Does Team Management Matter?

A Study of Impacts on Job Satisfaction and Organizational Commitment in Mental Hospital Departments

Kjersti Eeg Skudal

Does Team Management Matter?

A Study of Impacts on Job Satisfaction and Organizational Commitment in Mental Hospital Departments

Kjersti Eeg Skudal

Table Index

ACKNOWLEDGEMENTS

ABSTRACT

This dissertation examines team management in mental hospital departments. Management has for decades been a disputed subject in Norwegian hospital departments. The former Regional hospital of Tromsø (now UNN) introduced team management at department level at the hospital in 1988, which represented a fundamental break with how management had been carried out in hospitals until then. Although practitioners in UNN and governmental reports reported that this management model was successful in practice, there had not been conducted studies of the team management model and how it affected outcomes in contrast to other ways of conducting management in hospitals. On this basis I worked out the research questions: does team management make a difference on subjective outcome dimensions of managers and employees compared to how hierarchical management impacts these subjective outcome dimensions? Furthermore, if team management affects subjective outcome dimensions, the next research question regards: how does team management affect subjective outcome dimensions of managers and employees? Team management is approached by modernism and instrumental theory in which formal structure is regarded as a means to affect behavior, and it is thus vital that team management materialized in the formal structure of the organization. Team management is in other words viewed as an instrument to achieve organizational goals more efficiently according to these analytical lenses. Contrarily, constructivism and institutional theory regards team management as a socially constructed phenomenon which is infused with meaning and values dependent on how organizational members interpret the idea of team management. In this manner, analytical priority is given to informal and symbolic structures when understanding how individuals' attitudes and behaviors are shaped. Qualitative and quantitative data are collected by interviews and questionnaire. Analyses of these data imply that team management makes a difference on both managers' and employees' job satisfactions. Still, managers' satisfaction is more strongly affected than employees' satisfaction, which I argue illustrates that team management has both instrumental and symbolic impacts. The organizational commitment of managers and employees is not affected by team management.

1 Introduction

The subject matter in this thesis concerns team management and the impacts of this specific structuring of management on outcome. This project originates in observations made by members of management teams at the University Hospital of North Norway in Tromsø (UNN), who acknowledged that they worked in a team management model in contrast with more traditional hierarchical management models. The organization of management in teams on the departmental level in hospitals is a break with the classical dual management model, which has a long-term history of a medical accountable chief physician and the head nurse accountable for administrative aspects of the conduct of a hospital department. Practitioners in this hospital called attention to how team management had changed the way management was carried out, but they were uncertain as to whether or not this team structure actually made a difference in regard to outcomes. On this basis the team management members had an urge to explore whether this team model actually made a difference pertaining to outcomes. They conveyed this concern to researchers and this was the originating history of this project. Therefore, the mental wards at UNN constitute the units of analysis. Nordland Hospital (NLSH) and its mental wards are included as a comparative case in the study in order to address whether team management makes a difference on subjective outcome dimensions compared to a more hierarchically structured management model.

The subject of teams is certainly one that has gained a lot of attention from both researchers and practitioners. For one thing a search for teams in data bases such as JSTORE and ProQuests yields 51387 and 1584270 results respectively.[1] A great number of books on the subject of teams for both academics and managers in the organizational field have also been written, such as: *The Wisdom of Teams. Creating the High-Performance Organization* (Katzenbach and Smith 1998:129), *Designing Team-based Organizations: New Forms of Knowledge Work* (Mohrman, Cohen et al. 1995), and *Groups that work (and those that don't). Creating Conditions for Effective Teamwork* (Hackman 1990). Much of the research on teams, like other popular organizational concepts, takes certain ideas and beliefs regarding the possible benefits of teams as a starting point for its investigations. Much of this literature regards teams as innately good for both organizational performance and employees (Finn 2008:105). To assume that teams offer indisputable benefits reflects not only, what we find in

---

[1] These searches were conducted on May 12. 2008.

the scholarly literature, but also the general credibility associated with the concept. In western cultures, many people prefer that the organization they work in to conduct management in teams, simply because the idea is associated with being seasonal, dynamic and in line with democratic values.

In an article concerning High Performance Work Organizations (HPWOs) practices, which encompass such organizational practices as teams, Osterman (2000:179) asserts that these practices are held in such a esteem, because, first of all, they are seen as more productive than existing organizational ideas in terms of both output and quality terms. The prevailing conception regarding new organizational ideas is that they make for a more efficient use of labor by incorporating quality considerations directly into the work processes, and hence, avoid the need for a separate quality unit. Teams also draw on the ideas and creativity of the work force. Second, organizational ideas like teams yield mutual gains for both the organization and the work force. This is based on the assumption that for new organizational structures to function in the way they were intended, the workers must be assured a share of the gains (Osterman 2000:179). These ideas and assumptions regarding the benefits of introducing new organizational structures fit well with how people within and outside of UNN have regarded team management in the hospital's mental wards. When I spoke with members of the management teams who are working at UNN about team management, they made sure to emphasize what they experienced as the advantages of working in teams compared to previous management models with which they are experienced. They alluded to how the management teams had created better conditions for their job satisfaction and commitment, and that the sorts of treatment the departments were able to provide the patients were better than before. Also from a detailed statement (NOU 1997:chapter 10.4.5.1) prepared by a committee appointed by the Ministry of Health and Social Affairs[2] which introduces the idea of implementing unitary management as a managerial principal in all Norwegian hospitals, the team management model at UNN is mentioned in positive terms, even though the committee did not make any formal recommendation towards implementing a team structure. This statement stresses that team management is an alternative model that will fulfill the demand for unitary management (NOU 1997:chapter 10.4.5). It goes on to give arguments regarding the symbolic impacts of team management. First, the statement alludes to how team management could be a means to organize the most important professional

---

[2] This committee was appointed 29. April 1996.

management groups according to different professional requirements by including these professional groups in management teams. Second, attention is called to team management as a stronger way of underlining the relationship between the professions and the professional groups.

Despite this wide range of ideas and beliefs concerning what effects team management may have, the diversity in team literature makes it difficult to grasp the effects team management has in an organization and what it implies in an organization. The diversity of the literature gives the impression that scholars are divided with respect to organizational levels and types of teams. In this thesis, I especially call attention to other types of management teams, such as top management teams (TMTs) and teams on the operational level within health care organizations. Like most team literature, top management team (TMT) literature is clearly anchored in a modernistic way of thinking, in that it directs attention to teams as tools for effective goal achievement in terms of objective organizational performance. TMT research is focused upon creating knowledge for researchers and practitioners regarding how teams can be improved for the purposes of increasing efficiency and objective performance in organizations (cf. Murray 1989; Finkelstein and Hambrick 1990; Priem 1990; Haleblian and Finkelstein 1993; Smith, Smith et al. 1994). Studies of management teams on the lower levels of organizations are not that common. Another strand of team literature concerns teams on operational level in health care settings, this literature is also rooted in instrumental thinking as it regards teams as tool for improving efficiency. In the health sector the specific team research literature is also focused on comprehending effects upon objective outcomes, but outcomes are here widened to include subjective dimensions as well. Besides, research on health care teams does not solely regard outcomes on the organizational level, as does TMT literature, but may also assess outcomes on such as patient care, team personnel, and the cost-effectiveness of management (cf. Schofield and Amodeo 1999; Lemieux-Charles and McGuire 2006:266). Thus, a main argument in this thesis is that in order to study how team management on the departmental level affects outcome, one needs to study the outcome not only at the level of the team but also on the bottom line of the organization. This means that not only the team managers who manage, but that also the employees being managed, will be studied.

1.1 Introduction of the Research Question

In this dissertation the aim is to investigate whether team management makes a difference compared to hierarchical management in terms of subjective outcome dimensions such as job satisfaction and commitment. On this basis, the general research question becomes: does team management make a difference on subjective outcome dimensions (e.g. job satisfaction and commitment) of managers and employees compared to how hierarchical management impacts these subjective outcome dimensions? Furthermore, if team management does affect job satisfaction and commitment, the next research question is *how* it affects these dimensions? This ultimate question conveys that the purpose of this study goes beyond establishing the statistical impacts of team management on job satisfaction and commitment. This in turn alludes to the importance of substantially interpreting the effects of team management by means of the analytical tools I work out on the basis of modernism and constructivism. The research questions are approached by conducting qualitative interviews and collecting quantitative questionnaire data from department managers and subordinates at mental hospital departments in two different hospitals: one that practices team management and the other which practices hierarchical management.

1.2 How to Approach Team Management?

As already established in the first subchapter the team is a phenomenon that is often approached according to the logic of the modernist paradigm.[3] This is the most common and established approach in social science (cf. Røvik 2007). Studies of management and leadership have in particular been marked by the logic of modernist thinking (cf. Carter and Jackson 1993; Bryman 1996:287; Røvik 2007:46). To approach a social phenomenon such as the team through modernistic lenses yields certain analytical implications. First of all, it implies that a management team is a concrete entity which we can observe and explain if we employ appropriate techniques. Second, it implies that the management model put into practice is conveyed in the formal structure of the organization and that it is a rational instrument utilized to accomplish organizational goals. The third implication is that organizations operate in proportion to clear and official goals which constrain the behavior of

---

[3] This notion of paradigm draws upon the work of Burrell and Morgan (1994:23) and their interpretation of that concept of paradigm. It implies (ibid): "[P]aradigms as being defined by very basic metha-theoretical assumptions which underwrite the frame of reference, mode of theoreizing and *modus operandi* of the social theorists who operate within them." In this manner, the intention is to direct attention to the common cohesion of perspective which combines the work of a group of theorists together in a manner that it is fruitful to regard them as approaching social phenomena within the realm of the same debates. In social sciences modernism and constructivism are established as such paradigms (cf. Røvik 2007).

organizational actors (Scott 2003:34). Finally, research on team management is important for the sake of progress, that is, improving the efficiency of organizational functions and processes, which demonstrates the motivation for research on teams to enhance knowledge concerning how the team functions. These analytical implications are particularly elucidated in instrumental theories (Scott 2003:47; Røvik 2007). In team research the modernistic assumptions are clearly perceptible in what I refer to as the top management team (TMT) literature and in literature on teams in the health care sector. Within the TMT literature, for example, teams are defined according to a given formal top management structure of the firm:

> "The top management team is defined as all inside top-level executive including the chief executive officer, chief operating officer, business unit heads, and vice presidents (Finkelstein and Hambrick 1996). As a general rule, I consider all inside executives listed in the management section of the prospectus as key management personnel" (Kor 2003:712).

Furthermore, there is no doubt that within this literature, the team is a tool for goal achievements:

> "Designed to utilize the expertise and skills from a variety of functional areas affected by a product or process, teams have been used successfully in service delivery [], new product development [], and process improvement []. Used in a variety of competitive environments, this organizational tool has been linked with improved product/process quality, decreased costs, and reduced employee turnover []".[4] (Deeter-Schmeltz and Kennedy 2003:666)

Moreover, Deeter-Schmeltz and Kennedy (2003:667) pinpoint the necessity of conducting more research on how team dynamics are related to performance in order to increase the efficiency of this tool in organizations:

> "As more health care organizations utilize teams to improve the quality of patient care and reduce costs, it is paramount that a thorough understanding of team dynamics and their impact on performance be developed."

According to a constructivist perspective, it is problematic to approach organizations and their components such as team management solely through these modernist lenses (Røvik 2007). A constructivist approach directs attention to team management as a socially constructed feature, not as a given entity which we can study and fully perceive by studying it as a formal structure. The insight of institutional theory and institutional studies of "knowledge transfer processes" make it clear that a modernistic approach to teams involves limiting our understanding of this phenomenon, because what a team is and how it function in an organizations depends upon how the organization has translated and interpreted the idea about team management. This means that the functioning of organizational ideas like team

---

[4] References in original the text are omitted in citation.

5

management in practice and how it affects outcome may differ from organization to organization, and it may even differ between departments in the same organization (Nilsen 2007; Røvik 2007:39). Thus, institutional scholars have stressed that more attention needs to be given to the recipients of team management, and how these organizations and their departments put the idea into practice, in order to comprehend what team management really mean in these arrangements. Benders and Bijsterveld (2000:50) elegantly refers to this process of implementation of organizational fashion as the "interpretative viability"[5]: "Through interpretation processes at different levels, the outcomes of action undertaken in the name of a concept can be loose-coupled to its original meanings."

In this manner, institutional theory calls attention to how organizational processes such as team management in addition to being expressed in the formal structures with the purposes of effective goal achievement, are embedded in an institutional matrix. It is this institutional matrix which is given analytical priority within institutional theory. This means that within a team management group social commitments are developed; these restrict actors from behaving strictly according to rational logics. The informal commitments and procedures developed within the teams may develop at the expense of rational objectives, which are: "[i]nfuse[d] with value beyond the technical requirements of the task at hand" (Selznick 1957, 1984:17). Thus, through these constructive institutional lenses it is problematic to regard research on organizations as contributing to universally available principles for management and design of organizations, as organizations are emphasized as arrangements for development and interpretation of symbols and meaning (Røvik 2007:47-48).

