et al., 1989).

The relationship between goals and performance depends on individuals' commitments to the goals (Seijts & Latham, 2000). By definition, without commitment there are no goals (Locke & Latham, 2002). Commitment can be cultivated in many ways. One common method in organizations is to create a monetary incentive. If the size of the monetary incentive is appropriate and it is perceived as possible to earn it, then it can enhance goal commitment (Lee et al., 1997). Hollenbeck et al, 1989) argue that making a public commitment will work, while scholars such as Ronan et al, (1973) suggest that visionary leaders can inspire and bring about the same result. Another alternative theory is that goals become more important if those who are in charge of achieving them also participate in setting them. However, there is no clear evidence that one approach is much more effective than the others for creating high levels of commitment (Wagner & Gooding 1987a, 1987b).

Self-efficacy is another important factor in the accomplishment of goals. It entails a belief that one is capable of carrying out the actions necessary to manage a prospective situation. Self-efficacy is defined as an individual's perception that he/she is capable of successfully carrying out a particular task (Bandura, 1986). Bandura (1992) argues that self-efficacy influences motivation, encouraging individuals to persist in the face of obstacles, but also impacts how they approach and attempt to achieve their goals. It also affects how individuals choose to resolve challenges. The stronger self-efficacy an individual has, the greater is his/her sustained effort to avoid failure and the more rapidly he/she recovers from setbacks. High self-efficacy is also associated with better performance.

Goal setting theory has developed during the four decades in which it has been used to study different empirical settings. It has developed in different directions and has sometimes become more sophisticated. Locke (1991 b, pp. 297), concluded "I would like to call the goal/self-efficacy/performance like the motivational hub the motivational hub is where the action is what people do is powerfully influenced by their goals, intents and by their perceived confidence in being able to take actions in question." The core of the theory has been the same since it was first developed. Goal setting theory has become the dominant motivational theory (Fried & Slowik, 2004), and it is valid and useful (Tubbs, 1986). The effects of goal setting on performance have been a major topic of research. It has been addressed in many studies that span a wide variety of environments. Numerous studies have shown that goals are associated with improved results: in health (Dishman et al., 2009; Hurn et. al, 2006; Hastings & Hawkins, 2009), in sports (Duda, 2007; Mellalieu et al., 2006), sales persons (Fu, 2009), academic achievement and learning (Carlton, 1993; Phillips & Gully; 1997), idea generation in organizations (Lichfield, 2008), team building (Senecal et al, 2008), organizational units (Rogers & Hunter, 1991), organizations (Baum et al., 2001) and MBO (Thompson et al, 1981) .

In their article “New directions of goal-setting theories” Locke and Latham (2006) discuss a possible research path for the future. They argue that goal setting theory is an open one that can be developed by integrating it with other theories. Inspired by this suggestion, the research presented here is based on an integration of goal setting theory with MBO and diffusion theory. The dissertation also seeks to combine goal setting and role stress theory.

Head-teachers were charged with implementing the new steering device, which emphasized the importance of developing goals for schools. Integrating goal setting and role stress theories can enrich our understanding of the effects that the new control instruments have had on day-to-day activities in the local – i.e. school – environment. It can also shed light on how MBO has influenced head-teachers in their new roles and impacted their role performance. MBO is closely linked to goal setting theory because goals are a necessary component of it. Similarly, since all organizational changes cause stress, role stress theory is a useful tool for studying the effects of implementing MBO.

Role stress theory. The point of departure for role stress theory is that there are organizational expectations about individuals’ behaviour based on the roles that they hold. These role expectations are supposed to coincide with the expectations that individuals have about how they are to act given the role they hold. When these expectations do not coincide, when there is a lack of consensus about appropriate behaviour, problematic interactions are likely. When role expectations are unclear, individuals do not know what to do or how to act in order to behave role-appropriately. The role theory literature emphasizes the dysfunctional impact that role stressors – i.e. role ambiguity, role conflict and role overload – can have on individuals and how they are connected to, and can have a harmful influence on, role performance. The impact of role stressors has often been seen as negative and the relationship as linear (Gilboa et al, 2008).

Role ambiguity exists when norms adhering to a specific position are vague, unclear or ill-defined. The problem arises when employees are unclear about their responsibilities or when other role-related information is unclear (King & King, 1990). Role conflict arises when individuals experience divergent role expectations and/or conflicting demands (Kahn et al., 1964). Role overload occurs when an individual accepts an increased workload in order to live up to role expectations, but time and resources available to do so are inadequate. Khan et al. (1964) defines role overload as the perception that one lacks the resources necessary to meet role expectations and the distraction and stress caused by trying to cope with this situation.

There are many studies of role conflict and role ambiguity and their influence on different types of chronic stress (e.g. Gilboa et.al., 2008; Jackson & Schuler, 1985). Role overload has also been extensively researched (Bolino & Turnley, 2005; Briggs, 2005; Gilboa et al., 2008; Selmer & Fenner, 2009). Several studies on role overload have explored the relationship between overload and commitment (Brown & Benson, 2005; Glazer & Beehr, 2005; Coetzee & Rothman, 2005). Jones et al., (2007) argue that individuals accept role overload because they have strong commitments. Brown et al., (2005) argue that significant role overload decreases the effect of setting ambitious goals. It also tends to lower performance, which illustrates the connection between role theory and goal setting

theories. From this perspective, the impact of role stress is negative and the negative consequences increase as levels of stress go up.

In contrast to this, there are a growing number of scholars who have a different view of the effects of role stress. Kemery (2006) makes his position clear in the title of his article – “Role stress is not always bad.” This alternative perspective can be traced to Selye’s (1975) distinction between two types of stress: distress and eustress. The latter takes its name from the Greek “eu,” which means good or well and focuses on the positive influences that stress can have. Some studies show that the three role stressors are beneficial at certain levels. Above and below these optimal levels, role stressors are detrimental. Influenced by Yerkes and Dodson (1908), research based on this view of the impact of role stressors shows that their influence can be represented by a linear curve, which makes it possible to estimate an optimal level of stress. Gilboa et al.’s (2008) meta-analysis concluded that the view that stress has a linear impact on performance has been seriously called into question. They also call for further research about the relationship between stressors, suggesting that different stressors may have different relationships, some adding to and some diminishing the overall stress experienced by an individual. They argue that further exploration of the potential non-linear effects of stressors is warranted. The research presented here has been influenced by these recommendations and should be seen as an extension of the work of Gilboa et al.

Role stress theory has recently been used in a wide variety of empirical settings, and researchers have focused on both employees and management at different organizational levels. Some recent examples are Hansung and Stoner (2008), who studied social workers, Thomas and Lankau (2004), who examined healthcare professionals and Onyemah (2008) and Conley (2009), who studied sales people and teachers. Leung et al, (2008) focused on managers, while O’Driscoll and Beehr (2007) studied how supervisors influenced the role stress experienced by their employees. With the current interest in the role stress theory, it can be argued that it is appropriate to study the head-teachers management role and role performance when MBO becomes implemented. It has previously been described how the change of the head-teachers working situation involve many factors that can be highlighted by choosing this theory. A more diffuse role provides a basis for conflicting interpretations, different expectations and the influence of role stress. Role stress theory creates opportunities both to increase the understanding of the head-teachers new situation in the role and how important factors influence role performance.

2.3 Final Conceptual Remarks

The three theories presented above contribute both separately and in combination to increase our knowledge and understanding of the effects of implementing MBO in schools. Each article makes a particular contribution, and the combination of all of them additionally increases our knowledge. The development of diffusion theory implies that we should focus on the second phase of the implementation process. Research should be directed to where action is occurring and analysis of the public sector should be undertaken. Diffusion theory also serves as a foundation for the other two theories. Implementation in the public sector has not always has been successful, so before

studying the effects of MBO, it is necessary to determine that it has been implemented enough to be able to affect the organization.

The importance of performance legitimizes the use of goal setting theory, which stresses the direct positive effect of goals, but also the indirect effects linked to self-efficacy and commitment. Using goal setting theory can deepen our understanding of what affects the performance of head-teachers. Finally, as Locke and Latham (2006) suggest, combining role stress theory and goal setting theory enables us to further develop both of them, and makes it possible for us to apply them to describe and explain the affect of role stressors on head-teacher performance. Finally, role theory and goal setting theory are similar in a variety of ways; for example both pay attention to the impact of commitment. Three important factors in goal setting theory are the existence of a goal, goal commitment and self-efficacy. These factors are also important in role theory, in the form of role, role ambiguity, role conflict and role overload.

3 Philosophy of Science, Methodological Considerations and Research Consequences

3.1 Background for the Research Project

I began the research process that is presented in this dissertation when I was employed as a teacher in upper secondary school trying to implement MBO in the education I was involved with. Later, 1997, I joined a research project initiated by Prof. Einar Häckner of Luleå University of Technology. The research focused on upper secondary school, and I was recruited to study the implementation of MBO. Thus, I went from a position in which I was to apply MBO in the classroom to one in which I studied its impacts. The research program was influenced by an “operator approach” (Burrell & Morgan, 1979; Arbnor & Bjerke, 1977). Schools were considered to be "natural systems," i.e. systems of "elements" that are loosely coupled to each other. We examined schools from a local perspective and our emphasis was on understanding the operators' own frames of reference and perspectives. It was more important to understand the meaning different actors attached to the phenomena being studied than to predict behaviour.

The overall project consisted of several separate but interconnected research activities (Häckner, 1998; Häckner et al., 1996). Working with both analytical and interpretive research is likely to produce richer knowledge and give readers greater opportunities to interpret the research results for themselves. The project was methodologically eclectic, using complementary methods and combining them in ways that are usually referred to as triangulation (e.g. Jick, 1979; Scandura & Williams, 2000) and according to Denzin (1978, pp. 291) defined as a “combination of methodologies in the study of the same phenomenon.” The research I conducted for the project was based on the basic assumption which triangulation rests namely the premise that the weakness in each single method becomes compensated by the strength of the other method having a counterbalancing effect and has been used by several researchers (Jack & Raturi, 2006; Knoppen, et. al. 2008). I have developed this work further in the dissertation. Additional information about the scientific and theoretical foundations of the research can be found in my licentiate thesis (Lindberg, 1998) and in the paper “Designing the Head-teachers’ Role: Economic Responsibility.” In the paper is a combination of a case study and quantitative methods used to increase the validity of a study (Denzin & Lincoln, 2000; Bell 2006).

3.2 Scientific Perspective

There are a number of different philosophical traditions and a researcher’s decision about which one to follow has a great impact on how knowledge is discovered and developed. Positivism originates from the natural sciences and states that observations originate from the external social world. It maintains that observations and measurement of them can be done in an objective way, both in the social and natural sciences. Thus, social science can produce generalizations as is done in natural science (Remenyi et al., 1998). Examples of

other paradigms are phenomenology and social constructivism. These argue that the world is complex and that objective generalizations reduce complexity. Some also emphasize that reality is constructed by people and direct their attention to understanding and explaining the meaning of social things and people's different understandings of them (Saunders et al., 2007).

Particular methods are often linked to specific scientific paradigms, although this is not always easy to do. Attempts are sometimes made to categorize methodologies, often using dichotomies (see e.g. Burrell & Morgan, 1979; Baum & Rowley, 2002; Merton, 2003). Johansson-Lindfors (1993) has discussed problems of methodology, for example the ambivalence a researcher might experience when trying to clarify the meaning of ontology and epistemology. Ontology refers to the nature of reality and assumptions about what we (can) know, while epistemology refers to how we best create knowledge and conduct inquiries. These are key concepts, and the ontological and epistemological assumptions underpinning a research project are influenced by the researcher's views about the world and the possibility of knowing it.