The insights of these substantially different ways of considering organizational phenomena constitute a frame of reference throughout the analysis of team management. The analytical distinction between modernism and constructivism is made clear-cut in this thesis, in the sense that on an analytical level, the characteristics that are highlighted within the two camps are presented as mutually exclusive. In reality, however, modernistic and symbolic aspects in organizations are much more intertwined than these analytical approaches take into account. The intention is still not to treat them as competing in the sense of deducing stringent hypotheses on the basis of either the modernistic and constructivist paradigms or underlying perspectives such as the instrumental or institutional with the aim of deciding which of them

---

[5] Benders and Bijstervelds' refer to Ortmann (1995) when they use this concept.

provides the strongest explanatory power in analysis. Rather, I draw upon the way in which modernism and constructivism pervade (respectively) instrumental and institutional organizational theory, and in this manner the paradigmatic traditions act as cornerstones throughout the study. This must not however blur the fact that the starting point for this project lies in an empirical observation regarding management in mental wards, and that for example observations gathered through interviews with people working in mental departments add an inductive stamp to the conduct of the study. Moreover, modernism and constructivism are used in a mutually supplementary manner, as they direct attention to how team management may be expressed in two fundamentally different ways in organizations by directing attention to the formal and informal aspects of teams. Through instrumental and institutional theory, modernism and constructivism are combined with elements of empirical observations vital when I work out propositions regarding how team management affects subjective outcome dimensions. Ultimately, they will serve as a guide through the analysis and interpretation of the results. The aim of this continuous and complementary exploitation of the paradigmatic traditions throughout the thesis is to call attention to various aspects of organizing management in teams; in this manner a better comprehension of team management in mental departments is possible, than would be obtained by drawing upon only one of them.[6] The way I employ the paradigmatic traditions, combined with the empirical observations of the phenomena under study, reflects the compounded and pragmatic epistemic point of departure in the thesis. I make use of the theoretical debates in organizational science and bring to this field my own empirical observations regarding the phenomenon under scrutiny.

1.3   Leadership and Management in Organizational Theory

The general phenomena under scrutiny in this dissertation are leadership and management. Both of these concepts concern social influence processes and are often used in an overlapping manner without warranting further notice. Generally, they both concern how to contribute to organizational goal achievement through others. In organizational theory, however, it has been central to make clear distinctions between these concepts; on the one hand by offering mutually exclusive definitions on an analytically level, and on the other hand by trying to demonstrate the significance of these definitions empirically. In order to make

---

[6] Accoring to Roness (1995) such a utilization of theory makes aims of falsifications less relevant since the purpose rather concerns to put emphasis on various aspects of the phenomena under scrutiny by means of the theories.

distinctions, focus has been directed to activities carried out by leaders and managers. However, it has proved difficult to empirically distinguish leadership from management as leadership has been studied as a range of managerial behaviors (cf. Bryman 1986:5-7).

Nevertheless, leadership is commonly defined as the *creation* of a desired future state, a vision that seeks to include all members of an organization or an organizational unity to its net. Attention has been directed to symbolic aspects of the conduct of leadership, as light is cast upon how organizations are scene for the creation of meaning. A leader is in other words concerned with creating a vision, communicating this vision, and motivating followers[7]. In relation to the prior outline of modernism and constructivism, it is relevant to point out that leadership to a greater degree coincides with the development and interpretation of symbols and meaning which is emphasized in a constructive and institutional approach to organizational phenomena. This is line with basic textbooks in organizational theory, which emphasize that the executive level in organizations is referred to as the institutional level on which leadership is performed (cf. Jacobsen and Thorsvik 2002:379).

Management, in contrast, is regarded as administration. A prime task for managers is to ensure that plans are made, accountability dispersed, problems solved and controlled, and goals achieved. Managers are, in other words: "reactive organization men concerned with routine and short-term projects" (Bryman 1986:6). Managers deal with production, routine work, rationality, and the establishment of obedience, and it is important for managers to perform these tasks in an efficient manner. This executive role of managers, with a focus on goal achievement, coincides with a modernistic view of organizations and how they work, as managers are the organizational "tools" for ensuring that tasks are performed rationally and efficiently. Jacobsen and Thorsvik (2002:379) point out that management is typically performed on a lower department or unit level in organizations. They refer to this as the administrative level, which is an important connecting link to the operational level in organizations. From this perspective, management concerns the *execution* of tasks and goals,

---

[7] The notion of the follower is an analytical construct commonly employed in leadership research to distinguish followers from *subordinates*. Followers are described as persons who acknowledge the focal leader as the primary source of guidance about the work, regardless of how much formal authority a leader has over a person. It does not include subordinates who completely reject their formal leader and seek to remove the person(s) from their position. In this study, I speak of employees and subordinates when investigating the impacts of team management. Since it is important to get the standpoints of all individuals being managed by the teams in order to get the total picture of variation regarding how the management is perceived, and not just fractions of it.

while leadership involves the *creation* of visions, strategies, and goals. When it has proved difficult to demonstrate empirically that leaders and managers have different responsibilities, it may be expressed in the idea that the conduct of an organization requires *both* the development of symbols and meaning, *and* routine work providing for goal achievement on both the middle and executive level in organizations (cf. Colbjørnsen 2004:13). I take this into consideration in when I say that both management and leadership are studied this thesis. Even though the team managers under scrutiny here work on the level of middle management, this does not mean that they are concerned with administration alone; rather, it is also important for these middle managers in the social interaction process with their subordinates to practice leadership by adding symbolic meaning and values to the tasks and goals of the organization and its departments. The term management is mostly employed when referring to the phenomenon under study throughout the thesis, where it then also encompasses symbolic and interpretative aspects which most commonly are associated with leaders who perform *leadership* in organizations.

1.4   The Intertwinement of Management and Structure

Management and structure are two essential components in studies of organizations. When it comes to accounting for what shapes behavior and attitudes in organizations, scholars seem to study the two components separately; that is, managers either are assumed to affect outcomes or that outcomes are regarded as constrained by the social structures encompassing them (cf. Pfeffer 1981).

Leadership and management are generally ascribed great explanatory power when it comes to accounting for how real life happenings are connected with each other (cf. Hillestad 2008:169), when for example organizations experience crises or face some sort of challenges. In studies of leadership and management, the analytical assumption has been that leaders and managers affect organizational outcome and efficiency (i.e. behaviors and attitudes of organizational members). The managers' traits, abilities and/or behaviors are viewed as having an impact on how successful or unsuccessful they are as leaders of their organizations or of entities within the organizations[8]. For instance, managers have the authority to decide how their organization or organizational unit should be structured to enable efficiency and

---

[8] Trait theories (Stogdill and Bass 1981), behavioral theories (Blake and Mouton 1971; Mintzberg 1983), contingency theories (Hersey and Blanchard 1977; Fiedler 1978), and new leadership approaches such as transformational leadership (DeVanna and Tichy 1990), and charismatic leadership (House 1995; Conger 1999) are examples of approaches that stress the impact of management on organizational behavior and attitudes.

improve organizational performance, and organizational structure is regarded as being shaped by managers. With respect to team management in mental hospital departments, this alludes to how the top management in the hospital has decided that management on the departmental level should be organized in teams. However, different department management teams or the team managers may shape the structure[9] of their management team according to what they find most effective with respect to attitude formation or guidance of behavior. In practice, a team management structure on the departmental level may mean that the team manager is a unitary manager and that the other team management members are his or her marionettes. When going from an analytical level to real organizational life, it is clear that management and organizational structure are more intertwined than what management research usually takes into account when directing attention to management as the prime explicatory force upon organizational behavior and attitudes. For example, professional organizations that are characterized by a high degree of task complexity, like hospitals, universities, or law firms, are structured by granting flexible and qualified professionals a high degree of autonomy in complying with these complex tasks, which makes these organizations highly specialized on the ground floor (cf. Scott 2003:258-60). In this manner, these organizations have managed to confine the leeway of managers and management per se (cf. Glouberman and Mintzberg 2001). Based on this, it is reason to assume that the analytical role management is given in regard to explicating organizational functioning and outcome in some leadership and management studies, is more ambiguous than these studies take into account. Since the causal link between management and outcome is somewhat blurred.

Other scholars treat organizational structures and design of organizations as the prime guiding mechanism for explaining how behavior and attitudes are controlled in organizations. Structures and design here refers to the (formal and informal) frameworks within which activities and behavior take place in organizations. This structural framework restricts what is deemed acceptable, reasonable, appropriate or valid procedure in a situation, problem, or suggested solutions. Furthermore, it expresses role expectations and rules for who should or could do what and for how tasks should be conducted; ultimately, structures are effective in standardizing behavior. But, like management, these structures do not directly determine how an organization's members actually behave or what attitudes they develop; they only provide guidelines and a framework (cf. Christensen, Lægreid et al. 2007:15). This means that a flat

---

[9] Structure here refers to both formal and informal structure of management.

team structure forms a different basis for how management shall be conducted than a hierarchical organizational structure. For example, a department's management that is structured in teams signals that management is a task carried out by interdependent professionals who are mutually accountable for results and goal achievement (Colbjørnsen 2003:140-2). In this manner, an arena for the exchange of professional viewpoints is enabled, which may elicit a general management on the basis of balancing different professional and administrative considerations in a management team. Thus, another basis for the conduct of management is created than if management was structured according to hierarchical principles which place accountability with a uniform manager. This analytical dualism between how management or structure are assumed to affect behavior and attitudes, which I have described in this subchapter, indicates that the impact of neither management nor structure should be ascribed deterministically as to how they affect de facto outcomes in organizations. Management and structure are intertwined in the function of steering organizations, as they may restrict or augment each other's impact on behavior and attitudes according to how they work in organizational practice. In this study, it is a central assumption that team management may make a difference on the subjective outcome dimensions of managers and employees, and furthermore, that team management is intertwined with managerial and structural components in practice. It concerns both the managerial component in that, first, it may contribute to goal achievement through others in both a symbolic and instrumental manner, and second, it is materialized in a distinct (team) structure in which several professionals are mutually accountable for goal achievement[10]. However, in this study, team management functions in a distinct institutional context, which I now will outline, as it constitutes a vital frame of reference.

1.5 *Management in Norwegian Hospitals and Team Management*

Public hospitals are important institutions in the Norwegian welfare state, ensuring medical treatment for all citizens. It is in everybody's interest that the public hospitals are efficient and well-functioning. However, hospitals are well-known for their unique set of challenges which include budget overruns, a lack of efficiency in terms of patient flow, and concerns related to management. The Norwegian authorities play a key role in providing solutions to these challenges with which the hospitals struggle. This governmental role is reflected in the vast

---

[10] Furthermore, in order to sure that team management's impact on subjective outcome dimensions is a result of the managerial team structure I will control for other organizational variables that may affect job satisfaction and commitment.

number of government-appointed committees, which have issued several White Papers addressing these challenges over the last two decades. As a result of the work of such committees, public health reforms have been introduced. As the main object of study in the thesis concerns the management of hospital wards, I will now direct attention to the challenges concerning management on the ward level in Norwegian hospitals and the related initiatives taken by the governments in this regard.

The public discussion of management has mainly concentrated on what professional qualifications a department manager should have, and since essentially the arguments has concerned what professional groups should have the ability to manage at the departmental level, they are often referred to as "professional-struggles". It was the Øie-committee in the early 1980s that started the professional management debates which continued to be a central subject of discussion for years (cf. Nygaard 2007:27). The Øie committee decided that clinical departments should be managed by a chief physician superior to the other professionals (NOU 1997:chapter 10.4.2.1).

A governmental decision adopted in 1999 seemed to escalate the "professional-struggles". It stated that the managerial position was no longer dependent upon profession; this idea is also commonly known as unitary management. Unitary management was introduced in Norwegian hospitals on January 1, 1999 (cf. Law about Specialist Health Service 1999). Unitary management meant that at every hierarchical level in hospitals it should be possible to trace managerial responsibility (economic, administrative, and professional) to one single manager. The background for the government's decision was a chain of preparatory work done by such governmentally appointed committees as the Andersland-committee in 1990, and the Steine-committee in 1996-1999. The appointment of the Andersland-committee was according to Berg (2005:87) the authorities' first major attempt to grasp some of the challenges in Norwegian hospitals. This committee was also one of the first to regard departmental management as a means of increasing efficiency in the departments (ibid). The suggestion the Andersland committee presented was inspired by the management thinking of George Kenning. Kenning was an American management consultant who in the 1980s argued that managers should be independent of the activities they set out to lead (Berg 2005:78). Berg (ibid) indicates that the "Kenning-tradition" came with the members of the committee who

were enlisted from business life and the private sector.[11] Elements of the "Kenning-tradition" were well-known in Norwegian professional circles during the 1980s (Røvik 1998:231). In this tradition, managers in line with how leaders are regarded within leadership research alluded to in 1.3 are considered the "great commanders" that if necessary, could turn poorly-performing organizations into success stories (ibid). The recommendation of the Andersland committee was therefore that management should be kept as independent of the professional work it guided as possible. Furthermore, managers should furthermore be held personally responsible for their work, and the personal traits of managers expressed their management competence. The suggestion was put aside by the new Labor government in 1990[12], as it seemed to be influenced by business thinking at this point (Berg 2005:78). The subsequent Steine committee worked out a white paper entitled "The Patient first" in 1997. This was the forerunner to the legal rule adopted in 1999 that introduced unitary management at every hierarchical level in Norwegian hospitals. This white paper had many other important implications for the hospitals, as management was only *one* aspect of the efficiency improvements of the hospitals. The government's takeover of the hospitals was another huge change introduced on the basis of the work of the Steine committee. Prior to this, hospitals had been organized under the counties. Another change was that the hospitals were organized according to regional enterprise model, which made them accountable for their own budgets. This meant that the management, pursuant to the Kennings traditions, was regarded as something general, independent of profession, and that department managers should be accountable for every aspect of department management (cf. Berg 2005). The suggestions outlined in the "The Patient First" indicated that the authorities' attention to management in hospitals did not only concern solving the professional issues related to management. Management was seen as an agent in a much wider context than the struggle between professionals. "The Patient First" regarded many of the challenges in the hospitals, like budget overruns and a lack of efficiency, as being connected with management, which made it imperative to change the premises for managers.

However, not much attention has been paid to the possibility the hospitals were granted in "the Patient first" of the Steine committee (1997) to organize their management themselves.

---

[11] The committee-members Jan Erik Langangen and Kjeld Rimberg were managers enlisted form business life and they were business managers.
[12] At that point Tove Veierød was Minister of Social Affairs (3. November 1992-4. September 1992). This was the third Brundtland government (from 3. November 1990-25. October 1996).

Different ways of organizing management as provided by the law about unitary management were discussed in this white paper prepared by the Steine committee. One of the models pointed to in this discussion was the team model with respect to how this model seemed to be a solution to the so-called "Tromsø conflict" (NOU 1997:chapter 10.4.2.2). It is interesting to take a brief closer look at the process leading to the introduction of team management at the regional hospital in order to know more about the background of this implementation. The "Tromsø conflict", which resulted in the "Tromsø model", occurred in the late 1980s. For one thing, it concerned which professionals should be eligible to be the manager. The committee, in its decision about introducing team management did not however initially suggest that management should be independent of profession. The board of the hospital first preferred a solution in which the team manager in the management teams of medical units should be one of the units' deputy superintendents. This resolution gave rise to strong objections, especially among the nurses who carried out large scale dismissals (NOU 1997:chapter 10.4.2.2). As a result of these reactions the board of the hospital put off the implementation of this decision, and worked out the solution in which the team manager could be appointed independent of professional belonging. This decision was actually based on the work of the so-called "test-project". At this time (from 1987 until 1989) the regional hospital in Tromsø was part of a "test-project" led by the Department of Health and Social Security (cf. Report of Tromsø Regional Hospital (RiTø) 1990:109-f; Eriksen 1999). The implementation of team management as a means to rationalize the hospital, to solve the professional struggle concerning who could be a manager, and to improve the cooperation among the professionals was a comprehensive and turbulent process, and was only one of several initiatives to deal with the challenges of the hospital. Other initiatives were goal and outcome measurements, a project related to the financial management of the hospital, and decentralization of the authority regarding budgets and administration to the department level (cf. Eriksen 1999).

The Steine committee called attention to several types of team or group management, but only recommended testing of two of them. The first was one in which the management is shaped as a team and the manager of the team is the department's chief physician with medical responsibility for the patients. The second was the "Tromsø-model", which was employed in the wards of the regional hospital in Tromsø. This is also the model that is employed in the mental wards studied in this thesis. The unitary mental county hospital in Tromsø and its wards were incorporated into the regional somatic hospital of Tromsø in 2002, and the mental wards adopted the model from the somatic wards, i.e. a formal management structure with

management organized in teams. This was based on the resolution in the 2002 hospital reform that all county mental hospitals should be incorporated into the structures of the somatic hospitals. In this way the mental hospitals became part of the new enterprise model of Norwegian hospitals. In the Tromsø-model the manager of the team is appointed by the superintendent (employer). This model is further distinguished by the fact that the managerial position in the team is filled independent of professional background, meaning that a team manager may be a physician, nurse, psychologist, or another educated profession within hospitals (NOU 1997:chapter 10.4.5). It is further outlined in the report that a formalized team model emphasizes the interdependence between the most important professional groups in the management of a ward also. Additionally, it was emphasized that management in hospitals should concern all affairs of the department, including administration, economy, medical treatment and development. Up until this time managers seemed to be constrained by professional ties.

1.6   On Subjective Dimensions: Job Satisfaction and Commitment

It may seem redundant to emphasize the relevance of studying subjective dimensions like job satisfaction and commitment, since many articles on satisfaction and commitment state that these are, indisputably, some of the most studied topics in organizational science (Spector 1997; Wharton, Rotolo et al. 2000; Kim 2002; Cohen 2007; Proenca 2007) which clearly underlines the relevance of these dimensions. Still, I would like to say something why job satisfaction and commitment are vital in this study, beyond the fact that these dimensions are frequently studied. From the fact that job satisfaction and commitment are some of the most frequently studied topics in organizational theory, a more nuanced question would be: Why do job satisfaction and commitment garner so much attention from researchers? I think there are several answers to this question.

First of all, on an intuitive level, job satisfaction is important for organizations and organizational members per se, simply because people simply deserve to be comfortable in their job. Therefore, every organization should have an interest in their employees being satisfied with their job in the organization. Yet, many organizations with their focus on profit attempt to conduct business in a more efficient way by either generating more products or services at lower costs. The interest in job satisfaction may also be explained by the many factors it may in part or even primarily influence, such as performance, behaviors as turnover or retention, burnout, counterproductive behavior, and life satisfaction. Secondly, the

significance of commitment lies in the notion that commitment is a benefit for the organization. This is based on the idea that committed employees stay with the organization through thick and thin, attend work regularly, protect company assets, and share company goals (Meyer and Allen 1997:3), and that this predictability is important in every organization in order to be able to conduct business. The presupposed advantages of committed employees make commitment to an interesting and vital concept of study in organizational theory. Organizational researchers and practitioners have assumed that if employees feel comfortable and identify with the goals of the organization they would perform better and more efficiently, and it decreases the turnover rate in the organization. This urge to empirically establish a connection between job satisfaction, commitment, and how these improve organizational performance has resulted in a vast number of articles (cf. Hackman and Oldham 1975; Riketta 2008). Team research appears to have adopted this interest in job satisfaction and commitment as it continuously studies how teams affect these dimensions and other objective outcome measures (cf. Cohen and Bailey 1997; Lemieux-Charles and McGuire 2006). An instrumental logic is applied in team literature, as teams are studied in order to reveal how they enhance or diminish job satisfaction and commitment, which is often referred to as the effectiveness of teams. The link between teams and satisfaction is intuitively evident given that today many job-seekers want and expect that they are going to work in teams, since this democratic way of working simply applies to us and has become a common way of working in vast organizations. This is also reflected in job announcements in Norway today, as many companies make sure to state their emphasis on working in teams and their desire for team players. The coupling of teams and organizational commitment is also understandable, since team work enables an arena in which employees may actively develop an attachment to the organization's goals and values. At the same time, teams may develop their own goals and values making the commitment to the team stronger than to the organization, while bad team experiences may also affect the level of commitment to the organization and thus have consequences for turnover. For any organization, this clearly indicates the importance of commitment per se and the role teams may have in regard to developing commitment.

In the pas few decades, the pressure for increased efficiency is certainly an issue that has been stressed in public sector organizations in Norway and other western countries. This is particularly evident in public hospitals in Norway, in which public governed reforms inspired by New Public Management (NPM) thinking have been put into practice to overcome the efficiency challenges (cf. Lægreid, Opedal et al. 2005). In that respect, one may argue that job satisfaction and commitment are important to keep in mind, since the politicians' urge to reform and make health care more efficient appears to have exhausted hospital employees. Recent newspaper articles have revealed that the constant focus of the reforms on making hospitals more efficient has been hard on hospital managers and employees (cf. newspaper articles of Andersen 2008; Risum 2008 in Aftenposten). This draws attention to another aspect of job satisfaction and commitment, because even though research calls attention to these phenomena in relationship to objective outcomes, these outcomes are not their only significance. Job satisfaction and commitment are vital sources of information concerning how organizations are doing per se, and it is thus important to provide information regarding organizational conditions that may shape or influence them. In that respect, it is worth mentioning the memorial volume that that was issued for the centenary of Rønvik Hospital.[13] In an interview for this memorial volume, the then-managing director of the Northern Norway Regional Health Authority at that time, Marit Eskeland, alludes to some of the challenges that the mental hospitals in the northern region have struggled with over the years. She mentions the shortage in several categories of health personnel, as well as how personnel have left the least prestigious professions and escaped the northern hospitals for a job in the southern parts of Norway, and how these issues have prompted that the district general hospital of Nordland to always prioritize competence and fellow workers as important in the management of the hospital.

I have already alluded to how contextual factors such as budget cuts and efficiency improvements may affect employees' well-being in their job and their attitudes towards the organization they work in. This means that attention in this thesis is directed to how job satisfaction and commitment depend upon specific organizational and contextual factors, instead of focusing on how job satisfaction and commitment influence performance. In this

---

[13] Rønvik hospital is the former formal designation on the specialized psychiatric part of the district general hospital of Nordland which constitutes one of the cases in the thesis. This latter designation, specialized psychiatric district general hospital of Nordland, was introduced in accordance with the reviewed framework plan for psychiatric health care in 1989 (cf. Fygle 2002:223)

thesis, it is argued that specific organizational factors may be important in shaping how people feel about their job and how they commit to the organization they work in. This approach to attitudinal outcomes is derived from Salancik and Pfeffers' (1978) social information processing theory, and implies that worker attitudes are shaped through socializing mechanisms in organizations. Management model may constitute such a socializing mechanism in organizations. Both organizations under study in the thesis are mental hospitals distinguished by different management models at the departmental level. This constitutes the starting point in regard to job satisfaction and commitment, in that it is argued that these management models may create distinct contexts through which these attitudes are shaped.

1.7   Two Cases: Two Management Models

Both the hospitals and their mental wards that constitute the data basis in the thesis are enterprises within the Northern Norway Regional Health Authority (NNRHA): The University Hospital of North Norway in Tromsø (UNN) and Nordland Hospital in Bodø (NLSH). These are the largest hospitals within this geographical region. The starting point for this project is an observation of some of the managers concerning the practice of management on the departmental level in these hospitals. Managers at UNN became aware of their practice of management in teams as a distinct and not yet "common" way of conducting management in hospitals. Several of the managers working at UNN had also worked there before the team management model was introduced, and in this way gained experience with both traditional hierarchical management and team management. In the interviews I had with managers at UNN, they constantly referred to team management as opposed to the "old" model in order to point out the strengths and weaknesses of team management. I will now set out a brief account of team management and traditional hierarchical management in order to point out what distinguishes these two ways of conducting management.

At UNN team management basically means that departmental management is carried out by an interdisciplinary composed group of skilled professionals. As mentioned in subchapter 1.2, the team management model was introduced on December 2, 1988 as a solution to the profound challenges the hospital was facing at the time (Report prepared by the Regional

Hospital in Tromsø 1990:84). Each management team has a team manager who by law[14] has unitary responsibility for the management of the department, and thus has the ultimate voice in decisions where the team does not mutually agree. However, one central purpose of the management teams is that team members should together reach decisions regarding the management of the department together. It is, in other words, a formalized arena for the team management members with scheduled meetings every week. When the department management teams have meetings with other units, all team members must participate.

The composition of the management team should mirror the functional specialization of the department. Generally, this means that the medical, nursing, and administrative professions are represented in the management teams. In the mental departments this has certain implications since several professional groups beyond the traditional professionals such as physicians and nurses often have central positions in the management of the department. First of all, in addition to the physician and nurse, a psychologist is present in the management teams of the psychiatric departments, since psychologists have a vital professional position in mental departments. Secondly, other professional groups than the traditionally established ones are represented in management. For example, in the department of substance abuse and psychiatric problems, the management team is composed of a nurse, psychologist, and a social worker, with no physician represented in the management team. A social worker is needed for the specific patient group of this department in order to coordinate between the mental hospital, municipality, the front line support and the patient's relatives. This means that the social worker has a vital role in the department, which encourages the formal presence and participation of this profession in management in order to coordinate the daily work of the department. In interviews, members of the management teams constantly assert that organizing management in teams is a good way to conduct management. The reasoning behind this judgement is multifaceted. Several team members direct attention to the increased focus on working with departmental goals in management teams compared to what they have been used to in the "old" traditional hierarchical model. They also mention how differing professional considerations are becoming more evident and integrated in the management of

---

[14] The Law about Specialist Health Services entered into force on January 1, 2001 claimed that it should be possible to trace managerial decisions back to *one* unitary manager. This is referred to as the law concerning unitary management a vital crossroad in Norwegian health care regarding the conduct of management. In practice, it meant that in addition to physicians other health care personnel may hold managerial positions.

the department when several professional groups discuss and reach decisions regarding managerial issues together. They also stress that long-term planning has been made possible.

At NLSH traditional hierarchical management is used. This means that the departments have one manager who has the legally imposed unitary responsibility of management of the department. This department manager has an assistant now called the administration consultant, but which formally known as the unit nursing officer. Generally speaking, the administration consultant supports the manager when it comes to taking care of administrative functions, but what this area of responsibility constitutes and what other tasks the administration consultant has, differs according to what the department manager requests. This often means that the administration consultant is concerned with the economy and budget of the department, and represents the department when economic issues are discussed with superiors. Even though the department managers are also unitary responsible for the economic management of the department, they delegate it to their administration consultants. The department manager is more preoccupied with meetings concerning patient-related professional issues. Furthermore, the department manager has a subordinated staff composed of psychologists, physicians, social workers, and physiotherapists associated with the department manager position. The staff works in several of the underlying units, and the department manager has professional and patient-related meetings every week. When it comes to conducting the overall management, which for instance concerns the development of goals and making decisions in order to reach these goals the department manager works alone.