I can clarify my view and/or ambitions in the dissertation with the help of work by Burrell and Morgan (1979). They present a framework based on two independent dimensions. One is focused on the nature of social science and the other dimension is about the nature of society and social change. Each can be described according to a commonly used figure which distinguishes between a view of reality as subjective on one hand and objective on the other. There is also a polarization made between the view of change in society with radical change on one side and regulation on the other (see Figure 2). According to Burrell and Morgan, the social world can be approached in terms of four broad worldviews, each with a different set of meta-theoretical assumptions.

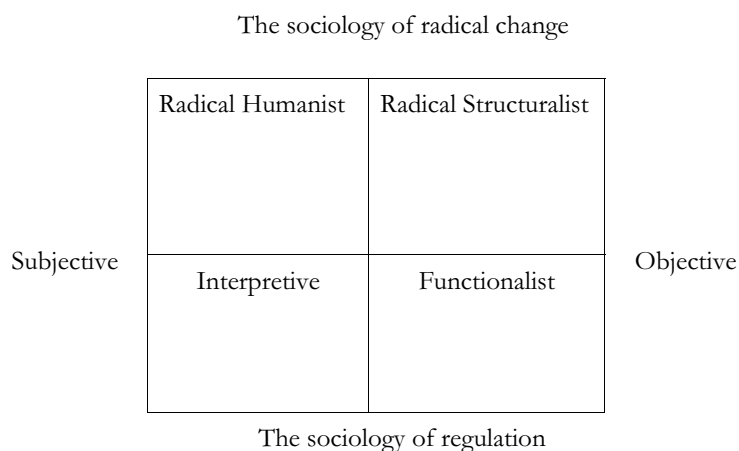


Figure 2: Burrell and Morgan (1979).

The four boxes in Figure 2 represent different paradigms, and this dissertation falls within the functionalist one. Functionalism is based on the assumption that society has a systematic character and a regulated state of affairs. It focuses on understanding human beings in a concrete world that really exists. Ontologically it accepts the possibility of value-free, objective knowledge. The researcher is capable of understanding the world and creating useful empirical knowledge about it. This position is close to the view of ontology that McKelvey (2002) describes. There is a real world that exists independently of the researcher's efforts to understand it. The epistemological foundations of my dissertation are influenced by the belief that it is possible to investigate the world using empirical methods and by the arguments of Azevedo (2002). He maintains that researchers can increase our knowledge about the world. Furthermore, new knowledge will enable science to continue to develop theories and deepen our understanding about the mechanisms that influence phenomena of interest to us. Thus, what seems to be true today might change as a result of future research.

A scientist working within the functionalist paradigm prefers to study "what is" without intruding on and affecting it. When studying the social world, the researcher chooses methods that he/she believes will make it possible to understand a uniform concrete reality governed by regularities. These regularities can be used to develop explanations. It is important that the knowledge that is generated can be applied to practical problems. Because functionalist research is problem oriented, it is often aimed at finding practical solutions to perceived social problems (Ardalan, 2008).

The functionalist paradigm has influenced this dissertation in several ways. The problems that are studied have been defined in such a way as to enable us to both increase our knowledge and generate explanations. The goals of the research are to contribute to the present state of knowledge, without claiming to aspire to "final answers." Rather, in keeping with the chosen epistemology, the hope is that this work will also contribute to tomorrow's research and knowledge development. In addition, we are also concerned with practical dimensions and practical solutions. The decision that was made in one of the articles to ask the same set of questions about the adoption of MBO to the same population (head-teachers) on two occasions but ten years apart, made it possible to study and compare the current situation over time. Functionalism has also guided the decisions to use deductive methods, develop hypotheses based on today's knowledge, and to use well-established questionnaires to measure variables. The latter enables us to compare our results with the results of other studies, thus contributing to scientific dialogue. Finally, functionalism has inspired analysis and discussion of the impact of the design of the role of head-teacher and how it can be designed in the future in order to improve role performance and ultimately school performance.

3.3 Research Approach

According to Saunders et al. (2007), there are two broad approaches to research. The inductive approach typically starts with the researcher making specific observations. This can then lead to the detection of patterns, hypothesis development and, perhaps, formulation of theory. The deductive method, on the other hand, starts with theory and uses it to formulate specific questions and hypotheses that can be tested. In inductive approaches, the collection of qualitative data is preferred, while deductive research mainly relies on quantitative data. The inductive approach with qualitative data is to be preferred when studying new phenomena, where there are few theories and little relevant literature to guide the research.

The approach that has had the greatest influence on this dissertation is deductive, where the ambition is to increase the likelihood of providing standardized and structured results. In deductive research, there is low flexibility in the design phase. The preferred type of questionnaire is the kind the researcher develops in advance. Research is characterized by clear concepts that are operationalized and measured. Associations and relationships between the concepts (or constructs) are the primary focus of the empirical analysis. The results are supposed to provide a representative picture of how the variables in the study affect each other. Below I provide a more detailed description of how I followed this procedure. As part of this, I also discuss and reflect upon issues of validity and reliability.

3.4 Pilot Testing and Sending out the Questionnaire

Because I chose a functionalist approach, there are some general dilemmas that I was forced to consider and seek to ameliorate. One is that only head-teachers have answered the questionnaire and results are therefore based on their perceptions of what occurs in their schools. In addition, it is inevitable that head-teachers will have different interpretations of particular matters, for example what counts as “fully understanding” target goals. Another risk is that concepts used in survey questions might mean different things to different respondents. According to Zikmund (2003) it is important that a questionnaire is well formulated, with unambiguous questions and a properly defined population. To this end, to reduce the risk that respondents would misunderstand questions/concepts and to ensure high validity, a pilot questionnaire was tested on people who are familiar with the role and activities of head-teachers. I discuss the details of this pilot testing more specifically in each paper, but a few general comments are in order here. A group of individuals including former head-teachers, heads at different stages in their careers, colleagues at the present departments and experts working at the Centre for Principal Development, Umeå University, and head-teachers that did not belong to the sample were asked to “think aloud” while they responded to each question and to propose changes. A few questions were reformulated and mostly as proposed by the “pilots” themselves.

The questions that were used to measure how much MBO was implemented were tested in the same way in the earlier study (Lindberg, 1998). A decade had passed since the first study and to eliminate the risk that this would have caused different interpretations of the questions regarding MBO, that I was not aware of, and that my literature study did not cover, I took two precautions. I attended some meetings between the superintendent in a municipality and their head-teachers when they discussed and solved common actual problems regarding upper secondary school. I also repeated the pilot testing to ensure that the questions still worked a decade later. This process significantly improved the relevance and precision of the questions, which probably contributed to the high response rate and high validity. The cover-letter accompanying the questionnaire stressed that responses were confidential. This was done to reduce concerns that a particular respondent could be identified, and thus to increase the likelihood of getting truthful answers to questions.

The workload of head-teachers varies over the course of an academic year. Aware of this, I sent the questionnaires out at a time when head-teachers workload is somewhat more manageable, thus increasing the likelihood that they would be able to devote time to answer the questions carefully. The period chosen was the end of the spring semester, after the end of the school year for students. All head-teachers in Swedish upper secondary schools received a questionnaire. Those who did not respond received a reminder just before summer break for staff/teachers. A final reminder, with questionnaire, was sent after summer break but before the start of the new academic year for students. The process was the same in 1998 and 2008. My insight of the head-teachers working situation was a big advantage and contributed to a high response rate the first time. However, the second round the interest in studying head-teachers had grown and the awareness of the head-teachers working situation had spread so they got three different questionnaires from various research groups at the same period, which might have contributed to a lower response rate. The useable response rates were 70 percent in 1998 but in 2008 the response rate was 46 percent and in the end about 40 percent of the questionnaires was useable. I compared late and early respondents, and the demographics of the sample, and found no risk for non-response biases. Additional information about the analysis is provided in the individual articles.

After the questionnaire had been sent out, I received several telephone calls and emails, and some respondents wrote notes in the margins of the questionnaires they mailed back to me. This clearly suggests that head-teachers are ambitious and feel a strong sense of professional responsibility. The reasons for the telephone calls varied. Some head-teachers called to explain that they were too busy to respond right away, but that they would answer the questionnaire later when their workload was lighter. Others called to provide information on why their questionnaire was delayed and when they would send it in. Some contacted me to say that they were only temporarily employed as head-teacher and were not sufficiently experienced to answer the questions. On these occasions I had the opportunity to determine whether there was any misunderstanding about particular issues. Those who expressed criticism focused mainly on the number of questions. Generally, however, my impression was that head-teachers spent considerable time and

made a serious effort to answer the questions thoughtfully. This is obviously crucial to the survey's validity and reliability.

In short, I pre-tested the survey in order to ensure that it measured what I intended it to do. Throughout the process of administering the survey, I sought to increase the consistency of measurement by asking the same subjects (i.e. head-teachers) the same questions, in the same way, at the same time and under the same conditions. In addition, several additional steps were taken to ensure validity and reliability in each individual study. These are discussed further in each study.

3.5 Measurements

In this dissertation, I use research from the disciplines of education and school administration as a basis for developing the hypotheses that are presented and tested in the articles. The ambition has been to rely as far as possible on established measurements of different concepts. According to Noar (2003), it is advantageous to use existing scales when the purpose of a research project is to further develop existing theories. Among other things, relying on accepted measures ensures reliability and validity. Therefore, I followed this advice when I formulated the questionnaire. As such, the goal was to ensure that the variables were consistent with regard to what is being measured, so measurement can be repeated with the same result in terms of reliability, but also the extent to which the measures accurately reflected what they are supposed to in terms of validity, i.e. the measure represents the concept being studied (Hair, 2006).

To study commitment was a scale developed by Klein, Wesson Hollenbeck and Alge (1997) used. For role conflict and role ambiguity was the scale in Rizzo et al (1970) used and for role overload, was the Beehr et al (1976) scale used. According to Hallberg and Schafeli (2006) and Betorget (2006), these have been tested in earlier studies and have been shown to have high reliability and validity. The work of Bell and Kozolowski (2002) was used to measure self-efficacy and role performance. Their scales capture theoretically well-grounded and concrete items linked to specific roles and have been used in previous research, where they been tested and evaluated favorably (Conell et al., 2004).

Almost all the questions on the questionnaire were formulated as four-point scales of assent. That is, following Eisler (1982) and Chang's (1994) recommendations for surveys of head-teachers, they are Likert-type scales. The use of a four-point scale is based on the idea that it is necessary to have at least four steps in order to get an outcome that sufficiently discriminates among different views/responses. I chose an even number (i.e. 4) in order to force respondents to take a clear position. That is, I denied respondents the opportunity to take a middle position that did not lean in one direction or another. An even number of scale steps is also preferable in this case because most head-teachers have extensive experience of normally distributed grading scales. They might therefore have a (possibly unconscious) professional tendency to emphasize the middle of a scale. It could be argued that according to Preston and Colman (2000), who investigated preferences

among respondents, regarding various types of scales, that the five point scale got among the highest scores by respondents as “easier to use”, but in the same study, the four point scale got among the highest scores as “quick to use.” That said it is however possible that some respondents may have experienced frustration over the fact that they could not express their perception adequately and would have preferred a larger number of response categories. However, this cannot have been an issue affecting response rate because the same four point scale was used in the first (70 % response rate) as well as the second study.

3.6 Analyses Techniques

The answers from the questionnaires that were sent out to all upper secondary school head-teachers in Sweden were entered into a database which was used in all four articles. However, the articles differ in their research questions, theories and techniques used to analyze the data. The papers develop and test different hypotheses. In the two papers “Goal Commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influences” and “Turning stressors into something productive: An empirical study revealing non-linear influences of role stressors on self-efficacy”, a more complex combination of theories, hypothesizes and models are developed and tested.