1.8   Outline of Thesis

I will now lay out the structure of the thesis. Chapter 2 contains a review of team literature. Furthermore, existing definitions of teams will be scrutinized in order to generate a working description for this project, and I employ the paradigmatic traditions as the starting point for this review. Literature devoted to top management teams and research on teams within the health care sector have been particularly useful here, since the former concerns management and the latter presents insights about the particular context of hospitals. Chapter 3 comprises an examination of the dependent variables that are going to be applied in the further analysis. It will be of particular interest to develop assumptions regarding how these variables are going to be affected in further analysis. Methodological considerations that have prevailed throughout the work for the thesis are accounted for in chapter 4. As the data collection has

utilized both qualitative and quantitative methods, an important aspect to discuss in this chapter is how these methods have been used, and what challenges they have involved. However, as the main source of information is quantitative, chapter 5 addresses with the process of constructing new variables. In chapters 6 and 7, the quantitative data are analyzed first by bivariate regressions and then multiple regressions. The aim in chapter 8 is to interpret the main results of the quantitative analyses by drawing upon the insights of the paradigmatic traditions by means of instrumental and institutional theory, but I also exploit the qualitative interviews to gain a deeper comprehension of the results. Chapter 9 contains the conclusions of the thesis.

2 Team Management in Organizational Theory

In this section I will discuss modernism and social constructivism, and the implications of these approaches for further analysis of the impact of team management on the formation of subjective outcome dimensions of both team managers and subordinates. Social science and organizational science in particular are pervaded by a fundamental distinction between, on the one hand modernistic approaches, and on the other hand social constructivist approaches in the study of social phenomena (Røvik 2007:46). In this chapter I will clarify how team management is interpreted according to these "conceptual glasses", in order to make clear how fundamentally different roles team management may have in organizations depending on which of these approaches is applied. A further intention with this interpretation of the concept under study is to establish a point of reference for the literature review and the further analysis. I start out with the modernistic approach.

2.1   A Modernist Approach to Team Management

The modernistic approach originates from the natural sciences and is inspired by the immense achievements of physics. Social scientists wanted to apply similar methods in the social and political world in order to achieve objectivity and science-like precision when studying social and political phenomena (Adams 1994). Modernistic approaches signify a great belief in development and progress. This is noticeable as the modernistic tradition is clearly materialized in instrumental theories in which societies and organizations are first and foremost considered as existing of formal structures through which one continuously moves towards higher levels of technical, economical and social development (Scott 2003; cf. Røvik 2007:47). Based on this fundamental assumption the main communalities underlying modernistic approaches within organizational science are: a great belief in organizations and a focus on the importance of systematically designing organizations for goal attainment. If arrangements like organizations are systematically designed they will serve as instruments to acquiring these higher levels of development and knowledge. Applying a modernistic approach to the study of team management in a professional organization implies that the team is regarded as a tangible entity, of which we can observe and explain the functioning, if we use suitable techniques. The type of management model operating in an organization is furthermore regarded as a rational instrument to achieve specific goals (Scott 2003). As organizations are composed of formal structures, team management is clearly expressed in the formal structure of an organization. Organizations operate with clear and official goals which

articulate the desired ends of the organization. Goals may vary in their precision and specificity, but specific goals yield precise criteria for choosing among alternative actions (Scott 2003:34). In the instrumental perspective, formal organizations are first and foremost regarded as rationally formed mechanisms for goal achievement.

Knowledge transfer[15] (cf. Røvik 2007:41) is an example of a subject matter in which logics of the modernistic perspective is applied in terms of theory. This is according to Røvik (2007) and Nilsen (2007) a common designation to a relatively distinct research tradition in that it directs attention to conditions for developing, transferring, receiving, and exploiting knowledge or organizational ideas in the restricted context of multinational companies (MNCs) (cf. Nilsen 2007:17-20; Røvik 2007:41-46). The argument is that the rational turn of this approach becomes evident, first, in the definition of knowledge transfer as this indicates an aim at identifying "best practices" that can be "replicated" by other parts of the company:

> "It connotes the firm's replication of an internal practice that is performed in a superior way in some part of the organization and is deemed superior to internal alternate practices and known alternatives outside the company." (Szulanski 1996:28)

Second, another rational characteristic that is recognizable in the knowledge transfer research relates to how "best practices" are regarded as conducive to progress by improving and increasing the efficiency of organizational functions and processes. Third, organizations do not always prove successful in transferring knowledge, which thus makes it important to conduct research on the conditions under which knowledge transfers are facilitated or prevented. To follow up on the three first arguments, it is finally concluded that there is a need for more research on this topic to enhance processes of knowledge transferring. In sum, these rational arguments on which the knowledge transfer approach is based, makes it a normative and utility oriented point of departure for analysis:

> "The potential theoretical and managerial implications of the results highlight the need to further examine the process of transferring knowledge assets across borders. Given that the sharing of firm-specific assets seems to be a prerequisite for MNC success, mechanisms that allow for successful sharing of knowledge and actions that may increase the difficulty of the transfer are essential to understand." (Jensen and Szulanski 2004:519)

However, the research topic in this thesis is to analyze if and how team management will affect job satisfaction and commitment of managers and employees. It is therefore of interest

---

[15] This term is used by for example Szulanski and Jensen themselves (2006) whom by Røvik (2007:41) is regarded as some of the vital contributors within this particular direction concerned with how popular ideas travel in multinational companies.

to look more closely at the implications of team management with reference to the instrumental perspective: From an instrumental perspective, what could be the motives for introducing team management? According to modernistic thinking formal structure is of special interest when the effects of organizational and managerial design are considered. One of the most obvious changes in formal structure when implementing team management in mental wards, is that several of the professional groups in a hospital are formally enabled to participate in the management and managerial decision-making processes. From this one can derive that it is a goal to include several of these groups into management, and that the reason for representing several professional groups in management teams is founded on assumptions that this way of organizing management has certain benefits. The governmental reports have declared that one problem when it comes to management in Norwegian hospitals is that managers often have been regarded as a representative of the professional group they themselves belong to (cf. NOU 1997; Eriksen 1999:145), and based on this one could assume that team management is an attempt to deal with these problems. Managers acting as representatives of their own profession was identified as one of the major problems in Norwegian hospitals in the report "the Patient first" (1997) because this resulted in managers making decisions that were not anchored in an overall evaluation of what would be the best thing to do (NOU 1997:chapter 10). In a way hospital managers did not appear as equal for the entire ward that they were in charge of, because they acted and were comprehended exclusively as representative managers for their own professional group. The managerial decisions were based on the current consideration of the profession of the managers. One reason for managers being regarded as representatives of their professional group could obviously be that managers lacked information and knowledge about the viewpoints of other professional groups and the preferences they hold. Organizing management in teams could be an instrument to improve the knowledge basis of managers regarding the professional groups on the grass root by creating a formalized arena (the team) in which viewpoints and preferences could be discussed and exchanged. The managers will then have the ability to discuss managerial decisions with staff that belongs to other professional groups who has to act in accordance with these decisions, and in this way they can get more knowledge about how other groups consider vital issues in the ward.

Another but closely related explanation for introducing management teams draws upon the concept of *cooptation*[16]. Cooptation refers to how new groups are incorporated into management. One way to do this is apparently to organize management teams in ways that secure a broader representation of professional groups in management. In this way management teams become a formal arena for the cooperation among professional groups across the established disciplinary divisions (Eriksen 1999:145). Professional groups are thus through their representation in the teams given the opportunity to discuss the decisions directly with the team manager[17]. Ultimately, they can express their approval or disapproval with managerial decisions. Drawing upon the instrumental perspective, this indicates that the subordinates are participants in decision-making processes. Furthermore, it indicates that they to a greater extent may recognize management decisions as being based upon overall considerations because their own profession is represented in management. What is de-emphasized – or down-played – within modernistic inspired approaches is how the status of new organizational ideas or recipes as tools for more effective production of either decisions, products, or services undermines the symbolic and legitimating aspects of the ideas (cf. Røvik 2007).

To summarize, instrumental theory founded on a modernist approach to team management has specific implications regarding how team management is perceived in organizations. In the instrumental perspective formal structures are regarded as means to constraining behavior according to specific organizational goals. Team management is introduced as means to facilitating goal achievement. On the basis of this outline of a modernistic approach to team management another closely related question concerns the research question in the thesis: does team management make a difference on job satisfaction and the organizational commitment of managers and employees? And in addition, how does team management impact the job satisfaction and organizational commitment of managers and employees in mental hospital departments? From an instrumental perspective on team management it is reasonable to propose instrumentally based impacts of team management. Team management is a formal structure which will strongly impact on the level of job satisfaction and organizational commitment by managers and employees. Since team management is

---

[16] Cooptation is clearly a term that also is associated with the social-constructivist approach through institutional theory and Selznick's work. The institutional interpretation of the term is further elaborated in the section concerning social-constructivism.
[17] Each management team has a team manager as its' superior, this team manager holds the unitary responsibility at ward level. Every hierarchical level in a hospital is legally claimed to have a unitary manager.

materialized in formal structures it may affect how management is conducted due to the tight coupling between structure and performance assumed within an instrumental perspective on how organizations work. Furthermore, a tight coupling between formal structures and individual behavior and attitudes, may also result in that individuals who are closer to the formal team structures and the practices it involves are more strongly impacted by them than individuals more distant to these structures. The fact that more managers are represented, and in this manner are empowered and participate in the conduct of management, may in particular affect managers' level of satisfaction and commitment strongly. Since managers are actively involved and practice team management, it is – from a modernistic and instrumental perspective – reasonable to expect that the connection between team management and the subjective outcome dimensions may be stronger for managers than for employees who are more distant from the conduct of management.

2.2   A Constructivist Approach to Team Management

Social constructivist approaches to the study of social phenomena have challenged the objective science of modernism and offered an alternative view on organizations and management (Hatch and Cunliffe 2006:41). Constructivist approaches are distinguished by acknowledging organizations as socially constructed arrangements (Røvik 2007:47). This does not, however, mean that constructivists oppose the claim that organizations have formal structures engraving them from the external environment. Rather, constructivists stress that these formal structures are socially constructed. It is furthermore clear in this approach that organizations also contribute to the social construction of their environment. Another component that distinguishes constructivist contributions is skepticism towards positivist approaches to organizations and their functioning. The prominent modernistic assumption that organizational science should contribute with universally applicable principles regarding design, management and leadership, is approached with great concern within constructivist thinking. Skepticism towards this assumption is founded on the recognition of organizations as social constructions conditional on context, and not as a phenomenon that can be understood as functioning exclusively according to science-like principles (Røvik 2007:48). Finally, approaches within constructivist thinking share a doubt about organizations solely being instruments with the aim of goal achievement. Constructivists rather emphasize that organizations are arenas for development and interpretation of symbols and meaning. This is particularly explicated in institutional theory (cf. Scott 2001; Røvik 2007).

As opposed to the instrumental perspective, institutional theory emphasize the role of normative and cultural elements in organizations (cf. Selznick 1957, 1984). Classical institutional theory gives analytical priority to how processes of institutionalization make organizations resilient and stable. According to Selznick (1948:25) the formal structures never succeed in conquering the non-rational dimensions of organizational behavior because:

> "This fundamental paradox arises from the fact that rational action systems are inescapable imbedded in an institutional matrix […]"

This means that the organizational members bring their specific characteristics to the organization and within the organization they develop other commitments that restrict their capacity for rational action. An organization strikes a bargain with its environment, and as a consequence present objectives are compromised and future possibilities limited. Furthermore, the strength of informal structures is recognized through processes of *institutionalization* in which organizations take on a distinct character (cf. Scott 2003:69) and organizational procedures become valued as ends in and of themselves. The degree of institutionalization depends on how much flexibility there is for personal and group interaction. The most significant meaning of institutionalization is to:

> "[I]nfuse with value beyond the technical requirements of the task at hand"[18] (Selznick 1957, 1984:17).

In the section elaborating the modernistic instrumental perspective, cooptation was referred to as means to incorporate representation of the professional groups at managerial level. Cooptation has however an established institutional interpretation which draws upon Selznick's (1966:13) definition:

> "Cooptation is the process of absorbing new elements into the leadership or policy-determining structure of an organization as a means of averting threats to its stability or existence."

Cooptation is thus understood as a mechanism by which external elements such as team management can be incorporated into the decision-making structures of organizations to ensure support from their local environments. This argument is pushed even further by Meyer and Rowan (1977) who argued that formal normative organizational structure adopts norms and values from the environments, which may be inefficient regarding goal attainment, but strengthens organizational legitimacy. Such adoptions are referred to as organizational rules that function as myths and reflect the "rationalized institutional myths" of the environments;

---

[18] I have removed Selznicks' originally italics in this quotation

hence, organizations incorporate these myths to achieve legitimacy. This means that team management may not be the best equipped tool to achieve organizational goals, but it is still introduced as it strengthens organizational legitimacy in a symbolic manner. Because of the inconsistencies between technical demands and ceremonial structures, organizations *decouple* elements of structure from activities (Meyer and Rowan 1977). In relation to team management this means that the hospital adopts team management into formal structures, but that the type of management conducted in practice may vary from these structures depending on the practical and technical requirements of the tasks at hand in the different wards. An extreme consequence of this is that team management may appear solely as a formal structure without any practical meaning in the everyday management of a ward. This underlines the importance of examining how team management is conducted in practice.