In the paper “Goal commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influence,” I try to understand both the functional and dysfunctional aspects of commitment. Role stressors are used as interlinking variables in a model that was developed for this purpose. To test these complex, multi-variable phenomena, an advanced analysis technique was needed. The model required conducting tests of correlation among several independent and dependent variables. To this end, Structural Equation Modeling (SEM) techniques were used, in keeping with the recommendations of Schumacher and Lomax (2004) about how to analyze and understand such complicated relationships. SEM is a multivariate technique that combines aspects of multiple regression and factor analysis. With SEM it is possible to estimate interrelated dependence relationships simultaneously. This makes it possible to capture and ultimately explain two conflicting influences of goal commitment on role performance simultaneously in one model. It also has other advantages. For example, SEM can represent unobserved concepts in multiple interrelated dependence relationships and calculate measurement error in the estimation process.

The research question in the paper “National Board of Education Stressors into Something Productive: An empirical study revealing non-linear influences of role stressors on self-efficacy” called for using a method that is useful for testing non-linear relationships. Here the recommendation of Cohen and Cohen (1983) was followed to use Ordinary Least Squares (OLS) hierarchical regression. This method allows the analyst to base variables’ order of entry in the model on their causal priority. To avoid problems with multicollinearity, the advice of Aiken and West (1991) was followed and the mean-center procedure used. Using this method, the non-linear effects of role conflict and role

ambiguity can be explored. In addition, it enables us to increase our understanding of the individual character of the impact of role stressors, with the ultimate goal being to explain these relationships.

Reliability and validity were analyzed by several techniques. In order to see how consistent the ratings generated by the scale are (reliability), factor analyses and testing using the Cronbachs alpha approach was conducted. Factor analysis was also used to analyze and ensure discriminant validity.

4 Summary of the Papers

4.1 Paper 1 “Management by Objectives: The Swedish Experience in Upper Secondary Schools.”

The first paper in the dissertation is “Management by Objectives: The Swedish Experience in Upper Secondary Schools.” The work is an extension of the implementation study of MBO in Swedish upper secondary schools that I presented in my licentiate thesis. The purpose of that study was to ask head-teachers about the implementation of MBO several years after the decision to replace Management by Rules, in particular to find out how far they thought the adoption of MBO had gone. In this paper, the current impact of MBO is studied, now that schools have had an addition 10 years to implement it. The paper reflects on some of the consequences identified in this longitudinal study, with particular focus on the question of whether MBO has improved student performance.

A questionnaire with the same questions asked in the original study was mailed to all Swedish upper secondary school head-teachers. Results from the two surveys were compared, and student performance was measured as a function of MBO adoption. The results show that, in line with modern diffusion theory, the implementation process slows down in the second phase, when local managers close to production try to change local activities so they reflect the innovation. Another finding is that the adoption of MBO has gone further in teaching than in areas of school development. Also, and in line with the international scholarly debate, which has started to ask why progress in education is so slow and why benefits have not materialized despite some early gains, this study concludes that it is difficult to document results in the form of better student performance. It was not confirmed that MBO is a steering device that has had clear positive impacts on student performance. Its impact seems to have been rather neutral. The results indicate that MBO might have a positive influence on teachers, who perhaps like it because it clarifies expectations on them, but at the same time head-teachers seem more frustrated. One conclusion of the study is that it is necessary to further develop MBO as a steering device if it is to live up to the intention behind it.

This first paper is linked to the others in various ways. For example, the second paper is a complementary study which extends the notion of frustrated head-teachers and focuses on the role stress that they experience and factors that influence their role performance. The fourth paper is also an extension of paper 1. It focuses on the question whether MBO has been complemented with a head-teacher role designed to facilitate role performance. It also discusses practical implications and issues that could smooth the implementation process and develop MBO so that it is a better steering device that also facilitates improved student performance.

4.2 Paper 2 “Goal Commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influences”

Several scholars argue that the head-teacher is important for school success. The study “Goal Commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influences” was carried out to further increase our understanding of the influence of MBO on the role of head-teacher. It is focused on the influence of goal commitment on head-teacher’s role performance and the extent to which increased levels of role stressors contribute to performance in the process of committing to goals. As such, the paper deals with goal setting and how a strong commitment to goals influences role stress and impacts on role performance.

To study such influences on head-teachers, the paper integrates two theoretical approaches. Some scholars have argued that high commitment is good because it leads to higher work intensity. Others argue that it can be negative in the long run because it can lead to more stress. Individuals can get worn out, which can lower their performance. The two views are woven together to explain the impact of commitment on role performance. Role stressors (i.e. role conflict, role ambiguity, and role overload) are used as interlinking variables in the model, because it is essential to understand what explains the influences of functional and dysfunctional impact. In earlier research, most of the work was devoted to studying the direct influence that stressors had on performance. In this study, the influence of self-efficacy is conceptualized as a mediator of the impact of role stressors on performance. It integrates the discussion of goal commitment with existing literature on role stressors. SEM technique was used, which permits multiple measures of both independent and dependent variables, and AMOS 7.0 to test hypothesized relationships. SEM has the advantage of simultaneously including all relationships and parameters. This allows us to capture both perspectives in one model. This is something that studies using other methods have not addressed.

The results of the paper support the hypothesis that high commitment reduces role ambiguity, and that the proposed functional effects are valuable for role performance. The study also clarifies the dysfunctional effects of commitment. It drives role overload, which reduces role performance. Our understanding of the positive and negative effects of commitment is expanded by adding self-efficacy into the model, which leads to insights as to how highly-committed individuals experience the two effects. In particular, it is possible to show the role of self-efficacy as a mediator of the influence of role stressors on role performance. Previous research has focused on the direct influences of stressors on performance. Bringing self-efficacy into the analysis sheds light on how goal commitment subsequently develops into performance.

Thus, a main contribution of this study is that it enables us to understand the impact of high self-efficacy as a mediator of the two influences on performance. This insight is a key factor in explaining how high commitment, operating through stressors, impacts performance. The importance of self-efficacy, which impacts coping abilities, becomes evident. Another contribution worth mentioning is that the research clearly illustrates the mediating role of self-efficacy for role stressors. Self-efficacy has been shown to be a solid

mediator in many studies, but its potential impact on the relationship between role stress and role performance has not been explicitly been tested. The findings about the importance of self-efficacy raise the question of how head-teachers can develop high levels of self-efficacy. This subject is the focus of an extended study in paper 3.

4.3 Paper 3 “Turning stressors into something productive: An empirical study revealing non-linear influences of role stressors on self-efficacy”

The third paper “Turning stressors into something productive: An empirical study revealing non-linear influences of role stressors on self-efficacy” documents the importance of high self-efficacy for head-teachers’ role performance. The purpose of the article is to better understand what can raise or lower the level of role stressors among head-teachers and the influence of stressors on self-efficacy. Earlier research on self-efficacy has focused on its etiology – i.e. what explains the development of self-efficacy. Current work on role stressors is aimed at understanding what impact they have on self-efficacy. The article develops a new perspective on role stressors. Older work focuses on the negative influence of role stressors such as role conflict, role ambiguity and role overload and emphasizes that the lower stressors the better. This research has most often assumed that all stressors have linear and negative impacts, for example on self-efficacy levels, although some early stress research suggested a non-linear relationship between stress and other outcomes of interest. Picking up on this, the possibility to explore whether some stressors might also have positive effects became a subject to study further. We argue in the article that we need to explore the possibility that stressors can have different qualities, and that particular stressors can be productive for the development of self-efficacy, at least up to certain levels. The study is therefore designed more openly (i.e. not based on assumptions about the consequences of stress) and aims at penetrating deeper into the subject in order to explore the degree and nature of stressors.

The hypotheses demanded a method that can test non-linear influences and therefore was OLS hierarchical multiple regression chosen. The results show that both role conflict and role ambiguity influence self-efficacy and that the effects are non-linear. There is a level at which stressors work well for strengthening self-efficacy. The relationship between role conflict and self-efficacy is U-shaped, while the relationship between role ambiguity and self-efficacy has an inverted U-shape. When the influence of role conflict diverges from the intermediate level it has a positive impact on self-efficacy. This means that role conflict can be good, and it can trigger an individual to see it as a challenge worth accepting.

The results also show that low levels of ambiguity occur both in situations when the head-teacher feels that he/she has limited autonomy to define the head-teacher role, lacks challenges and is bored, as well as when he/she feels faced with a fuzzy, confusing and demanding work situation. At the intermediate level, head-teachers feel encouraged to develop creative solutions, and this has positive effects on self-efficacy and facilitates well functioning levels of it.

The results of the research in this paper suggest that there are levels for role ambiguity and role conflict as promoters of self-efficacy that are more functional. Above or below these levels, self-efficacy can be affected negatively. This suggests that we need additional research focused on how the role of head-teacher should be designed to facilitate good role performance. Self-efficacy is strongly related to performance, which means that improvements of it are productive. Designing the head-teacher role in a way that creates appropriate levels of role stress will therefore stimulate good performance. The main theoretical implication of the study is that role stressors, at appropriate levels, can be a source of self-efficacy. However, they should be studied separately because their character and influence on self-efficacy vary. In the fourth paper I examine the role of head-teacher in order to explore how it is defined, and what the effects and practical implications of the design are.

4.4 Paper 4 “Designing the Head-teachers’ Role: Economic Responsibility”

In the paper “Designing the Head-teachers’ Role: Economic Responsibility” I analyze the design of the head-teacher role and its implications for role stress. It is well known that when role stress is too high, the performance of managers declines. Several scholars have reported that head-teachers experience very high levels of role stress, and that financial and administrative tasks are so demanding that they leave little time to focus on school development and pedagogical leadership. As a result, head-teachers feel that they have little possibility to positively influence student performance. They are caught between their responsibilities for financial/administrative matters and school development/pedagogy. The question addressed in paper 4 is whether high levels of stress experienced by head-teachers is due to MBO, which replaced Management by Rules (MBR), or to the design of the School Based Management (SBM) role. The paper’s focus is on the sources of stress that head-teachers want to reduce most – i.e. the financial and administrative workload. In this study I explore the situation in Sweden, where authority to design the role of the head-teacher has been decentralized to the local governments. They have designed the role differently, which makes it possible to study the impact of different designs.

I first use a qualitative approach to study two local communities that have adopted different types of roles. In one community, the old role – which was designed during the MBR era – was retained with only minor adjustments. This is a centralized approach to management, in which head-teachers have little room to manoeuvre and are very dependent on directions and solutions from the central administration of local government. The other community has a decentralized approach which is close to that described as SBM. Head-teachers have much more responsibility and authority. Their room to manoeuvre is greater, but at the same time the problems for which they have responsibility are more complex. They require head-teachers to have more knowledge, and at the same time there is a lack of clarity about the head-teacher role.

As the paper discusses, the two roles create different challenges and threats. The different effects on the situation of head-teachers are then examined further using a quantitative method in which levels of role-stress are measured, compared and analyzed. The results show that the positive aspects of the old role include clarity of role expectations, with

head-teachers experiencing a lower level of role ambiguity. However, when these head-teachers try to find acceptable solutions to difficult problems, they experience much more role conflict and role overload because they have little room to manoeuvre and limited resources. Thus, the combination of a decentralized steering device and a centralized approach to role design does not seem to be a winning concept. Head-teachers with an SBM role experienced lack of role clarity and thus much more role ambiguity. However, the fact that they had greater room to manoeuvre reduced their levels of role conflict and role overload. This suggests that this role design also causes higher levels of stress, even if uncertainty of role expectation is partially compensated for by a greater possibility to solve problems.

Overall the results of the paper show that neither the SBM role or MBO itself caused role stress for head-teachers, rather it was the combination. SBM, like MBO, is a decentralized approach, but when authority and responsibility are decentralized, it is beneficial if the role is designed so that there is clarity about responsibility and authority. Also, there needs to be resources and support in the form of skilled people at the right levels if tasks are to be carried out successfully. A practical implication is that when designing a new role for head-teachers, it is necessary to simultaneously decide how responsibility and authority should be divided between central administration and the level of schools. The degree of decentralization as regards which tasks should be done at each level has to be commensurate with available resources at the different levels. When this is done and when there is clarity about the role of head-teacher, it is important that the school has employees who have both the competence and time necessary to do their jobs. If this is not the case, the head-teacher is at risk for becoming overburdened.