The notion of formal structure as myth and ceremony of Neo-Institutional theory has, however, been criticized by newer contributors within institutional theory for paying too little attention to how the adoption and implementation of new structures evolve on the inside of organizations, and how this may affect the functioning of new formal structures (cf. Zbaraki 1998; Brunsson 2002:11-12; Røvik 2007:28)[19]. Institutional theory refers to the implementation of new structures or changes in existing structures as a process of implementing new organizational ideas or organizational recipes. Ideas or recipes are the general concepts institutional theorists used to describe the variety of new structures that organizations may adopt and materialize. Røvik (1998:11) points to total quality management (TQM), benchmarking, business process reengineering as examples of some of these organizational ideas or recipes. In this thesis idea or recipe refers to team management. This is often referred to as the process of contextualization by which the idea under study (team management) is "unpacked" which indicates that the idea is translated, interpreted, and/or adopted into action in the local context of the specific organization being study (cf. Røvik 2000:227; Nilsen 2007:51-2). Based on this it is assumed that the idea (team management) may appear in a variety of different locally developed versions, but that the basic and underlying idea may be the same. Newer contributions within institutional theory are often referred to as *translation* theory and *Scandinavian New-Institutionalism.* The label Scandinavian New-Institutionalism was according to Røvik (2007:37) first employed by

---

[19] However, Røvik (2007:29-30) also points to how Neo-Institutional theory has developed to overcome the critic concerning lack of attention about what happens on the inside of organizations when new ideas hit the ground.

Czarniawska in a publication by her and Sévon in 1996 with the title: "Translating Organizational Change". These newer institutional contributions are concerned with addressing the degree to which organizations rewrite organizational ideas that they formalize in their structures (cf. Lægreid, Roness et al. 2007:72; Nilsen 2007; Røvik 2007:39). This argumentation is based on the acknowledgement of the implementation of organizational ideas constituting (formal) structures in organizations, as something more than merely physical objects. Hence, they do not have definitive forms. If one relates this to team management it signifies that after a dispersion of the idea into the wards, team management is continually translated and reinterpreted. As a result it is transformed into local versions in each ward. This suggests that in the same hospital, team management may appear and function in different ways according to how the distinct ward has translated the idea of team management into practice.

From an instrumental perspective, team management is perceived as a tool for involving and empowering several professional groups in the management of the ward. On the basis of a social constructivist approach – and building on the insights of institutional theory – team management may also be regarded as having important symbolic effects. For example, according to Selznick:

> "[T]he degree of institutionalization depends on how much leeway there is for personal and group interaction" (Selznick 1984:16).

Hospitals are marked by decentralization along both vertical and horizontal dimensions which mean that the people have a great deal of leeway in their daily work (cf. Mintzberg 1983). In other words, the conditions within hospitals for developing institutional values are good. As Glouberman and Mintzberg (2001:73) point out: "[t]he health system hardly lacks strong for cultures. What it lacks is a single strong culture." Mental hospitals consist of a range of professional groups such as nurses, physicians, psychologists, physiotherapists, and social workers to mention some of them. Drawing upon the work of March and Olsen (cf. 1989:22-6) one can argue that some groups have to a varying degree developed their distinct logics of appropriateness. This means that the different professional groups share a set of common values and norms that constrain their behavior in the hospital. In general, it is a common opinion in Norwegian hospitals that physicians are medical experts taking the medical responsibility. For the physicians medical concerns tend to overshadow the administrative and economic considerations, which they also should take into account when making decisions as department managers (Byrkjeflot 1999). For subordinates belonging to other expert groups

guided by their own professional logics focusing on other aspects of management such as nursing care or economic aspects, it can be difficult to identify themselves with managerial decisions based purely on medical considerations. It is however possible that this lack of identification can be remedied by bringing together a broader collection of professional groups into a management team. This brings us to the symbolic impacts of team management worked out on the basis of a constructive approach to team management, which may be more blurred and less tangible than those deduced from the modernistic and instrumental approach to team management.

The social-constructivist approach alternatively points to the importance of informal structures constituting themselves in the normative and cultural elements of organizations. Organizations are more than just means to achieving certain goals as they are arenas for development and interpretation of symbols and meaning. To organize management in teams in which several professionals are represented, and are empowered through participation may involve the development of certain values and norms within for example the management groups. Norms and values generated in the management groups lay premises for what is acceptable ways of thinking, talking, and acting, which may restrict team management members from acting rationally. In this way a distinct group identity and meaning may develop among team management members, which may result in that this organization of management in groups becomes valued as ends in and of themselves. These symbolic aspects that a management team may develop could result in a strong connection between team management members' level of satisfaction and commitment to the organization. At same time, drawing upon Neo-Institutional theory, team management may be integrated in organizational structure as a myth in the sense that it has no influence on how management is organized and function in practice. If this is the case the relationship between team management and the level of satisfaction and commitment of managers may be weak. However, symbolic impacts of team management are perhaps even more relevant with regard to subordinates of the management teams and their satisfaction and commitment. The subordinates are not directly acquainted with the inner life of management in such a manner that the instrumental effects of organizing management in teams resulting in representation, participation, and empowerment of team management members will reach them as subordinates. In this manner, the connection between team management and subjective outcome dimensions are more uncertain. However, the possible symbolic impacts of organizing management in teams with regard to subordinates should not be underestimated

since these may induce a great deal of variation in satisfaction and commitment. As mentioned at the end of the last section, at the grassroots of the organization there is a wide range of professionals who all need to see that their views are taken into consideration in management. On a symbolic level, team management may signal to employees that management decisions are based on a variety of professional considerations and that it may be important that their profession is represented in managements. As a consequence, employees being managed by teams may consider the integration of several professional aspects into the conduct of management as both important and necessarily. The structure of management in teams may not in line with an instrumental logic automatically turn out in decisions that reflect the multiplicity in the conduct of management. Owing to the fact that in team management it may still happen that decisions do not replicate all current professional regards, and in this manner, decisions actually lack an interdisciplinary character as some professional aspects could erase others in decision-making processes. But the symbolic meaning and interpretation of team management may exceed the lack of instrumental effect, and the symbolic impact of team management on employees' satisfaction and commitment may be solid. Contrarily, it could also make subordinates regard the team member who represents their professional group as part of the management group, which for the employees is one distinct entity with its own culture and values. Thus, this representative no longer symbolizes their professional values but rather the values of the management team. This may result in a blurred and ambiguous relationship between team management and the subjective outcome dimensions.

To conclude, by drawing upon the analytical insights of the paradigmatic traditions it is clear that team management can be represented through formal and informal structures. Awareness of how team management is constituted in practice – based on insights from the paradigmatic traditions – will serve as a point of reference when discussing team management and the relevance of outcome variables in the next chapter. This means, for example, that the choice of variables that team management is related to in this thesis, is dependent on this elucidation of team management through the paradigmatic lenses. Furthermore, the modernistic and constructivist approaches to organizations and team management indicate that the paradigmatic traditions do not offer any ready-made definitions concerning what a management team is. What they do is providing us with analytical constructs that can guide the task of defining what team management is and how it functions in a specific organization. In essence, what team management means and how it functions in an organization is

constituted in organizational practice. Teams on the operational level of the organization will for example function under other conditions than management teams on middle manager level or top management level. Notwithstanding this insight, there are agreed-upon definitions in the literature of the team concept. I will discuss these definitions below.

2.3   Preparations Prior to Review of the Literature

Having interpreted team management through modernistic and constructivist lenses I will now prepare some questions for the further literature review. Based on the insights of modernism regarding teams as instruments and those of constructivism regarding teams as symbols, there is reason to expect considerable variation regarding how teams are defined in the literature. As the main object under study is team management, the purpose of this chapter is to review the literature on teams and management teams to place those in the appropriate context. Furthermore, the aim is to work out how the existing literature on teams has approached this phenomenon in their studies, and what this research has revealed regarding its implications in organizations. An important purpose in relation to the review of the team literature is to point out what deficits there are in this literature, and furthermore, to infer how the research question of the present thesis may be conducive to mending these gaps. The aim of this review of the literature is to substantiate the relevance of the research question.

Searches on literature bases such as BIBSYSAsk, JStore, and ProQuest have resulted in a vast number of results of which several have constituted the sample of sources for this team review. I started by reviewing the TMT literature, because it offered insights on management teams. Contributions to the TMT relied upon here are accounted for in subsequent subchapters. Since the teams under scrutiny in the dissertation operate within the special context of hospitals, searches on teams and management teams within health care organizations were also conducted (see subchapter 2.7). In addition to the references throughout subchapters 2.6 and 2.7 some review articles have generated much interest and have been drawn heavily upon on in the dissertation: Cohen and Bailey (1997): "What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite" Journal of Management, and Lemieux-Charles and McGuire in the Medical Care Research and Review (2006): "What do we know about Health Care Team Effectiveness?, A Review of the Literature." These two articles offer excellent overviews of how different types of teams in various organizational contexts have been studied, and how teams affect performance in organizations at different levels. Cohen and Bailey's article is often referred to in team

literature, and it has thus proved to be highly influential as it according to Mathieu, Maynard et al. (2008:410) has more than 545 citations as of 2007.

The number of books and articles produced on different types of teams is overwhelming (cf. Mohrman, Cohen et al. 1995:7; Cohen and Bailey 1997; Lemieux-Charles and McGuire 2006:263-4; Mathieu, Maynard et al. 2008), and it is necessary to establish some guiding questions or "principles" for maneuvering through the literature. First of all, the team concept must be clarified, and the first question for the literature review concerns how teams have been defined in the literature. Based on the insights of instrumental and institutional theories, it is pertinent to assume that teams may have different roles and meanings in organizations, which may manifest itself in the team literature through analyses of the various effects of teams in organizations. Secondly, I therefore ask which categories of teams and effects exist in team literature. I direct special attention to top management teams, and to teams in health care settings since these share similarities with those under scrutiny in the present thesis. As mentioned in the introduction to this subchapter, these questions will serve as tools for pointing out how my research question may be conducive to filling some of the white spots in the team research literature. Additionally, a vital aspect of my research question concerns the relationship between teams and outcome – which ends in a third question: How does the team literature deal with the outcome of teams? As already revealed job satisfaction and commitment are the dependent variables in relation to the team literature, but it is still vital to locate these variables in relation to team literature. In this way it is possible to further substantiate the relevance of job satisfaction and organizational commitment with regard to team management in mental hospital departments. Ultimately, in organizational theory, outcome may be studied on different levels. It is thus pertinent to expect that this is the case in the team literature as well. The last question is therefore: On what organizational level have outcome variables been measured in relation to teams? This is particularly important in regard to my own analysis since I study impacts not only on team management members but also on employees. I expect that these questions will reveal white spots in the team literature which may underline the relevance of the research question posed in this thesis. An additional aim is to contribute to mending some of the white spots in the team literature.

2.4 Team Management defined

Teams have to an increasing degree gained ground as a tool which can cope with different organizational challenges (cf. Pineda and Lerner 2006; Proenca 2007), and management and academic writers are calling more and more attention to the importance of teams for organizational success (Cohen and Bailey 1997:239). The body of literature on teams is growing rapidly, and when approaching team literature one quickly becomes aware of the distinction between management and academic literature which I briefly mentioned in the beginning of chapter 1. These communicate with different audiences and they have developed a distinction worth mentioning. While, popular management literature has been inclined to employ the term "team", for example, empowered teams, quality improvement teams and team efficiency, the academic literature has preferred the term "group", as for example, group cohesion, group dynamics, and group effectiveness (cf. Hackman 1990; Cohen and Bailey 1997:241). This superficial semantic distinction indicates one challenge when assessing team literature, Mathieu, Maynard et al. (2008:411) put it like this:

> "Teams come in many different configurations and are tasked with performing different types of functions. Accordingly, several taxonomies of team types have been advanced in the literature."

In this thesis the words "team" and "group" are used synonymously, although the term team is used more frequently. In addition to this semantic confusion and in accordance with the expectations emanating from institutional theory, a wide range of different teams such as virtual teams, management teams, project teams, and cross-functional teams exist. This makes it difficult to be certain about what these different kinds of teams actually imply in practice, and what the differences imply analytically. It, thus, underlines the importance of investigating the teams in their organizational context and in practice. Despite the semantic confusions in terminology and variety of teams, there seem to be agreement in the popular management literature on the definition of teams.

In order to study teams it is desirable to clarify how the team concept has been defined in earlier studies. When one looks at other definitions (cf. Mohrman, Cohen et al. 1995:39-40; Yukl 2002:306) of teams it is revealed that Katzenbach and Smiths' definition (1998:45) of a team summarizes what most contributors tend to include:

> "A team is a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable."

One weakness with this definition is that it does not recognize the external properties of teams which are present in most organizational settings where teams operate. As opposed to other contributors to the team literature, Alderfer and Smith (1982:38) and Hackman (1990) alluded to the lack of consensus on the definition of groups. Cohen and Bailey (1997:241) build their definition of groups on the work of Alderfer and Smith and Hackman which takes the external properties of groups into account:

> "A team is a collection of individuals who are interdependent in their tasks, who share responsibility for outcomes, who see themselves and who are seen by others as an intact social entity embedded in one or more larger social systems (for example, business unit or the corporation), and who manage their relationships across organizational boundaries."