5 Concluding the Dissertation

The purpose of this final chapter is to discuss the findings in the four papers, conclude the dissertation and indicate possible areas for future research. The overall purpose of the dissertation has been to increase our understanding of how the implementation of MBO affects school performance and the management role of head-teachers and explain what factors influence role performance. This has been done in four papers. Two of them (“Management by Objectives: The Swedish Experience in Upper Secondary Schools” and “Designing the Head-teachers’ Role: Economic Responsibility”) focus on the level of the school and are mainly about school performance. The two other papers (“Goal Commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influences” and “Turning Stressors into Something Productive: An empirical study revealing non-linear influences of role stressors on self-efficacy”) explore head-teachers as managers and role performance. Diffusion theory has been used to show how far the implementation of MBO has gone. Role stress theory has been an important element in the research, and together with goal theory it has contributed to the development of new knowledge. In some cases this has led to theoretical contributions that can stimulate new research. It has also produced new insights which can influence the design of the role of head-teacher and can also be of practical help to head-teachers, who might be able to see their everyday activities and struggles in a broader perspective.

In Sweden, the push to decentralize and introduce NPM into the public sector was motivated by desires to improve public sector performance and produce more value for tax money (SOU 1974; Holmblad-Brunsson, 2002; Brunsson, 2007). The new steering device, the potential created through the re-design of the head-teachers’ role, role performance and student performance were all important aspects of the reform. The questions of whether or not MBO has facilitated the development of the Swedish education system and whether it has meant a step forward or backward are both very important and difficult to answer.

5.1 School Performance

Many diffusion studies, for example Gallivan (2001) and Wenisch (2004), show how the tempo of adoption slows down in the second phase, once it reaches the environment in which action takes place. The longitudinal approach used in this study confirms that this pattern is also observable in Swedish upper secondary schools. The adoption of MBO made some early gains, similar to what Barker (2009) found in his study of educational reforms in England. The results show that implementation has been more successful in some areas than others, and that adoption has gone further in the area of teaching than in areas such as school development. One way to determine whether MBO has lived up to the intentions behind the reform and to evaluate the extent to which it has been a step forward is to examine the influence it has had on student performance. The research undertaken here shows no clear evidence; implementation does not seem to have either improved or reduced student performance.

5.2 Head-teachers' Performance

As part of the research presented here I tested a model of the effects of goal commitment, role stressors and self-efficacy. These concepts can explain important effects on the role performance of head-teachers. I developed these insights based on the fact that understandings of commitment have not been uniform in previous studies. Earlier studies using a functional research approach have argued that high levels of commitment lead individuals to perform better and overcome obstacles. High commitment also makes individuals experience less ambiguity due to their efforts to live up to challenging goals and to grow in their professional roles (Locke & Latham, 2006). According to Drach-Zahavy and Freund (2007), this is most obvious under difficult and dynamic circumstances. However, there are also studies focused on the dysfunctional consequences of high goal commitment, in which individuals take a hard-line approach to their own efforts. They work too much and give too little priority to their own well-being. As a result, they experience more stress and greater health risks (Brown, 1990; Jex et al., 2003; Klein et al., 2001) as a result of their efforts to meet the ambitious goals set for them. Wong and Kong (2007) argue that individuals avoid facing problems and negative emotions by staying committed, and Ku (2008) suggests that there can be a process of escalation that makes it difficult to change direction. Many scholars report results such as those presented by Hanlon and Clifton (2004), which show how head-teachers who love their jobs and are highly committed work too much. Also, many studies echo MacBeth (2009), who notes that highly committed professionals often work up to 60 hours a week or more. MacBeth discusses the two conflicting perspectives of high goal commitment and illustrates how far head-teachers can push themselves despite great personal sacrifices.

As regards functional influences, it seems that head-teachers develop high goal commitment, which leads to reduced role ambiguity, higher self-efficacy and ultimately better role performance. Based on this, I detected a goal clarifying process, which means that head-teachers reduce uncertainties about vague role expectations and get clearer guidance about what actions are appropriate. The dysfunctional influences, on the other hand, are characterized by a complicated role behavior process. High commitment that is dysfunctional leads to situations characterized by incongruent perceptions and role overload, which in turn reduces self-efficacy and ultimately role performance. This integration of goal commitment and role stress contributes to a better understanding of how head-teachers experience their management role. It also makes clear that there are parallel goal processes that need to be taken into account. Integration can be difficult, and the results in this study open a path for further research into how goals, goal commitment and role stress can be better managed in the future.

This dissertation reports interesting results about self-efficacy. The buffering role of self-efficacy and its importance for transferring the effects of role stressors has been discussed in earlier research (e.g. Willard et al, 2008). Scholars like van't Riet, et al., (2008) point out that high self-efficacy is crucial for maintaining high levels of effort and for recovering from setbacks. It has earlier been mentioned that the findings in this study show that with regard to functional (i.e. positive) consequences, high goal commitment and role clarification lead to reduced role ambiguity, better self-efficacy and improved role

performance. However, at the same time, high goal commitment can also contribute to dysfunctional consequences which include a decline in role performance. Head-teachers with high self-efficacy benefit from the goal-clarifying side of the combination and have less difficulty with goal-complicating processes. This insight about the importance of self-efficacy and its mediating role for head-teachers emphasizes the importance of further research to increase the understanding of how self-efficacy can be strengthened and maintained in the role.

Several scholars, for example Bandura and Locke (2003) and Stajkovic and Luthans (1998), report strong theoretical support for the importance high self-efficacy. Bandura (1994) summarized the most common sources for developing of self-efficacy, but did not mention role stress. According to Örtqvist and Wincent (2006) and Hyde et al., (2008), the literature has not regarded role stressors as a factor influencing self-efficacy. However, the results in this study show that at least two factors, role conflict and role ambiguity, do affect it. Earlier research has focused on the linear impacts of role stressors, and the banner “the more the lower” (e.g. Sonnentag & Krueger, 2006). In contrast to this, the results in this study follow a growing number of scholars like Allen et al (1983), Lazarus and Folkman (1984) and Quick et al. (1997) who argue that the influences of stressors should be studied individually, and that the relationships should be conceptualized as non-linear with optimal levels. The research explains how, starting from a low level, rising levels of role conflict reduce head-teachers’ sense of self-efficacy. It reaches a minimum when role conflict is within the intermediate value range. After that point, further increases in role conflict actually lead to higher self-efficacy. The research also explains how levels of ambiguity that are either too low or too high reduce the self-efficacy of head-teachers, so that a well functional level is an intermediate one. The knowledge of how these two stressors have a positive impact on self-efficacy at appropriate levels and how they reduce it when levels are too high or too low gives us a new understanding of the head-teachers’ management role and head-teacher role performance. In this light, the individual character of role stressors and how the role of head-teacher can stimulate role performance are important subjects for further research.

The importance of head-teachers for school success has been pointed out in previous research (Levine, 2005). In this study, factors that impact the performance of head-teachers have been presented. How they affect performance has been explored and explained. As a result, another area for further research has become visible – studies that focus on the relationship between head-teacher role performance and student performance. Further research might provide us with a better understanding of what facilitates the role performance of head-teachers and how we can best link it to improving student performance.

5.3 Head-teachers Role Design

During the years when the Swedish education system was characterized by central planning, not only schools but also the role of head-teachers was governed by thick volumes of rules (Lundahl, 2002). The heads had little authority to interpret how the rules should be applied and their room for maneuverability was small. When MBO was implemented, the Swedish central government did not design a new role for head-

teachers that was clearly defined. This made it possible for the local municipal level to influence their design, which led to the establishment of a variety of head-teacher roles. Some local governments kept many elements from the old role, albeit with minor changes. Others designed the role to match what, in international circles, is called School Based Management (SBM). According to De Grauwe (2005) and Caldwell (2005), SBM is broadly characterized by a decentralized approach, in which power over decision making, day-to-day authority, responsibility and autonomy is delegated to the local school. According to Friedman (2002) and Cranston (1999), this has meant a greater responsibility for head-teachers, who are now both pedagogical leaders and managers with responsibility over financial and administrative matters. Scholars like Philips et.al, (2007) and Athanasoula-Reppa and Lazaridou (2008) report that head-teachers have a heavier workload and that role stress has increased, and that we need to increase our knowledge about head-teacher stress.

The paper “Designing the Head-teachers’ Role: Economic Responsibility” illustrates how the work situation of head-teachers in Swedish upper secondary schools differs depending on how their roles are defined. It focuses on two different roles. One of them, the old role, is a clear one, but it gives head-teachers little room to maneuver, which can make it difficult to deal with problems that might arise – e.g. ones of a financial nature. Head-teachers can be forced to devote many hours to trying to resolve a financial problem about which stakeholders have conflicting interests, despite the fact that their authority to act is actually quite limited. On the other hand, compared to head-teachers whose roles are defined by School Based Management (SBM), these head-teachers have little influence over how money is to be spent, so the total amount of time devoted to problems related to financial questions is relatively lower.

The research results presented in the dissertation show that those head-teachers whose roles are largely the same as the old head-teacher role experience more role conflict and role overload than those who have an SBM-inspired role. However, role ambiguity is lower. The more decentralized SBM role creates a larger space in which to maneuver. For example, as regards financial matters, these head-teachers have more authority to make decisions that impact spending and income. This means that even if financial and other problems are more complicated, head-teachers are better equipped to find solutions, although doing so is often time-consuming. Since these head-teachers can experience the satisfaction of finding creative solutions to complex situations, they might experience less role overload and role conflict. The question of whether the new role design is a step backwards or forwards – i.e. one that makes it easier for a head-teacher to improve his/her role performance, is difficult to answer without longitudinal research. When the new and old roles are compared to one another in the context of a MBO educational system, the new role seems to reduce role conflict and role overload, but it increases role ambiguity. In addition, the role of head-teachers today is such that the workload remains quite high or even increases. When financial and administrative tasks become very time consuming, head-teachers have less time to devote to other responsibilities – for example school and pedagogical development.

These findings suggest that the design of the head-teachers' role might help us understand why the adoption of MBO not has gone as far in the area of school development and why it seems to have had little impact on student performance ("Management by Objectives: The Swedish Experience in Upper Secondary Schools"). One obvious question is whether school development and pedagogical leadership would be a higher priority if the role of head-teacher were designed differently. If so, redesigning it might improve school development and lead to better education and ultimately better student performance, which would clearly be a step forward. These outcomes might also occur if role-redesign stimulated a process of role clarification ("Goal Commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influences"), which starts with a high commitment to goals and then considers how role ambiguity can be reduced to achieve well functioning levels ("Turning stressors into something productive: An empirical study revealing non-linear influences of role stressors on self-efficacy").

The research in this dissertation has shown that the influence of MBO on student performance is rather neutral, but that it has affected the role of the head-teachers. The results increase our understanding of factors that are important for facilitating the role performance of head-teachers. A new head-teacher role, referred to as School Based Management (SBM), has become more common. This decentralized role has been designed to suit MBO, but it does not seem entirely appropriate. More research should be directed at the question of how head-teachers' management roles can be made clearer, because this is necessary if head-teachers are to perform well and if MBO is to be a step forward.

5.4 Contributions to Theory and Literature

A dissertation has the potential to contribute to scientific discussion and the creation of new knowledge that helps to move the research front forward. This dissertation is built around a number of self-contained articles, and as such it explores a number of interconnected issues in ways that are intended to increase our understanding within multiple fields and at multiple levels.

I have used diffusion theory in a longitudinal study spanning over a decade. The focus was on the public sector. Scholars like Jackson and Lapsley (2003) argue that research projects on the public sector are important because few have been conducted. My research here supports modern diffusion theory (Gallivan, 2001) and confirms the finding that the implementation process slows down during the second phase, in this case when it is introduced into local schools and is confronted with difficulties in the local environment, in which the day-to-day business of educating pupils take place. The rate of past successes decreases, and the pattern that emerges is similar to that found in Barker (2009) and Fusarelli and Johnson (2004) – i.e. it is not easy to reap educational benefits as a result of educational reforms, even if there are some early gains.

Goal-setting theory has been developed over four decades and is a solid, well developed theory (Locke and Latham, 2006). Locke and Latham argue that the approach has been used in many theories, and because it is an open theory it can be further developed by integrating it with other theories. In this dissertation I have integrated it with role stress theory in order to test and explain the head-teachers role performance. Both theories see commitment as an important influence on performance, and earlier research has emphasized that it has a direct influence that either improves or undermines performance. By integrating the theories, I am able to examine both the functional and dysfunctional consequences of commitment on role performance though its impact on individuals' inner processes. This leads to insights about the indirect influence of stressors and enriches earlier research focused on direct influence. The study shows that it can be fruitful to integrate the goal-setting and role stress literatures. Doing so allows us to see how the conflicting effects of high commitment work indirectly by influencing role stressors and emphasizes the important mediating role of self-efficacy on individual performance. Earlier research has mentioned this integration, but to my knowledge this is the first time self-efficacy has explicitly been tested to find out how, in practice, it is related to role stress and performance. The results are discussed in relationship to existing literature related to these issues. Thus, this contribution will be part of the scientific dialogue aimed at expanding our knowledge in this area.

Role stress theory focuses on systems of roles, and it has had a great impact on the dissertation. Role theory emphasizes both an organization's perspective of what is expected from a particular role, as well as the understanding of the person who has the role. When these views of the role do not match, those performing the roles experience role stress. This is a common situation for head-teachers (Athanasoula-Reppa & Lazaridou, 2008). Role stress is composed of three main factors: role ambiguity, role conflict and role overload. In the role stress literature, these unclear role expectations have been seen as dysfunctional, in particular as having a linearly negative impact on role performance. However, a growing number of scholars have done studies suggesting that the relationship is actually non-linear, and have hypothesized that different stressors may have different impacts on performance (Gilboa et al., 2008). The results I present in this study support the growing non-linear approach. This leads to the additional insight that it is not simply the degree of stressors that influence outcomes like self-efficacy the nature of each specific stressor is important too which can be a subject for further studies. The study's point of departure is existing knowledge on the topic, but new insights were developed by combining role stressors with self-efficacy.

The dissertation also contributes to our knowledge about the sources of self-efficacy. Results from many studies of self-efficacy show its positive impact on performance outcome and many other individual-level variables. In addition, the origins and causes of high self-efficacy are well known (Bandura, 1994). However, existing literature of self-efficacy has not paid much attention to the research on role stressors (Hyde et al., 2008; Örtqvist & Wincent, 2006). By combining literature on self-efficacy with role stress research, the results presented here show that role stressors influence self-efficacy. This contribution, together with the findings that show self-efficacy's mediating role for role performance, increase our understanding of the importance of self-efficacy.

5.5 Practical Implications

The four papers in this dissertation are interlinked in a way that makes it possible to combine them for the purpose of exploring practical implications and contributions. The results in the paper “Management by Objectives: The Swedish Experience in Upper Secondary Schools” showed that implementation of MBO had a neutral impact on student performance and caused frustration among head-teachers. The intentions behind the reform were not met. The question of whether this was due entirely to factors related to MBO as a steering device, or whether it was caused by the combination of MBO and an unsuitable head-teacher role was analyzed in the paper “Designing the Head-teachers’ Role: Economic Responsibility”. The discussion in that paper makes it clear that the new SBM head-teacher role was not fully functional and suffered from lack of clarity. This had two consequences for head-teachers. One was that they were forced to spend large amounts of time on financial and administrative issues, because so many tasks were decentralized to school level. This made it difficult for them to prioritize their roles as pedagogical leaders. Another consequence was that they experienced high role ambiguity. As discussed in the third paper, “Turning stressors into something productive: An empirical study revealing non-linear influences of role stressors on self-efficacy,” when role ambiguity is too high, it leads to lower self-efficacy. The importance of having a suitable level of both role ambiguity and role conflict were emphasized in the paper and if this knowledge is taken into consideration and applied it can contribute to better role design and role performance.

The high commitment of head-teachers is well known but when commitment leads to increased levels of role overload and role complication it undermines role performance. The question that arises is what can be done to eliminate the negative impact. The paper “Goal Commitment and Performance: An Empirical Study Incorporating Role Stress Literature to Reveal Functional and Dysfunctional Influences” suggests that it is preferable to stimulate a role clarifying process and the functional influence. This reduces the likelihood that head-teachers will feel that they are caught between national goals and local realities. A question that could be considered is how goals at different levels can be coordinated and the goal fulfilment evaluated in a more structured way. The likelihood of creating a working situation for head-teachers in which the level of role stress is maintained at an appropriate level is greater if there is increased awareness about the importance of designing a role that better suits the character of MBO. That illustrates how important it can be for the SBM role to be designed in order to make it clearer, thus reducing ambiguity, but also to consider what can be done to facilitate appropriate levels of role conflict and role overload.

NPM emphasizes the importance of decentralization, but when it is put into practice this creates some issues that are important to discuss. In this case, more specific regarding MBO and the issue of how the balance between national, municipal and school level should be organized. One practical implication of the research presented here shows how beneficial it would be with an awareness of the importance that decentralized tasks ought to be combined with commensurate resources. It is necessary to carefully consider which responsibilities, authorities and tasks should be carried out by centrally-placed administrators in the municipalities and which should be delegated to the local schools,

included administrators and head-teachers. Finally, resources must follow tasks, so that those responsible for acting have the ability (skills and resources) to do so. Otherwise there is a risk of overload and prioritizing becomes characterized by short-term thinking. If all these challenges were met successfully, it would make it easier for head-teachers to perform their role of pedagogical leader, local schools could be better managed and student performance could improve.

5.6 Future Research

One question raised by the research presented in this dissertation is whether the factors identified as having an important impact on role performance have been taken into consideration in the design of the role of Swedish head-teachers. This is important because it is a prerequisite for better performance. The old role was designed to suit a centrally planned and managed steering device. When MBO was implemented, planning and management were delegated to local governments, and they designed the role of head-teacher differently. Some municipalities kept the old role, while others created roles that were influenced by the decentralized SBM, which gives head-teachers greater autonomy and responsibility. Research indicates that the SBM approach leads to heavy workloads and is characterized by more role ambiguity than is the case in the old role. This dissertation has had a local school perspective. Much could be gained by widening the perspective in future research. One alternative research approach would be to study how a head-teacher role can be designed as one part of the whole educational system in a local government. Combined with qualitative methods, this could lead to deeper knowledge in this area, which could facilitate role design.

In this thesis the growth of upper secondary schools in the private sector was noted, but treated as “an interesting footnote in the study” (Lindberg and Wilson, 2011). A footnote of course does not do that phenomenon justice and deserves further interest as it appears to be part of an emerging trend not only in Sweden, but elsewhere. According to Fussarelli & Johnson (2004) the private sector is heavily involved and is doing big business in education in the US. The classical research questions have traditionally had a national perspective in the public sector environment, but in the future these perspectives could be combined with a study that also had an entrepreneurial focus. That is, one possibility for future research would be to examine the growing number of the upper secondary schools that have initiatives in and from the private sector. In that regard, knowledge from other emerging sectors and industries could be used to contribute to understanding the current process. A study where the two perspectives, public sector environment and entrepreneurial focus, converge would add a new dimension to the ongoing understanding, concern and debate in Sweden.

So far, the supposed advantages of MBO have not really materialized, but for those who have hopes for rational decision making, it still has a potential. Gaps and frictions will from this perspective be possible to avoid when teams of individuals work together and all sub goals are synchronized to achieve common goals in the public sector. Scholars like As such, some stressors may be positive up to a certain degree, whereas others may be negative up to a certain degree (2006; 2007), who do not place their hopes in rational decision making, will continue to argue about the weakness of the approach. If MBO is to

be a step forward, the role of head-teacher must be developed so that head-teachers experience less role ambiguity and can reduce the time they must devote to financial and administrative tasks. The role has to allow head-teachers to prioritize tasks of school development and pedagogical leadership to a greater extent than is possible today. This is one factor that would increase the possibilities to fulfill the intentions behind MBO, so that the reform will be a step forward for education.

References

- Aiken, L. S. & West, L.G. (1991). *Multiple Regression: Testing an Interpreting Interaction*. Newbury Park, CA: Sage.
- Allen, R. D., Hitt, M.A. & Greer, C. R. (1982). Occupational Stress and Perceived Organizational Effectiveness in Formal Groups: An Examination of Stressor Level and Stressor Type. *Personnel Psychology*, 35 (2), 359-370.
- Anthanasoula-Reppa, A. & Lazaridou, A. (2008). Requirement, Roles and Challenges of the Principalship in Greece and Cyprus: Newly Appointed Principals' views. *European Education*, 40 (3), 65-88.
- Appelbaum, A. & Hare, A. (1996). Self-efficacy as a Mediator of Goal Setting and Performance: Some Human Resource Applications. *Journal of Managerial Psychology*, 11 (3), 33-47.
- Arbner, I., & Bjerke, B. (1977). *Företagsekonomisk metodlära*. Lund: Studentlitteratur.
- Ardalan, K. (2008). On the Role of Paradigms in Understanding Economic Globalization. *Forum for Social Economics*. Springer.
- Atkinson, J. W. (1958). *Motives in fantasy, action and society*. Princeton: Van Nostrand
- Azevedo, J. (2002). *Updating organizational epistemology*. In Baum, J. A. C. (Ed.): *Companion to organizations* (pp. 715-732). Oxford: Blackwell Publishing.
- Babbie, E. R. (2004). *The practice of social research (10 ed.)*. Belmont, CA: Wadsworth Thomson Learning.
- Bandura, A., & Cervone, D. (1983). Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *Journal of Personality and Social Psychology*, 45 (5), 1017-1028.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*; Engelwood cliffs NJ. Prentice-Hall.
- Bandura, A. (1989). Regulation of cognitive processes through perceived self efficacy. *Development Psychology*, 25 (5), 729-735.
- Bandura, A. (1992). Exercise of agency through the self-efficacy mechanism, In A Schwartz (Ed.), *Self-efficacy; Thought Control of Action* pp. 3-38. Washington, DC; Hemisphere.

- Bandura, A. (1994). Self efficacy. In V.S Ramachaudran (ed.) *Encyclopaedia of human behaviour*, 4, 71-81. New York Academic Press. Reprinted in H.F. Friedman (Ed.) *Encyclopedia of Mental health..* San Diego Academic Press, 1998.
- Bandura, A., & Locke, E. (2003). Negative Self-Efficacy and Goal-Effects Revisited. *Journal of Applied Psycholog*, 88 (1), 87-99.
- Barker, B. (2009). “Public service reform in education: why is progress so slow”. *Journal of Educational Administration and History*, 41 (1), 57-72.
- Baum, J. A., & Rowley, T.J. (2002). *Companion to organizations: An Introduction*. In J. A. C. Baum (Ed.), *Companion to organizations* (pp.1 - 34). Oxford; Blackwell publishing.
- Baum, J. R., Locke, E. A., & Smith, K. G. (2001). A multidimensional model of venture growth. *Academy of Management Journal*, 44 (2), 292-303.
- Bell, B. S., & Kozlowski, S.W. (2002). Goal orientation and ability: Interactive effects on self-efficacy, performance, and knowledge. *Journal of Applied Psychology*, 87 (3), 497-505.
- Beehr, T. A., Walsh, J. T., & Taber .T. D. (1976) Relationships of stress to individually and organizationally valued states: Higher order needs as a moderator. *Journal of Applied Psychology*, 61 (1), 41–47.
- Betoret, B. S. (2006). Stressors, Self-Efficacy, Coping Resources, and Burnout among Secondary School teachers in Spain. *Educational Psychology*, 26 (49), 519-539.
- Björklund, A., Fredriksson, P., Gustafsson, & Öckert, B. (2010). Rapport 2010:13 ”Den svenska utbildningspolitikens arbetsmarknadseffekter: vad säger forskningen?”
- Bolino, M., & Turnley, W. (2005). The personal costs of citizenship behavior: The relationship between individual initiative and role overload, job stress, and work-family conflict. *Journal of Applied Psychology*, 90 (4), 740-748.
- Bradford, M., & Kent, W. (1977). *Human Geography - Theories and their Applications*, Oxford: Oxford University Press
- Briggs, A. J. (2005). Middle Managers in English Further Education Colleges: Understanding and Modeling the Role. *Educational Management Administration and Leadership*, 33 (1), 27-50.
- Brignall, S., & Modell, S. (2000). An Institutional perspective on Performance measurement and management in Public sector. *Management Accounting Research*, 11 (3), 281-306.