I adopt Cohen and Bailey's (ibid) definitions of groups (teams) in the thesis because this definition takes both the task aspects of teams and the relationship between teams and external properties into account. Employing this definition to management teams at department level in mental hospitals signifies that their common purpose concern managing their department, unit and subordinates according to the organizational performance goals. This definition certainly encompasses important aspects of the research question under scrutiny in the thesis, since it regards teams in relation to other organizational properties and includes these external properties which I argue that a management team may affect. This is important since the research question posed in the thesis concerns how management teams may affect the level of satisfaction and commitment, both introvert: for team management members and extrovert: by considering the degree of job satisfaction and organizational commitment among employees. Furthermore, this definition alludes to the fact that the management teams are parts of a larger organizational context, and that the management teams and the organization influence each other mutually. Even though it is referred to how the purpose of teams is something that goes beyond strictly instrumental task achievement as they acknowledge that teams are social entities, Cohen and Bailey are concerned with demonstrating the instrumental effects of teams. Since their definition points out that the teams are regarded by themselves and others as "an intact social entity" it is natural to draw

upon a constructive approach to extend the meaning of this definition. Defining teams as social entities opens the possibility that these may become valued – by both team members and others in the organization – as ends in themselves. This means that beyond the instrumental tasks and goals the teams are set to solve and achieve, they are also groups where group processes take place. The group processes may have implications beyond the instrumental impacts that the teams may have. Particularly with regard to management teams it is important to be aware of the more symbolic aspects that teams may induce – even beyond the teams themselves – since this is a vital role of management in organizations. The teams are arenas that may generate both instrumental and symbolic impacts with regard to managers and employees. The definition does not distinguish the management teams under scrutiny in the thesis from top management teams (cf. Kaluzny and Shortell 2006). Although this distinction is an empirical one, it is important to make clear what kinds of teams that are studied in the thesis since the body of TMT literature is extensive[20]. Top management teams constitute the executive top management of an organization, and they make strategic decisions and are accountable for the overall organizational performance. In contrast, the management teams under study in this project are operating at the middle-management level in departments or units in mental hospitals, and they thus have other tasks than top management teams[21]. But even though teams on different levels in organizations may have different tasks, similar to the distinction made in organizational science between management and leadership, I argue that they may impact on themselves and other organizational units and employees in both instrumental and symbolic manners[22]. This directs attention to the importance of studying teams not only in relation to how they affect the team members, but to also with reference to how they may affect employees. Furthermore, drawing upon the insight of modernism and constructivism it is clear that team management may be expressed both in formal and informal structures of organizations. To capture these structures there is a need for looking at how team management is constituted in practice in the organizations under study and what this means. In this manner, the instrumental and symbolic impacts of teams may be revealed.

Some of the first systematic research on how groups in organizations may play roles as both instruments and symbols, is traced back to the Hawthorne studies of the 1930s and the

---

[20] Top management teams are examined more thoroughly later in this chapter in section 2.4.
[21] See chapter 4: Description of the cases, for more information concerning the management teams under study.
[22] For an elucidation of this see chapter 1.3 in which the management versus leadership are discussed.

research on group work and the benefits of working in groups (Levin and Rolfsen 2004:19). This research revealed for example the Hawthorne effect: when researchers directed attention to workers, workers' performance increased (Scott 2003:61-62). Another discovery, which is even more relevant when it comes to teams, pertains to the effect of organizing workers in groups. Individuals organized in working groups did not behave as "rational" economic actors, but rather as members of social groups exhibiting commitments and loyalties to colleagues stronger than their self-interests. When the workers were organized in groups they developed common norms and identities influencing the performance of the groups (cf. Scott 2003:62; Levin and Rolfsen 2004:20). Greatly influenced by the Human Relation School[23] the Tavistock Institute in Great Britain developed the distinct socio-technical approach to organizations on how to improve productivity and morale of the workers. The socio-technical approach distinguished itself by conducting "action" research where some of the investigators worked as managers, manipulating work settings and then attempting to learn from these processes (cf. Thorsrud 1971; Scott 2003:115).[24]

However, the empirical focus of this approach was on the organizing of working groups on the lowest level of enterprises and the impact of these on work productivity in organizations. The Socio-technical School acknowledged that organizations encompass both *technical* and *social* systems. Rather than following the notion of 'Scientific Management' exclusively focusing on technical issues, the Socio-technical School called attention to the need for finding a balance between both technical and social considerations in order to achieve *joint optimization* in organizations (cf. Herbst 1971; Emery and Thorsrud 1976). This differed from other approaches to organizations which recommended standard solutions independent of context. According to the Socio-technical School, production could be impeded if the technical system was optimized at the expense of the social system, or the other way round. The result would then be suboptimal. Through the studies of Norwegian companies: "[T]he

---

[23] The Human Relation School is the general term used when describing researchers that broke with the mechanical organizational understanding of the Scientific Management School. The Hawthorn studies are a collective term for a long list of studies, that actually in the start followed the thinking of Scientific Management, but whose empirical discoveries indicated that organizational actors were not solely constrained by instrumental rationality. In this way the Hawthorn studies initiated the new trend in organizational research: Human Relation School (cf. 2003:61-62).

24 The experiments were carried out mostly in industrial enterprises like for example Christiania Spigerverk and Norsk Hydro according to the cooperation-attempts between the Norwegian labor union LO and the employer's association at that time called NAF (cf. Emery and Thorsrud 1976). Some of the further experiments were pursued in Volvo in Sweden (cf. Scott 2003:253).

general psychological requirements that pertained to the content of a job" were developed (Emery and Thorsrud 1976:14). It was argued that to organize work on the principles of 'Scientific Management' did not ensure any of these job requirements. To strike a balance between the social and technical system, partial semiautonomous working groups (teams) were introduced (Levin and Rolfsen 2004:22). It was detected that the semiautonomous working groups could provide workers with an ongoing source of incentives, error correction, and that these groups compared to conventional organized working groups achieved superior outcomes both in terms of production and social-psychological criteria (Herbst 1971). In this way, the Socio-technical School contributed to the understanding of social-psychological aspects as equally important for job satisfaction and productivity as the instrumental and technical conditions. Its approach was rooted in the modernistic paradigm, since the studies were pursued with the aim of enhancing conditions for workers in the industry, and therefore a range of principles concerning improving work conditions were developed. Emery and Thorsrud (1976:15-16) for example came out with lists regarding job design both on the individual and on the group level.

Most of the socio-technical research was conducted during the 1960s and the 1970s, and experiments inspired by socio-technical thinking were carried out in the Netherlands, Australia, and in Germany. It has remained an alternative approach that especially has gained ground among advocates of humanizing and democratizing industry-work. Since it put emphasis on the fact that not only technical requirements of the tasks at hand were crucial when it came to improving organizational efficiency, but also that social-psychological aspects of the work such as; worker's participation in management employee participation (cf. Mulder 1971); learning opportunities; and social support (cf. Scott 2003:58), were important features to enhance work outcome. In relation to current research on teams as sources of improving outcomes and with regard to the attention of organizational research in general on the relationship between job satisfaction and organizational performance[25], the studies made by the Socio-technical School are vital references since they generated theoretical arguments and demonstrated such connections empirically. Ultimately, pertaining to the research question in the thesis the Socio-technical School substantiates the relevance of the group dynamics in organizations both in regard to objective and subjective outcomes for employees on different organizational levels. But on the basis of Socio-technical Theory it also possible

---

[25] which will further discussed in chapter 3

to regard management teams as having both instrumental and symbolic impacts in organizations.

2.5 Top Management Teams as Instruments

Much of the literature concerning teams and TMTs was produced during the 1990s. Searches on "top management teams" in influential journals like Administrative Science Quarterly, The Academy of Management Journal, Organization Science, and Strategic Management Journal clearly indicates the relevance of research on these kinds of teams. The literature on top management teams is particular interesting in the context of this thesis, because it deals with teams that have genuine management responsibility. A top management team operates on higher hierarchical levels in organizations as it constitutes the executive top management in organizations, and they exercise power and authority through strategic decision making that influences organizational performance (Amason 1996). This literature focuses on the functioning of management teams by discussing how different independent and mediating variables affect team performance or general organizational performance. Contributors to the TMT literature base their arguments on the "upper echelons" paradigm which claims that organizational outcomes are reflections of the values and cognitive basis of powerful actors in the organization – such as the dominating coalition of top managers (cf. Murray 1989; Finkelstein and Hambrick 1990; Priem 1990; Haleblian and Finkelstein 1993; Smith, Smith et al. 1994; Cohen and Bailey 1997) in addition to the Chief Executive Officer (CEO). The upper echelon argument was developed by Hambrick and Mason (1984)[26] and their assumption was that the linkages between top managers and outcomes could be detected empirically.

Furthermore, this literature is clearly anchored in a modernistic approach as it regards teams as some sort of instrument for goal achievement, and hence, searches for observable characteristics of the formal team structure or process to explain the degree to which top management teams improve organizational performance. On the basis of the insights of a constructive approach to organizations, I argue that when management teams are studied there is a need for applying an analytical framework which in addition to the instrumental aspects of teams could also illustrate other aspects of teams. Because, in addition to the instrumental tasks teams are set to solve, another vital aspect of teams, especially management teams,

---

[26] Hambrick and Mason were inspired by Cyert and March's concept of the dominant coalition (cf. Smith, Smith et al. 1994)

concerns their role as "communities" where meaning, norms, and values are developed and interpreted. A specific "logic of appropriateness" may develop within teams, and their members may develop certain ways of doing things, approaching challenges they face, and developing their distinct ways of perceiving the organization in which they work. These interactive processes where meaning and interpretations are developed within teams, may not only affect the team members. According to institutional theory, such symbolic meaning which may develop within any collection of individuals in organizations may also affect other members of the organization as the symbolic aspects are generally acknowledged. This is particularly important with regard to management teams since one of their vital roles in an organization concerns influencing employees. It is thus vital to take symbolic impacts into consideration when studying management teams and to study the impacts of teams extrovertly, that is to consider the effects of management teams on subordinates of the teams.

One explanatory variable in focus in TMT literature is referred to as team demography variables which means the aggregated external characteristics of a team (cf. Smith, Smith et al. 1994). It draws upon Pfeffers' assumption (1983) about direct effects of top management team demography on organizational performance. The further discussions in the TMT literature relate to how demography correlates with team process variables and performance variables (Wiersema and Bantel 1992). Relevant items that express team demography are the team members' age, education, sex, length of time within the organization and the team (cf. Priem 1990; Wiersema and Bantel 1993; Pitcher and Smith 2001). Some studies have demonstrated significant connections between demographic features of certain top management teams and important strategic phenomena such as for example strategic change (cf. Wiersema and Bantel 1992). Murray (1989:137) comments this as in itself a major contribution:

> "That any statistically significant linkages at all were found between specific aspects of, [a few] of the members of the organizations studied and those organizations' performance is remarkable, and constitutes strong support for those who advocate further study of top management groups".

To relate this discussion about the impact of demographic indicators of TMTs on organizational performance to the study of department management teams is somehow arbitrary. Strategic decisions are not to any great extent made at this organizational level and are as such not an object under study in this project. Team demographic is nevertheless an interesting background variable despite the fact that strategic performance is not a dependent variable in the thesis. This is because a demographic perspective does not only identify the

organizational structure as vital when describing how organizations function, but also put emphasis on who holds the positions in the organization. It is based on the assumption that the individuals arrive in an organization "pre-packed" with images and attitudes acquired over years in particular social and educational settings (Egeberg 2003). As members of the organizations they are exposed to new sets of images and attitudes depending on the characteristics of organizational structures and professional affiliations, and as such, it is important to have demographic data available about the two cases in the thesis. This ensures data that are concrete, hard and tangible, and provide important categorizing antecedents to the attitudinal variables. According to Cohen and Bailey (1997:273-4), the key findings pertaining to demographic variables are that the impact of TMT demographic outcome is mixed. They argue that the relationship between outcome (dependent variables) and the demographic variable that is assessed is dependent upon whether or not these variables are directly connected or not. The relationship between strategic persistence and tenure is for example one of the most consisting findings in the literature (ibid). It is a direct relationship in that executives with long tenure tend to be more committed to strategies they have formulated and implemented. On the contrary, the connection between demographic variables and return on equity or sales growth occur as the least consistent, because it is hard to make an argument about these variables being directly connected.

Besides demographic variables, the TMT literature has directed attention to what is labelled *process* variables. The process variables are treated as intermediate variables through which the demographic variables affect the dependent performance variables. Focus on the significance of process is continuously growing within organizational theory, and a vast number of publications on process indicates that a distinct process literature exists (Røvik 2007:183). Røvik also points to the tendency by contributors to this literature to interpret the emphasis on organizational processes as a new paradigm within organizational theory (ibid). Based on this one can explain the top management team literature and its attention to process variables as a reflection of the general emphasis on organizations and their processes. The TMT literature has perhaps most in common with that part of the process literature, identified by Røvik, which calls attention to process-based design of formal structure. Process variables are acknowledged and measured as a kind of organizational (team) structure describing dimensions through which the work of the team takes place. Accordingly, process here refers to variables that account for certain aspects of team processes, and it must not be confused with the more purely process-oriented studies where one or more ongoing processes are

followed over time. Process variables in the context of team management merely offer snapshots of process dimensions concerning how groups conduct their work. This brings the discussion to one of the weaker points of process variables in the TMT literature: the lack of definitions of the construct team process as Marks et al. (2001:357) point to. On one hand, Smith et al. (1994:412) defines process as:

> "[w]hile process concerns the team's actions and behaviors, such as communication, and psychological dimensions, such as social integration."

On the other hand, Priem (1990) skips the definition by limiting the concept of process to those that involve decision-making. Although such specifications of the concept of team processes give an idea about what kind of processes that are in focus, they are not specific enough to provide clear guidance for other researchers. In the article of Marks et al. (2001:357) the meaning of team process is examined, and they offer a clarifying definition:

> "We define team process as members' interdependent acts that convert inputs to outcomes through cognitive, verbal, and behavioral activities directed toward organizing taskwork to achieve collective goals."