- Broadbent, J. (1999). The state of public sector accounting research: The APIRA conference and some personal reflections. *Accounting, Auditing & Accountability Journal*, 12 (1), 52-25.
- Brorström, B., Haglund, A., & Solli, R. (1998). *Externredovisning och internredovisning i kommuner och landsting*. Lund: Studentlitteratur.
- Brown, M., & Benson, J. (2005). Managing to Overload? Work Overload and Performance Appraisal Processes. *Group and Organization Management*, 30 (1), 99-124.
- Brown, R. P. (1990). *Organizational commitment and its effects on behavior*. Unpublished doctoral dissertation, University of Massachusetts.
- Brown, S. P., Ganesan, S., & Challagalla, G. (2001). Self-efficacy as a moderator of information-seeking effectiveness. *Journal of Applied Psychology*, 86 (5), 1043-1051
- Brown, S. P., Jones, E., & Leigh, T. W. (2005). The attenuating effect of role overload on relationships linking self-efficacy and goal level to work performance. *Journal of Applied Psychology*, 90 (5), 972
- Brunsson, N., & Jönsson, S. (1979). *Beslut och handling: Om politikernas inflytande på politiken*. Stockholm, Liber.
- Brunsson, N. (1993). Ideas and actions: Justification and hypocrisy as alternative to control. *Accounting, Organisations and Society*, 18 (6), 489-506
- Brunsson, N., Warglien, M. & Masuch, M. (1995). Managing organizational disorder. (eds.) *The Logic of Organizational Disorder*, Walter de Greute.
- Brunsson, N. (2002) *The Organisation of Hypocrisy: Talk, Decisions and Actions in Organisations*. Oslo: Liber and Copenhagen Business School Press
- Brunsson, N. (2003). "Organized hypocrisy" Czarniawska Barbra and Sevón Guje Eds. "The Northern Lights- Organization theory in Scandinavia", Trelleborg, Liber.
- Brunsson, N. (2006). *Mechanisms of Hope: Maintaining the Dream of the Rational Organisation*. Malmö, Liber
- Brunsson, N (2007). *The Consequences of Decision-Making* Oxford: Oxford University Press.
- Burrell, G., & Morgan, G. (1979). *Social Paradigms and Organizational Analysis. Elements of the Sociology of Corporate life*. London: Heineman.
- Caldwell, B. J. (2005). *The New Enterprise Logic of Schools*, Specialist Schools Trust, London.

- Carlton, D.C. (1993). Effects of knowledge of accountability in mastery learning programs on academic achievement, goal setting characteristics, and locus-of-control orientation. Dissertation 54 (2-A).
- Chang, L. (1994). A psychometric evaluation of 4-Point and 6-Point Likert-type scales in relation to reliability and validity. *Applied Psychological Measurement*, 18 (3), 205-215.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression correlation analysis for the behavioral social science*. (2nd ed.) Hillsdale NY: Erlbaum.
- Coetzee, S. E & Rothmann, S. (2005). Occupational stress, organizational commitment and ill-health of employees at a higher education institution in South Africa. *S A Journal of Industrial Psychology*, 31 (1), 47-54.
- Conell, P., Lee, V., & Spector, P. E. (2004). *Job stress Assessment Methods*. In Hersen (Ed.), *Comprehensive handbook of Psychological Assessment* (pp. 455-466). Hoboken, New Jersey: Wiley & Son.
- Conley, S., & You, S. (2009). Teacher role stress, satisfaction, commitment, and intentions to leave: A structural model. *Psychological Reports*, 105 (3), 771-786.
- Cranston, N. (1999), "Teachers as leaders: a critical agenda for the new millennium", *Asia-Pacific Journal of Teacher Education* 28 (1), 123-131.
- Daft, R. L., & Macintosh, N.B. (1978). A new approach to design and use of management information. *California Management Review*, 21 (1), 82-92.
- De Grauwe, A. (2005). Improving the quality of education through school-based management: learning from international experiences, *International Review of Education* 51 (4), 269-287.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods*. New York: McGraw-Hill.
- Denzin, N. K., & Lincoln, Y. S. (2000). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1-28).
- Dishman, R. K., DeJoy, D. M., Wilson, M.G., & Vandenberg, R. J. (2009). Move to Improve A Randomized Workplace Trial to Increase Physical Activity. *American Journal of Preventive Medicine*, 36 (2), 133-144.
- Drach-Zahavy, A., & Freund, A. (2007). Team effectiveness under stress: a structural contingency approach. *Journal of Organizational Behaviour*, 28 (4), 423-450.
- Drucker, P., E. (1954). *The Practice of Management*, New York, 1954.
- Drucker, P., F. (1986). *The Frontiers of Management*, Truman Talley Books, New York.

- Duda., J. (2007). Motivation in sport settings: A goal perspective approach. Motivation in sport and exercise Essential readings in sport and exercise psychology Eds. Daniel Smith, Michael Bar-Eli, pp.78-103. Thomson shore. Inc. USA
- Earley, P. C., Connolly, T., & Ekegren, G. (1989). Goals, strategy development, and task performance: Some limits on the efficacy of goal setting. *Journal of Applied Psychology*, 74 (1), 24–33.
- Eiser, H. (1982). On the nature of subjective scales. *Scandinavian Journal of Psychology*, 23 (1), 161-171.
- Feather, N. T. (1990). *The psychological impact of unemployment*. Springer-Verlag. New York.
- Frederickson, H. G., & Johnston, J. M. (1999). *Public management reform and innovation: Research, theory, and application*. Tuscaloosa: The University of Alabama Press.
- Fried, Y., & Slovik, L. H. (2004). Enriching Goal-Setting Theory with Time: An Integrated Approach. *The Academy of Management review*, 29 (3), 404-422.
- Friedman, I. A. (2002), Burnout in school principals: Role related antecedents. *Social Psychology of Education* 5 (3), 229-251.
- Frölich, N. (2005). “Implementation of New Public Management in Norwegian Universities”, *European Journal of Education*, 40 (2), 223-234.
- Fu, Q. F. (2009). Effects of Salesperson Experience, Age, and Goal Setting on New Product Performance Trajectory: A Growth Curve Modeling Approach. *Journal of Marketing Theory and Practice*, 17 (1), 7-20.
- Fusarelli, L. D., & Johnson, B. (2004). “Educational governance and the public management”. *Public Administration*, 9 (2), 118-127.
- Gallivan, M. J. (2001). Organizational adoption and assimilation of complex technological innovations; development and application of a new framework. *The Database for Advances in Information Systems*, 32 (3), 51-58.
- Gilboa, S., Shirom, A., & Cooper, C. (2008). A Meta-analysis of work demand stressors and job performance examining main and moderating effects. *Personnel Psychology*, 61 (2), 227-271.
- Glazer, S., & Beehr, T. A. (2005). Consistency of implications of three role stressors across four countries. *Journal of Organizational Behavior*, 26 (5), 467-487.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate dataanalysis*. 6:e Ed, Pearson Prentice Hall,. Upper Saddle River, New Jersey.
- Hallberg, U. E. & Schaufeli, W. B. (2006). “Same Same” But Different” *European Psychologist*, 11 (2), 119-128.

- Hanlon, J. O., & Clifton, D. O. (2004). *Effective principals. Positive principals at work.* Scarecrow education. Oxford, UK.
- Hansung, K., & Stoner, M. (2008). Burnout and turnover intention among social workers: effects of role stress, job autonomy and social support. *Administration in Social Work*, 32 (3), 5-25.
- Hastings, J. F., & Hawkins, J. (2009). Body Weight and Goal Setting among Multiracial Young Women: Results from the California Health Interview Survey (CHIS). *Journal of African American Studies*, 13 (1), 14-28.
- Helgøy, I & Homme, A. (2006) Policy Tools and Institutional Change: comparing education policies in Norway, Sweden and England, *Journal of Public Policy*, 26 (2), 141-165
- Holmblad-Brunsson, K. (2002). Management or Politics – or Both? How Management by Objectives May be Managed: A Swedish Example. *Financial Accountability & Management*, 11 (2), 189-209.
- Hollenbeck, J. R., Williams, C. R., & Klein, H. J. (1989). An empirical comparison of the antecedents of commitment to difficult goals. *Journal of Applied Psychology*, 74 (1), 18–24.
- Hood, C. (1991). A public management for all seasons. *Public Administration*, 69 (1), 3-19.
- Hood, C. (1995). The "new public management" in the 1980s: variations on a theme. *Accounting, Organizations and Society*, 20 (2-3), 93-109.
- Hurn, J., Kneebone, I., & Cropley, M. (2006). Goal setting as an outcome measure: A systematic review. *Clinical Rehabilitation*, 20 (7), 756–72.
- Hyde, J., Hankins, M., Deale, A., & Marteu, T.M. (2008). Interventions to Increase Self-efficacy in the Context of Addiction Behaviours: A Systematic Literature Review. *Journal of Health Psychology* 13 (5), 607- 623.
- Häckner, E., Björklund, L., Fendell, E., Sellen, M., & Tschudi, F. (1996) *Bilder och motbilder: elevers och lärares föreställningar om yrkesinriktad gymnasieutbildning*, Göteborg: BAS Förlag.
- Häckner, E. (1998). *Prästens lilla kråka*. Arbetspapper. Institutionen för Industriell ekonomi och samhällsvetenskap. Luleå Tekniska Universitet.
- Jack, E. P., & Raturi, A. S. (2006). Lessons learned from methodological triangulation in management research. *Management Research News*. 29 (6), 345-354.
- Jackson, A., & Lapsley, I. (2003), "The diffusion of accounting practices in the new 'managerial' public sector". *International Journal of Public Sector Management*, 16 (5), 359-72.