Furthermore, they detail the distinction between taskwork and teamwork by saying that taskwork is what teams are doing (tasks, tools, machines etc), whereas teamwork describes *how* they are doing it together. Team processes then, are those through which taskwork is directed, aligned, and monitored. There is no doubt that it is useful to know more about team processes to comprehend how management teams actually manage. Yet, in spite of the lack of an agreed-upon definition of the concept, research on team process offers vital knowledge concerning how teams in different organizations direct, align and monitor their tasks.

Team process has been interpreted in several different ways. One aspect of process that has been called into attention is *communication*. Smith et al. (1994) interpret communications in groups as multidimensional, and find that it varies in frequency and informality. Frequency pertains to the amount of interaction among team members, whether or not communication takes place in face-to-face meetings, by telephone, by written notes, or via electronic mail. Informality is about how interaction is conducted; is it for example conducted through less formal channels such as spontaneous conversations and unstructured meetings, or do they have a more formal medium as for example highly structured meetings and written communication? Others have measured process as the degree of conflict during decision-making processes (Priem 1990).

This focus on team processes within the TMT literature is rooted in the modernistic approach as several contributors aim at providing insight so that organizations can retool human resource systems and managers develop and reward effective teamwork (cf. Marks, Mathieu et al. 2001). I include variables in the thesis that belong to the *process category*, but the aim by including these is not to provide counseling for the organizations concerning team development. Through the questionnaire "team process variables" such as decision-processes, frequency of contact among team members, and collegiate spirit within the department are measured. The reason for exploring these variables is to get (control) information about how team management may differ from hierarchical management, whether or not the departments conduct different team processes, and ultimately how this affects job satisfaction and commitment. Comparisons of the two management models conducted make process variables relevant as conditions for which it is important to control. Therefore it is vital to map if and how the two hospitals differ in their management processes, and any variation on these variables are of interest. Formalized team management structures in one hospital implies other processes than the ones in the hospital that structure management through a traditional hierarchical model. This is however not explored in the TMT literature, since the focus solely is on team management and team processes in regard to organizational performance. It will therefore be interesting to analyze how team management processes score compared to the processes in a traditional hierarchical management model.

2.5.1 Teams in Health: Efficiency on Group Level

Another bulk of literature that has developed alongside the TMT literature is that on teams within health care settings. A search on the literature database JStor comes up with a range of published articles from the 1970s concerning team in health care settings. After searching the reference lists of some of these articles it is evident that the topic started to gain interest among scholars as early as in the 1960s as well. Already in the 1970s it was stated that the occurrence of teams in health care settings had increased and that the use of teams could take many forms (cf. Beckhard 1972; Rubin and Beckhard 1972; Nagi 1975). The fact that team approaches have been preferred in health care organizations has been explained by pointing to the advances in medical knowledge and technology, an increase in the number of subspecialties among health care providers, and the manpower shortages in some of the highly trained professions (cf. Nagi 1975; Temkin-Greener 1983).

One thing that distinguishes this team literature from TMT literature is that within health care settings the team literature follows the socio-technical trend by calling attention to teams at operational level, as the teams under study are working with patients. But even though the teams under study are on the same organizational level as the groups in the socio-technical approach, the analytical focus of this research is not on the same aspects of teams. For one thing, much of the literature seems to be driven by instrumental purposes, in the sense that it aims at improving the functioning of teams and their efficiency within health care settings. The early literature, in particular, focused on how the internal group processes functioned and how team effectiveness could be improved (cf. Beckhard 1972; Rubin and Beckhard 1972; Nagi 1975). Later contributors have started to examine team effectiveness in terms of how it can improve patient outcomes (cf. Weisman, Gordon et al. 1993; Lemieux-Charles and McGuire 2006; Power, Iacoponi et al. 2007) team members' job satisfaction and organizational commitment (Weisman, Gordon et al. 1993; Schofield and Amodeo 1999; Proenca 2007). As the TMT literature was extrovert in that it considered the effects of the teams with regard to the organizational level, the literature on health care teams seems more introvert as it assesses attitudes of team members. In relation to management teams it is, however, vital to regard the impacts of these beyond the teams themselves, as a vital task of these teams concerns influencing other employees.

There are a vast number of articles that aim at summarizing the research done on teams, in order to draw up some "team lessons" in health care settings (cf. Rubin and Beckhard 1972; Temkin-Greener 1983; Opie 1997; Ingram and Desombre 1999; Schofield and Amodeo 1999). These summaries can be collected both from team and group research in other organizational contexts or they can be accumulated from team studies within health care. One interpretation of this is that there is a great urge to find a "cure" for the general challenges faced by health care organizations such as budget overruns and manpower shortages, and to develop cooperation and coordination across professional groups. It is of course a good thing that researchers from different disciplines are paying attention to these challenges, and are curios about research on teams in other organizational contexts. But it seem like this curiosity is more focused on finding the benefits in terms of outcome or efficiency of implementing teams, than on refining the analytical conceptualization of teams and outcomes. First of all, it should be obvious that it is too ambitious to believe that organizing in teams within health organizations solely can fully the challenges in these organizations by making them more efficient. There are also limits to how much it is possible to increase the efficiency in

organizations based on introducing new (team) structures, because the problems are so complex that it is difficult to predict how structural changes will impact the organizations. Simply by drawing upon classical organizational theory and the diversity in the team literature, it is evident that the concept is multifaceted and poorly defined in the studies conducted within health care settings (Lemieux-Charles and McGuire 2006), and that there may be great variation concerning how it is applied in practice. So if patient-flows, patient satisfaction, job satisfaction or the organizational commitment of the employees within health care organizations are increasing, how can one be sure that it is the effect of teamwork and team structures? And how can one be sure what the team concept really represents in this research when, on one hand, poor conceptual definitions of the team construct are offered, and on the other hand, empirical descriptions of how the teams under study function is de-emphasized because attention is called to prescriptive images of teams? The health care team literature has always addressed these matters by pointing to the lack of a precise definition of the team concept. Some contributors stress the need for bringing clarity and consistency to the definition of the team (cf. Opie 1997; Schofield and Amodeo 1999; Carlström and Berlin 2004; Lemieux-Charles and McGuire 2006), others "solve" the problem by offering scarce empirical descriptions of the team concept (Nagi 1975; Temkin-Greener 1983). Moreover, when it comes to the absence of clear and consistent conceptualizations of the *team efficiency* term within health care research, it is also clear that the contributors themselves are aware of this shortage (cf. Lemieux-Charles and McGuire 2006:266).

According to Lemieux-Charles and McGuire (ibid) health care researchers need to learn from the organizational studies literature about conceptualizing and operationalizing the multiple dimensions of teams and team effectiveness. This is based on the fact that within the organizational studies literature the characteristics of the different types of teams are described in greater detail, as they are defined and classified according to task type, team duration, purpose, interdependence, and autonomy (ibid). The lack of information concerning these team dimensions are striking in the health care team literature, which makes it difficult to understand what kind of teams the different studies actually refer to. Because of the poor definitions of teams and team efficiency it is difficult to understand how this research can demonstrate the effects of team structures. This underlines the importance of constantly refining the analytical perception of team, team dimensions, and outcome of team work by drawing on the insights of organizational studies. But it also put emphasis on the importance of distinctive knowledge about teams under study and the context in which they operate.

Since teams are employed on all hierarchical levels in organizations, and are used for a variety of purposes in organizations they appear under a range of different labels. Organizational theory has developed a rich "collection" of conceptions specifying and demonstrating how teams vary[27], which it would be appropriate to draw upon and develop further. Therefore, in the next section the aim is to account for the implications of these insights for the thesis.

2.6 On the Outcome of Teams

An essential focus in the team research is related to explaining the effects or outcomes of working in teams. Research on teams has related teams and team management to a vast number of outcomes. Team performance, effectiveness, organizational performance, or organizational outcome is examples of labels encompassing the dependent variables that directly or indirectly have been affected by teams. Outcome and performance are broad labels which makes it difficult to be certain about exactly what they contain in every case[28]. In this subchapter the aim is to open this Pandora's Box of outcome or performance variables in the team literature. Therefore, the outcomes that are treated as dependent variables in the literature on team are described in this subchapter. The aim of conducting such an examination of outcome variables is to clarify the relevance and justify the choice of dependent variables in this project.

A common way to distinguish outcome variables is to separate them into objective dimensions and subjective dimensions (cf. Cohen and Bailey 1997; Lemieux-Charles and McGuire 2006). Objective dimensions refer to outcomes as performance effectiveness assessed in terms of quantity and quality of outputs such as firm performance (Finkelstein and Hambrick 1990; Priem 1990). Firm performance is the mostly used objective outcome measurement in the TMT literature (cf. Cohen and Bailey 1997:269)[29]. It is measured through for example return on equity (Finkelstein and Hambrick 1990; Haleblian and Finkelstein 1993), return on assets and return to stakeholders (ibid), and total sales growth (Eisenhardt

---

[27] For example virtual teams, functional teams, top management teams, and production teams (cf. Carlström and Berlin 2004:11)

[28] Drawing upon (March and Sutton 1997:705) the terms "performance", "effectiveness", and "outcome" are used interchangeably, because these terms share content when it comes to definitions, measurements, and explanations.

29 Although, some contributors within the TMT literature have considered behavioural aspects of outcomes like turnover form both the team and the firm (Wiersema and Bantel 1993), strategic change of firm-level and acquisition activities (Wiersema and Bantel 1992), and strategic persistence (Finkelstein and Hambrick 1990).

and Schoonhoven 1990). Other objective performance variables are customer or patient satisfaction (Deeter-Schmeltz and Kennedy 2003; Power and Waddell 2004), quality of service or products, and cost effectiveness. Subjective dimensions concern attitudinal and behavioral facets of outcomes as job satisfaction, commitment, turnover, trust in management, and perceived team effectiveness by team members such as: perceived task outcomes, well-being, willingness to work together in the future (cf. Cohen and Bailey 1997).

I will first consider the relevance of the objective dimensions as outcome variables according to the research question posed in this thesis. Return on equity, return on assets, and return to stakeholders constituting firm performance are not included as dependent variables in this study. This is related to aspects of the cases. As mentioned earlier firm performance is connected to top management teams. The management teams under study in the thesis are first of all operating in public hospitals and they are middle management teams rather than top management teams. Public hospitals in Norway are enterprises owned and funded by government. As public hospitals they expected to be profitable, and their main task is to provide health within the budgetary limits by government. Second, the management teams under study are not operating on the top level of the organization, but are management teams on lower level: department or unit level. These teams are indeed accountable for the budgets of their department. But it is the board of the hospital that is accountable for the overall management and performance of the hospital, and that makes the managerial strategic decisions affecting the overall hospital performance. In light of these distinctions between the teams under study and top management teams it seems more pertinent to measure aspects of the objective dimensions like patient satisfaction, quality of service, cost efficiency, or patient flows, since these measurements are more directly connected to the core activity of hospitals. Research on the relationship between teams and patient outcomes such as satisfaction or retention, demonstrates that patient satisfaction is mostly dependent on the teams that are directly in contact with patients, that is the *patients care teams* or *treatments teams* (cf. Nagi 1975; Weisman, Gordon et al. 1993; Deeter-Schmeltz and Kennedy 2003; Wells, Jinnett et al. 2006). In other words is the relationship between department or unit management teams and patient satisfaction "longer" and more complex than for the patient care or treatment teams. Therefore it is not likely that the management form of the department or unit affect the patients and their well-being as most patient are not familiar with the management level. The aim in the thesis is furthermore to study the how the type of management affects the

employees, not the patients, economic aspects such as cost efficiency, patient flow or quality of service.

In order to assess how the organization of management affects the employees and managers in mental departments it is more suitable to examine outcomes along subjective dimensions. Job satisfaction and organizational commitment therefore constitute the dependent variables in the thesis. Job satisfaction is related to teams in a vast number of studies (cf. Cohen and Bailey 1997; Griffin, Patterson et al. 2001; Lichtenstein, Alexander et al. 2004; Lemieux-Charles and McGuire 2006; Proenca 2007). Commitment is also commonly treated as a subjective dimension of the outcome of team work in the literature (cf. Cordery, Mueller et al. 1991; Cohen and Bailey 1997; Dooley and Fryxell 1999; Elloy 2005; Lemieux-Charles and McGuire 2006; Pineda and Lerner 2006:184). By examining some of this research the intention is to obtain knowledge about: on what organizational level do teams studied in connection with job satisfaction and organizational commitment operate? After reviewing the literature to answer the first question, it is clear that job satisfaction and commitment have been treated as dependent upon teams on the operating level of organizations, but not as dependent upon management teams or top management teams. As mentioned earlier the TMT literature tends to call attention to objective dimensions of outcome and not subjective attitudinal outcome dimensions. It is studies of teams on lower organizational levels that have related teams and teamwork to job satisfaction and commitment (cf. Cohen and Bailey 1997). After answering this first question regarding the organizational level at which the teams related to the three subjective outcome dimensions operate, the next task is to assess how teams relate to these dimensions.

2.6.1　　Teams and Subjective Outcome Dimensions

In this section the purpose is to look more closely into the relationship between teams and the subjective outcome measurements. Thus, the guiding question to analyse how teams relate to the three subjective outcome dimensions under scrutiny is: how do teams, and especially team management, affect job satisfaction, and organizational commitment? Job satisfaction and commitment are connected in that both are subjective attitudinal measures and accordingly they are treated simultaneously in studies focusing on subjective dimensions (cf. Cohen and Bailey 1997). This is a subjective measure of outcome in that it provides us with subjective information about how the team members themselves consider their well-being and loyalty, without linking these considerations to objective measures of team work.