- Jackson, S. E., & Schuler, R. S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior & Human Decision Processes*, 36 (1), 16-78.
- Jex, S. M., Adams, G. A., Bachrach, D. G., & Sorenson, S. (2003). The impact of situational constraints, role stressors, and commitment on employee altruism. *Journal of Occupational Health Psychology*, 8 (3), 171-180.
- Jick, J. K. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24 (4), 602-611.
- Johansson-Lindfors, M-B. (1993). Att utveckla kunskap. Lund 1993. Studentlitteratur.
- Jones, E., Chonko, J., Rangarajan, D., & Roberts, J. (2007). The role of overload on job attitudes, turnover intentions, and salesperson performance. *Journal of Business Research*, 60 (7), 663-671.
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*. Oxford, England: John Wiley.
- Kemery, E. R. (2006). Clergy role stress and satisfaction: Role ambiguity isn't always bad. *Pastoral Psychology*, 54 (5), 561-570
- Kimberly, J., & Evanisko, M. (1981). Organizational Innovation: The Influence of Individual, Organizational, and Contextual Factors on Hospital Adoption of Technological and Administrative Innovations. *Academy of Management Journal*, 24 (4), 689-713.
- King, L. A., & King, D. W. (1990). Role conflict and role ambiguity: A critical assessment of construct validity. *Psychological Bulletin*, 107 (1), 48-64.
- Klein, H. J., Wesson J. M., Hollenbeck J. R., & Alge, B. J. (1997). Goal commitment and the Goal-setting Process: Conceptual Clarification and Empirical Synthesis. *Journal of Applied Psychology*, 84 (6), 885-896.
- Klein, H. J., Wesson, J. M., Hollenbeck, J.K., Wright, P.M., & DeShon, R.P. (2001). The assessment of goal commitment: A measurement model meta-analysis. *Organizational Behavior and human Decision Process*, 85 (1), 32-55.
- Knoppen, D., Dola, S.L., Diez-Pinol, M. and Bell, R. (2008) 'A triangulation analysis of value congruency in corporate Spain: American dream or Spanish reality?', *International Journal of Human Resource Management*, 17 (3), 539-558.
- Ku, G. (2008). Before escalation: Behavioral and affective forecasting in escalation of commitment *Journal of Personality and Social Psychology*, 34 (11), 1477-1491.
- LaPorte, R., & Nath, R. (1976). Role of performance goals in prose learning. *Journal of Educational Psychology*, 68 (3), 260-264.

- Lapsley, I., & Wright, E. (2004). The diffusion of management accounting in the public sector: a research agenda. *Management Accounting Research*, 15 (3), 355-374.
- Latham, G. P., & Erez, M. (1988). The determinants of goal commitment. *Academy of Management Review*, 13 (1), 23–39.
- Latham, G. P., Seits, G., & Crim, D. (2008). The effects of learning goal difficulty level and cognitive ability on performance. *Canadian Journal of Behavioral Science*, 40 (4), 220-229.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lee, T. W., Locke, E. A., & Phan, S. H. (1997). Explaining the assigned goal-incentive interaction: The role of self-efficacy and personal goals. *Journal of Management*, 23 (4), 541-559.
- Leung, M., Chan, Y., & Olomolaiye, P. (2008). Impact of Stress on the Performance of Construction Project Managers. *Journal of Construction Engineering and Management*. 134 (8), 644-652.
- Levine, A. (2005). *Educating school leaders*. New York: Education Schools Project.
- LGY Läroplan för de frivilliga skolformerna (curriculum for upper secondary school) Utbildningsdepartementet, Stockholm: Fritzes.
- Litchfield, R. C. (2008). Brainstorming reconsidered: A goal-based view. *Academy of Management Review*. 33 (3), 649-668.
- Lindberg, E. (1998). *Målstyrning i svenska gymnasieskolor. [MBO in Swedish upper secondary schools.]* Luleå, LTU
- Lindholm, C. E. (1959). *The Science of "Muddling Through"*. Public Administration review, 19 (2), 79-88.
- Locke, E. A. (1991a). Goal theory vs. control theory: Contrasting approaches to understanding work motivation. *Motivation and Emotion*, 15 (1), 9–28.
- Locke, E. A. (1991b). The motivation sequence, the motivation hub and the motivation core. Locke, E., *Organizational Behavior and Human Decision Processes*, 50 (2), 288–299.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57 (9), 705-717.
- Locke, E. A., & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science*, 15 (5), 265–268.
- Locke, E., & Latham, G. (2006). Enhancing the benefits and overcoming the pitfalls of goal setting. *Organizational Dynamics*, 35 (4), 332- 340.

- Lundahl, L. (2002). From Centralization to Decentralization: governance of education in Sweden, *European Educational Research Journal*, 1 (4), 625-636.
- Lundgren, U. P. (1983). *Att organisera omvärlden. En introduktion i läroplansteori*. Liber förlag, Stockholm.
- Lundgren, U.P. (1999). Ramfakta och praktisk utbildningsplanering. *Pedagogisk Forskning i Sverige*, 4 (1), 31–41.
- MacBeth, J. (2009), Recruitment and retention of Senior School leaders: meeting the challenge. *European Educational Research Journal*, 28 (2), 123-131.
- March, J., & Olsen, J. P. (1976). *Ambiguity and Choice in Organizations*. Oslo: Universitetsförlaget.
- McClelland, D.C. (1953). *The achievement society*. New York: Appleton
- McClelland, D.C., Atkinson, J. W., Clark, R.A., & Lowell, E. L. (1953). *The Achievement Motive*, New York, Appleton-Century-Crofts, inc.
- McKelvey, B. (2002). *Model-centered organization science epistemology*. In J. Baum (Ed.), *Companion to organizations*: (pp. 752–780). New York: Oxford University Press.
- Mellalieu, S., Hanton, S., & O'brian, M. (2006). The effects of goal setting on rugby performance. *Journal of Applied Behavior Analysis*, 39 (2), 257- 261.
- Mento, A. J., Steel, R. P., & Karren, R. J. (1987). A meta-analytic study of the effects of goal setting on task performance: 1966–1984. *Organizational Behavior and Human Decision Processes*, 39 (1), 52–83
- Merton, D. M. (2003). *Mixed methods and the politics of human research: The transformative-emancipatory perspective*. In A. Tashakkori & C. Teddlie (Eds) *Handbook of mixed methods in social and behavioral research* (pp.135-164).
- Meyer, A. D., & Goes, B. J. (1988). Organizational assimilation of innovations: a multilevel contextual analysis. *Academy of Management Journal*, 31 (4), 897-923.
- Meyer, J., W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83 (2), 340-363.
- Moldoveanu, M. C., & Baum, J. A. C. (2002). Contemporary debates in organizational epistemology. In J. A. C. Baum (Ed.), *Companion to organizations* (pp. 733–751). New York: Oxford University Press.
- Noar, S. M. (2003). The role of structural equation modeling is scale development. *Structural Equation Modeling*, 10 (4), 622-647

- O'Driscoll, M. P., & Beeher, T. A. (2007). Supervisor behaviors, role stressors and uncertainty as predictors of personal outcomes for subordinates. *Journal of Organizational Behavior*, 15 (2), 141-155.
- Onyemah, V. (2008), "Role Ambiguity, Role Conflict, and Performance: Empirical Evidence of an Inverted-U Relationship." *Journal of Personal Selling and Sales Management*, 28 (3), 299–313.
- Örtqvist, D., & Wincent, J. (2006). Prominent consequences of role stress: A meta-analytic review. *International Journal of Stress Management*, 13 (4), 399-422.
- Phillips, J. M., & Gully, S. M. (1997). Role of goal orientation, ability, need for achievement, and locus of control in the self-efficacy and goal-setting process. *Journal of Applied Psychology*, 82 (5), 792–802.
- Philips, A., Sen, D., & McNamee, R. (2007), Prevalence and causes of self-reported work-related stress in head teachers. *Occupational Medicine*, 57 (5), 367-376.
- Pollitt, C., Van Thiel, V. & Hoburg, V. (2007). *New public Management in Europe: Adoptions and Alternative*. (eds.). New Public Basingstoke: Palgrave.
- Popkewitz, T. S. (2009). The Denial of Change in Educational Change: Systems of Ideas in the Construction of National Policy and Evaluation. *Educational Researcher*, 29 (1) 17-29.
- Porter, M.E. (1990). *The competitive advantage of nations*. New York The Free Press.
- Preston, C. C. & Colman, A. M. (2000). Optimal number of response categories in rating scales: reliability, validity, discriminating power, and respondent preferences. *Acta Psychologica*, 104 (1), 1-15.
- Proposition 1988/1989: 4. Skolans utveckling *Skolans utveckling och styrning (Development and governance in education)*.
- Quick, J. C., Quick J. D., Nelson, D. L., & Hurrell, J. J. (1997). *Preventive stress management in organisations*. Washington, D. C: American Psychological Association.
- Ramström, D., & Schäfer, J. (1992) *Ersätt tro med vetande - utvärdera målstyrning*. Kommunaktuellt (8).
- Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *"Doing research in business Management: An introduction to process and method"* SAGE Publications, London.
- Rizzo, J. R., House, R. I., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15 (2), 150-163.
- Rogers, E. (1995). *Diffusion of innovations. (4th edition)* New York. Free Press.

- Rogers, E. (1983). *Diffusion of innovations. (3th edition)* New York. Free Press.
- Rogers, R., & Hunter, J. E. (1991). Impact of Management by Objectives on organizational productivity. *Journal of Applied Psychology*, 76 (2), 322-336.
- Ronan, W. W., Latham, G. P., & Kinne, S. B. (1973). The effects of goal setting and supervision on worker behavior in an industrial situation. *Journal of Applied Psychology*, 58 (3), 302-307.
- Rothstein, B. (1994) *Vad bör staten göra? Om världsfärdsstatens moraliska och politiska logik.* Studieförbundet Näringsliv och samhälle. Stockholm
- Ryan, T. A. (1970). *Intentional behavior*, Ronald Press, New York.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students (4ed)*. Essex, England: Pearson Education.
- Scandura, T.A. & Williams, E.A. (2000) Research Methodology in Management: Current Practices, Trends, and Implications for Future Research. *Academy of Management Journal*, 43 (6), 1248-1264.
- Schumacher R. & Lomax G. (2004) *A Beginner's Guide to Structural Equation Modeling*, 2nd edn. Lawrence Erlbaum Associates, Publishers, London.
- Selmer, J., & Fenner, C.R. (2009). Job factors and work outcomes of public sector expatriates. *Human resource management journal*, 19 (1), 75-90.
- Selyes, H. (1975). *Stress without distress*. United States of America: McClelland and Steward Ltd.
- Senécal, J., Loughhead, T. M., & Bloom, G. A. (2008). A season-long team-building intervention: Examining the effects of team goal setting on cohesion. *Journal of Sport and Exercise Psychology*. 30 (2), 186-199.
- Slappendel, C. (1996). Perspectives on innovation in organizations. *Organization Studies*, 17 (1), 107-129.
- Sonnentag, S.S., & Krueger, U. (2006). Psychological detachment from work during off-job time: The role of job stressors, job involvement, and recovery-related self-efficacy. *European Journal of Work and Organizational Psychology*, 15 (2), 197 – 217.
- SOU 1974:53. *Skolans arbetsmiljö*. Stockholm: Utbildningsdepartementet.
- SOU 1988:13. *En förändrad ansvarsfördelning och styrning på skolområdet (Changed responsibility and governance in education)*. Betänkande från beredningen om ansvarsfördelningen och styrning på skolområdet.
- SOU 1992:94. *Skola för bildning*. Stockholm: Utbildningsdepartementet.

- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, 124 (3), 240–261
- Thomas, C. H., & Lankau, M. J. (2009). Preventing burnout: the effects of LMX and mentoring on socialization, role stress, and burnout. *Human Resource Management*, 48 (3), 417-432.
- Thompson, K. R., Luthans, F., & Terpening, W. D. (1981). The effects of MBO on performance and satisfaction in public organizations. *Journal of Management*, 7 (1), 53-68.
- Tubbs, M. E. (1986). Goal-setting: A meta-analytic examination of the empirical evidence. *Journal of applied psychology*, 71 (3), 446-450.
- Van 't Riet, J., Ruiter, R. A. C framed he., Werrij, M. Q., & de Vries, H. (2008). The influence of self-efficacy on the effects of alth messages. *European Journal of Social Psychology*, 38 (5), 800–809.
- Wagner III, J. A., & Gooding, R. Z. (1987 a). Shared influence and organizational behavior: A meta-analysis of situational variables expected to moderate participation–outcome relationships. *Academy of Management Journal*, 30 (3), 524–541.
- Wagner III, J. A., & Gooding, R. Z. (1987 b). Effects of societal trends on participation research. *Administrative Science Quarterly*, 32 (2), 241–262.
- Webster, F. (1971). Communication and diffusion processes in industrial markets. *European Journal of Marketing*, 5 (4), 178-188.
- Weick, K. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21 (1), 1-19.
- Wenisch, S. (2004). *The diffusion of a balanced scorecard in a divisionalized firm-Adoption and Implementation in a practical context*. Dissertation. Umeå University.
- Whetten, D.A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, 14 (4), 490-495.
- Willard, J., Madon, S., Gyll, M., Spoth, R., & Jussim, L. (2008). Self-efficacy as a moderator of negative and positive self-fulfilling prophecy effects: Mothers' beliefs and children's alcohol use. *European Journal of Social Psychology*, 38 (3), 499–520.
- Wong, K. F. E., & Kwong, J. Y. Y. (2007). The role of anticipated regret in escalation of commitment, *Journal of Applied Psychology*, 92 (2), 545-554.
- Wood, R. E., & Locke, E. A. (1990). Goal setting and strategy effects on complex tasks. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*, (12, 73–109). Greenwich, CT: JAI Press.

Zikmund, W. G. (2003), *Business Research Methods*, 7th edn, chapter 5. Ohio-USA; Thomson, South-Western.

Yerkes, R. M., & Dodson, J.D. (1908). The relation of strength of stimulus of rapidity of habit formation. *Journal of Comparative Neurology Psychology*, 18, 459-482.

I skriftserien Studier i företagsekonomi Serie B utges löpande rapporter från den företagsekonomiska forskningsgruppens verksamhet vid Umeå universitet.

Hittills föreligger följande skrifter:

1. Bengt Johannisson och Christian Lindström
Företagsstorlek och forskningsaktivitet.
Umeå 1970.
2. Leif Dahlberg och Gustaf Söderström
Närhetsbutik i glesbygd.
Umeå 1970.
3. Christian Lindström och Lars Enslöf
Marknadens rumsliga spridning i små och stora företag.
Umeå 1971.
4. Bengt-Olov Byström, Bengt Johannisson och Christian Lindström
Alternativa mått på företagsstorlek.
Umeå 1971.
5. Bengt Johannisson
Företagens anpassningsprocesser - en systemanalys med tillämpning på mindre företag.
Umeå 1971.
6. Dezsö Horváth och Dick Ramström
Organisationsuppdelning i samband med lokaliserings-
överväganden. En teoretisk föreläsningsram.
Umeå 1971.
7. Lennart Orkan
Regionala variationer i företagets personalomsättning.
Umeå 1972.
8. Per G. Hånell
Inkörningskostnader i mindre och medelstora företag.
Umeå 1972.
9. Leif Dahlberg
Konsumentens val av inköpsställe.
Umeå 1972.
10. Göran Carstedt och Birgitta Isaksson Peréz
Företagsbestånd och företagsutveckling.
Umeå 1972.
11. Carl Fredriksson och Leif Lindmark
Underleverantörssystem i Skellefteå A-region - En In-
put-Outputstudie.
Umeå 1972.
12. Dezsö Horváth
Kriterier och principer för företagsorganisation.
Umeå 1972.
13. Lars Enslöf
Kontaktmöjligheter och kontaktbeteende. En studie av
kontakternas regionala variationer.
Umeå 1973.
14. Lars-Peter Holmlund
Hur man tillämpar teorier om planering.
Umeå 1973.
15. Bengt-Olov Byström och Mats Glader
Industriell service - Rapport från studier om serviceutnytt-
jande i mindre och medelstora företag.
Umeå 1973.
16. Göran Carstedt och Birgitta Isaksson Peréz
Företag i strukturomvandlingen, del I-V.
Umeå 1974.
17. Lennart Orkan
Personalomsättning - orsaker, konsekvenser och regional
struktur.
Umeå 1974.
18. Bo Lemar och Jan-Evert Nilsson
Långsiktig planering - En begrepps- och innehållsanalys.
Umeå 1974. 2:a upplagan 1978.
19. Sixten Andersson
Produktutvecklingens möjligheter och begränsningar - En
studie med inriktning på mindre och medelstora företag.
Umeå 1974.
20. Dezsö Horváth
Situationsanpassade organisationer - teori och tillämpning.
Umeå 1976.
21. Claes-Göran Larsson
Datorbaserad kassaplanering.
Umeå 1976.
22. Carl Fredriksson och Leif Lindmark
Nationella och lokala produktionssystem. En strukturstudie
av svenskt näringsliv.
Umeå 1976.
23. Carin Holmquist
Styrning av organisationer - ett systemperspektiv tillämpat
på statliga företag.
Umeå 1980.
24. Runo Axelsson och Lennart Rosenberg
Applications of organization theory. On problems of the
Swedish system of higher education.
Umeå 1976.
25. Elisabeth Sundin
Företag i perifera regioner. Fallstudier av företagstradition,
företagsmiljö och företags framväxt i Norrbottens inland.
Umeå 1980.

26. Per Månsson och Kaj Sköldberg
Symboliska organisationsmönster - Sju typer av planeringskultur under osäkerhet och stress i ett metamorfosperspektiv.
Umeå 1983.
27. Christer Strandberg
Glesbygdsbutiker. En studie av tillkomst, köptrohet och socialt samspel.
Umeå 1984.
28. Håkan Bohman och Håkan Boter
Planering i mindre och medelstora företag. Den strategiska planeringens utmaningar och faktiska villkor.
Umeå 1984.
29. Christer Peterson
Familjeföretag i omvandling. En studie av fusionsförlopp och utvecklingsmönster.
Umeå 1985.
30. Maj-Britt Johansson Lindfors
Organisationers ideologiska ansikten. Om grundläggande föreställningar i mindre företag.
Umeå 1989.
31. Anders Söderholm
Organiseringslogik. En studie av kommunal näringslivspolitik.
Umeå 1991.
32. Kerstin Nilsson och Per Nilsson
Småföretag i flerpartssamverkan. En studie av aktörer, byggstenar och fogmassa vid nätverks byggande.
Umeå 1992.
33. Maria Bengtsson
Konkurrens klimat och dynamik. En studie av interaktion mellan konkurrenter.
Umeå 1994.
34. Nils Wåhlin
Näringslivsledares arbete i nätverk. Identitetsskapandets dynamik.
Umeå 1994.
35. Tomas Müllern och Katarina Östergren
Lärandekulturer. En studie av organisatoriskt lärande under olika institutionella betingelser.
Umeå 1995.
36. Monica Lindgren
Möjligheter till kompetensutveckling. Ett individperspektiv på relationen människa-organisation.
Umeå 1996.
37. Ulrica Nylén
Gott och ont inom affärlivet. Utveckling av ett etiskt perspektiv på företags relationer med aktörer.
Umeå 1996.
38. Jan-Erik Jaensson
Marknadsorientering i tjänsteföretag. En studie av försäkringsbolag.
Umeå 1997.
39. Sven Junghagen
Strategiska förhållningssätt till informationsteknik i små företag.
Umeå 1998.
40. Tomas Blomquist och Johann Packendorff
Ekonomisk styrning för förändring: En studie av ekonomiska styrinitiativ i hälso- och sjukvården.
Umeå 1998.
41. Agneta Marell Molander
The Household Decision Making Process in Replacement of Durable Goods.
Umeå 1998.
42. Karl Bonnedahl
En företagsstrategisk analys av ekonomisk integration. Konsekvenser av Europas inre marknad för svenska mindre tillverkande företag.
Umeå 1999.
43. Jan Bodin
Perpetual Product Development. A study of small technology-driven firms.
Umeå 2000.
44. Henrik Linderöth
Från Vision till Integration. Infusion av telemedicin, en översättningsprocess.
Umeå 2000.
45. Gert-Olof Boström
CAD Adoption in the Swedish Architectural Industry. IT and the Professional Service Sector.
Umeå 2001.
46. Peter Hultén
Managing a Cross-Institutional Setting: A Case Study of a Western Firm's Subsidiary in the Ukraine.
Umeå 2002.
47. Johan Sandström
Organizational Approaches to Greening: Technocentrism and Beyond.
Umeå 2002.
48. Elisabet C. Ljunggren
Entreprenörskap og kjønn. En kunnskapsreise mellom to perspektiver: fra individ til relasjon.
Umeå 2002.
49. Olof Wahlberg
A Paradigm Questioned. A study of how the cultural relativity of modern management knowledge confines its transferability to non-industrialised Third World countries.
Umeå 2002.

50. Henrik Nilsson
Essays on the value relevance of financial statement information.
Umeå 2003.
51. Lars Lindbergh
Essays on Financial Performance and Capital Structure.
Umeå 2003.
52. Jessica Eriksson
Branschinteraktion och institutionell förändring. Omvandling i två livsmedelsbranscher.
Umeå 2004.
53. Simone Wenisch
The Diffusion of a Balanced Scorecard in a divisionalized firm - Adoption and Implementation in a practical context.
Umeå 2004.
54. Tommy Jensen
Översättningar av konkurrens i ekonomiska laboratorier om ekonomiska teories förenkling, komplexitet och fördunkling i hälso- och sjukvården.
Umeå 2004.
55. Åke Gabriellson och Margareta Paulsson
Individ och agentskap i strategiska processer. En syntetisk och handlingslogisk ansats.
Umeå 2004.
56. Rickard Olsson
Portfolio Management under Transaction Costs. Model Development and Swedish Evidence.
Umeå 2005.
57. Håkan Andersson
Svenska småföretags användning av reserveringar för resultatutjämnning och intern finansiering.
Umeå 2006.
58. Sofia Isberg
Den mångfacetterade marknadsorienteringsprocessen.
Umeå 2006.
59. Anders Isaksson
Studies on the venture capital process.
Umeå 2006.
60. Patrik Nilsson
Attention to Advertising.
Umeå 2006.
61. Lars-Anders Byberg
Framgångsrika exportörer.
Umeå 2006.
62. Peter Zackariasson
World-Builders: A Study on the Development of a Massively Multiplayer Online Role-Playing Game.
Umeå 2007.
63. Andreas Nilsson
Projektledning i praktiken. Observationer av arbete i korta projekt.
Umeå 2008.
64. Tobias Svanström
Revision och rådgivning. Efterfrågan, kvalitet och oberoende.
Umeå 2008.
65. Kittipong Sophonthumapharn
A Comprehensive Framework for the Adoption of Techno-Relationship Innovations: Empirical Evidence from eCRM in Manufacturing SMEs.
Umeå 2008.
66. Jens Graff
Career as an Experiential Learning Voyage. Development of Experiential Assessment Methodology in a Lifelong Learning Context.
Umeå 2008.
67. Jaana Kurvinen
Imitation och omtolkning – entreprenörers identifieringsprocesser ur ett genusperspektiv.
Umeå 2009.
68. Markus Hällgren
Avvikelsens mekanismer: Observationer av projekt i praktiken.
Umeå 2009.
69. Lars Erik Lauritz
Spirande polisidentiteter, en studie av polisstudenters och nya polisers professionella identitet.
Umeå 2009.
70. Pontus Bergh
Learning Among Entrepreneurs in Formal Networks: Outcomes, Processes and Beyond.
Umeå 2009.
71. Johan Jansson
Car(ing) for our environment? Consumer eco-innovation adoption and curtailment behaviors: The case of the alternative fuel vehicle.
Umeå 2009.
72. Thommie Burström
Organizing boundaries in early phases of product development. The case of an interorganizational vehicle platform project setting.
Umeå 2010.
73. Jonas Nilsson
Consumer Decision Making in a Complex Environment: Examining the Decision Making Process of Socially Responsible Mutual Fund Investors.
Umeå 2010.
74. Malin H. Näsholm
Global careerists' identity construction. A narrative study of repeat expatriates and international itinerants.
Umeå 2011.

75. Erik Lindberg
Effects of Management by Objectives. Studies of Swedish Upper Secondary Schools and the Influence of Role Stress and Self-efficacy on School Leaders.
Umeå 2011.

Studies in Business administration
Series B, No. 75



Umeå School of Business
Umeå University
www.usbe.umu.se

ISBN 978-91-7459-196-5
ISSN 0346-8291