In the team research review article of Cohen and Bailey (1997:249) is multiple dimensions of team outcome considered; they found that substantive participation resulted in quite positive measures of job satisfaction and commitment. This concerned "self-directed work teams" and "parallel teams". A self-directed team is a traditional work team responsible for producing goods or providing services which involves employees in decision making formerly reserved for supervisors or managers. A parallel team exists parallel with formal organizational structure, it has limited authority and can only make recommendations to people higher up in the organizational system. It is composed of individuals from different units to perform functions that the regular organization is not equipped to perform well. The main tasks of this team concern problem-solving and improvement-oriented activities (Cohen and Bailey 1997:242). The effect of self-directed work teams and parallel teams on job satisfaction was explained by alluding to these types of teams as forms of worker participation which promote high levels of group autonomy, and are example of substantive participation because they require fundamental changes in work organization. This corresponds to the thinking of the instrumental approach to team management I described in subchapter 2.1. It furthermore indicates that this instrumental argument about representation and participation from work teams on lower level can be exploited with a view to management teams on department level as positive for the job satisfaction and commitment of the management teams.

Abbott, Boyd et al. (2006) study supports this argument by proposing that job characteristics, such as degree of autonomy, mediate the relationship between different types of teams and degree of job satisfaction and commitment. Types of teams were distinguished according to degree of autonomy the teams enjoyed in the process of adopting employment involvement program, which consists of different stages. The stages in this process aid as determining the two types of teams: consultative and substantive (ibid). A consultative team is synonymous with Cohen and Baileys' (1997) concept of parallel team as problem solving teams of limited duration that return to traditional employee-supervisor relationships to accomplish work outside of team activities. A substantive team is described as an *institutionalized replacement initiative team* which requires the greatest organizational commitment. This team is employed at the third stage of the employee involvement program, and it is used as replacement initiatives to change the way work is accomplished. However, the crucial distinction between these two types of teams is the member' authority to implement proposed solutions (Abbott, Boyd et al. 2006:487): the consultative teams do not have the authority to implement the

solutions they suggest to management; but the substantive teams have the authority to implement their solutions although this authorization have specified limitations. Even though a substantive team is not formally the same as a management team, they have some important similarities through a certain amount of autonomy within a restricted task field. Management teams on department and unit level also experience to be self-determining as they have economical, medical, and human resource responsibilities in the entity they manage. The degree of self-determination for the management teams is still restricted from instructions given from higher hierarchical level. Based on this it is reasonable to assume that the degree of job satisfaction of team members and their *team commitment* are related to whether or not management is organized in teams or not. Abbott, Boyd et al. (2006) have defined and measured commitment as team commitment and not as organizational commitment, which is more common. They argue that team oriented commitment is distinct from organizational commitment in that team members feel a commitment both to their group of co-workers and to the goals of the team. Furthermore, they call attention to studies demonstrating a difference between organizational and group commitment in that group commitment is related to task-based group liking, perceptions of task-related group processes, satisfaction with group members, and group cohesion (Abbott, Boyd et al. 2006:489). Despite these arguments, in this thesis commitment is defined and measured as *organizational* commitment. This is based on the fact that one of the main features under study here is how the management teams affect members' attitudes as managers and the attitudes of their subordinates towards the organization. The employees are not directly involved in the work of the management team and may therefore not see themselves as parts of the management team but rather as being managed by it. It is called attention to the degree to which managers and the operating core expresses beliefs in the general organization based on how management is conducted. If employees express stronger commitment to organization as a result of team management this may be an expression of symbolic effects of management teams. Management teams may affect their own and employees' commitment to the organizations as they constitute an arena in which the role of the professional in relation to the organization and its goals are infused with values and meanings which goes beyond the strictly technical contributions of the professionals in regard to overall organizational goals.

Cohen and Ledford (1994) have conducted a study following a quasi-experimental design to assess the effectiveness of self-managing teams. They point to two underlying explanations for assuming that self-managing teams are effective and contribute to employee quality of

work life. First, the build on the arguments of the socio-technical perspective, like Cordery, Mueller et al. (1991), that emphasize structural properties of self-managing teams enabling employees to control key sources of performance variance. Second, they call attention to the motivational effect of self-management teams and how this foster high performance and satisfaction (Cohen and Ledford 1994:14). The teams they studied were self-managing teams implemented in a telecommunications company in a variety of functions over several years. Furthermore, the lower-level managers had been given considerable leeway by the company to construct self-managing teams that best suited the local conditions in each department (Cohen and Ledford 1994:17). In this study the self-managed teams was compared with a group of workers that were traditionally managed. In general, the analysis indicated that the self-managing groups scored higher on quality of work life outcomes than traditionally managed groups. Self-managing groups reported significantly higher levels of job satisfaction[30]. The reports on organizational commitment do not demonstrate significant differences between the two ways of organizing work. According to Cohen and Ledford this is related to the lack of spillover effect to attitudes about the organizations that is not directly related to the intervention of self-managing teams (Cohen and Ledford 1994:36). In relation to the research question in the thesis, this argument is not directly transferable as this is not a study of an intervention or a change process, but rather a study of how team management function and affect the attitudes of team members and their subordinates. The fact that the teams under study in the thesis are management teams makes a difference because we expect management to affect other and underlying segments in the organization.

Cordery, Mueller et al. (1991) have conducted a study of the effects of autonomous groups working on attitudinal measures such as job satisfaction and commitment. They base their arguments for studying effects of group work on attitudes of the group members by alluding to the reasoning of socio-technical theory and the work of Hackman (1990), and autonomous groups in a newly established processing plant in Australia were studied. The autonomous groups controlled the processing operations at a new refinery and were contrasted by other groups operating under traditional work structures (Cordery, Mueller et al. 1991:465). Furthermore, the collective decision-making range of these autonomous groups included aspects like for example allocating work, including work group administrative roles,

---

[30] This was also the case on growth satisfaction, social satisfaction, group satisfaction, and perceptions of positive change

51

maintaining safety and housekeeping standards, planning shift operations, determining work priorities, ordering operating supplies, and making recommendations on the hiring of new work group members(ibid). The role of the supervisors was to supply the groups with information, training, and support resources; beyond this they should provide minimal direction to the teams on day-to-day activities. Besides developing work group autonomy, a further feature of autonomous group working being implemented was "multiskilling" (ibid), which means that the groups should consist of a flexible range of skills in order to enhance job rotation. In the analysis there were groups organized on the principles of autonomous groups or groups organized due to more traditional work structures. The effects of this way of organizing work on job satisfaction and commitment demonstrated that employees in the autonomous work groups reported more approving attitudes than those operating under traditional work structures. But it noted that the autonomous work groups at both sites had a drop-off in their levels of organizational commitment, and that commitment remained higher for members of the autonomous work groups than for the workers operating under traditional work design (Cordery, Mueller et al. 1991:473).

Decision quality has been related to top management teams by Korsgaard, Schweiger et al. (1995) and Amason (1996). In the article of Amason it is stated that top management teams make strategic decision, the quality of which influences organizational performance. Consensus among team members making these decisions and affective acceptance of them is moreover regarded as important to implement and produce decisions in order to sustain high performance. But it is the paradox concerning the effect of different types of conflict on strategic decision making that is the prime focus of Amason (1996:123) as the research question posed in the article is:

> "[h]ow can top management teams use conflict to enhance the quality of their decisions, without sacrificing consensus and affective acceptance among their members?"

Conflict is either conceptualized as cognitive or affective. The units of analysis were top management teams from small and midsized food-processing firms across the United States and five furniture manufacturing firms in the South-Eastern United Sates. Amason's findings revealed that cognitive conflicts can improve decision quality, and cognitive conflict also was beneficial for the other outcome variables: understanding of decisions and affective acceptance. Affective conflict was adverse with regard to decision quality and affective acceptance. In this analysis, team management is not applied as an outcome variable. The correspondence between Amason's findings and the research question under scrutiny here

relates to the reasons for introducing team management I developed based on the insight of the paradigmatic traditions in section 2.1 and 2.2. The points in these elucidations were that one aim with team management was to ensure for representation and participation in decision-making to make decisions based on uniform considerations and not merely based on interests of the professional group of the manager. In addition, it was pointed to the symbolic meanings of this representation and participation of more professional groups in a team management model. From a constructivist and symbolic point of view representation and participation in decision-making could result in employees to a greater extent identifying themselves with decisions made of a team management in which several and perhaps their own professional group is represented. It is in other words vital to control for the perceived quality and legitimacy of decisions as the representation and participation in decision-making processes could differ between the two cases, and thus decision legitimacy is adopted as a vital control variable in the analysis. In addition it is controlled for how the decision-making processes are carried out in the two cases.

To sum up, in this section the relationship between teams and the two subjective outcome measurements job satisfaction and organizational commitment has been investigated. It has been revealed that these outcome variables are commonly related to teams. Job satisfaction of team members seem to be positively affected by team work. The link between organizational commitment and teams is, however, more difficult to support empirically, for one thing due to lack of spillover effects from team work of team members to organizational measures like commitment (Cordery, Mueller et al. 1991). This inspection of the relationships between teams and the subjective outcome variables has made me aware of another challenge in my study: the challenges related to levels of outcome. This brings me to a third relevant question: Do studies that relate teams to these two dimensions consider them on the level of the team members (managers)? Or do they also consider these subjective measurements on the level of the employees managed by the management teams?

2.6.2   Level of Subjective Outcomes

In this section the intention is to answer the question regarding whose job satisfaction and organizational commitment in the organization team management may affect: team members' or/and subordinates' being managed by the team. As the TMT literature focuses on overall firm performance one considers a top management team to impact on organizational level, top management teams are usually not concerned with group-level outcomes (cf. Cohen and

Bailey 1997:269). Yet, management team effectiveness has been assessed as decision quality on group level by some (cf. Amason 1996). Research on teams on lower organizational levels does however scrutinize team performance or team outcome along both objective and subjective dimension on group level. It is thus the team members' job satisfaction and organizational commitment that has been assessed in this body of literature (cf. Lemieux-Charles and et al. 2002; Abbott, Boyd et al. 2006). In this way it becomes clear that outcomes are demonstrated at different levels of analysis.

Cohen and Bailey (1997:243) point out the importance of being unambiguous regarding both what dimensions of outcomes that is measured; as well as on the level at which they are being examined. When it comes to management teams and job satisfaction and commitment in this study I argue that it is not only relevant to investigate how team management affects them on group level. It is also of crucial interest how team management affects the job satisfaction and organizational commitment of subordinates – because subordinates are being managed by these management teams. The reason for arguing that management teams affect both the three outcome measures of their team members and the subordinates being managed by the teams, rests on the fact that these teams are performing management. Management teams on department and unit level are more than just a core task team, as they also perform management and as such it is expected that they influence their subordinates. As I alluded to in subchapter 2.1, one of the distinguishing elements of organizing management in teams is that several of the professional groups are formally represented and thus able to participate in management. The representation of the professional groups provides an opportunity for management to get more information about theses professional groups and how they consider the functioning of the organization. With a greater knowledge basis regarding the professional groups and their viewpoints managerial decisions should be recognizable as being based upon overall considerations. Following the arguments of the instrumental approach it is opportune to expect that team management will influence job satisfaction and commitment of the team members as well as of the subordinates positively.

Drawing upon the insight of the institutional theory the influence of team management on job satisfaction and commitment of tem members and their subordinates may however be more complex. For one thing, team management may be incorporated as the formal management model in the organization. But if this way of performing management contradicts the present norms and values of a department or unit, team management may have no practical

significance in the everyday management of the unit. Team management could also appear in different local versions according to how the units translate team management into their practice which may affect level of job satisfaction, and organizational commitment differently from unit to unit. On the one hand, representation and participation of professional groups by organizing management in teams does also have symbolic aspects which encourage identification with managerial decision across professional belonging. On the other hand, it could be that the staff regards the team member representing their professional group as part of the management group entity, and symbolizes managerial values instead of professional values. It is not necessarily the intention to utilize the arguments of instrumental and institutional theory to develop hypothesizes on the subject of how team management affects job satisfaction, and organizational commitment. The point is rather that in order to intercept the effects of organizing management in teams there is a need for not only considering them on team level but also to assess the effects on individual or subordinate level.

2.7 Concluding Remarks

The literature review has first of all revealed that notwithstanding the vast number of contributions on teams, agreed upon definitions of teams exist in the literature. I have employed a definition that recognizes the teams as a group of several people working towards mutual goals, but this definitions also identifies that teams operate within an organizational framework which means that the teams have to deal with their relationships to external actors inside and maybe also outside the organization. I have acknowledged that teams both have instrumental tasks to solve and that they operate as social entities in accordance with other units in the organization, which implies that they develop meaning for themselves and for others in the organization. Based on this it accentuated that there is a need for analysing both the instrumental and symbolic effects of management teams. The analysis of TMT literature made it clear that teams were analysed as instruments to achieve organizational goals measured as firm performance. In this manner symbolic effects of these management teams were neglected. I argued that this is a weakness in relation to management teams. It is particular important to investigate symbolic effects when studying management teams since a vital task when it comes to management concerns both instrumental goal achievement and to create vision, communicating this vision, and motivating employees. Throughout the thesis I argue that team management may involve affecting team members and subordinates both instrumentally and symbolically since team management materializes in organizations both in formal and informal structure. Ultimately, by reviewing the literature on teams in health care

settings, it was revealed that subjective outcome dimensions as jobs satisfaction and organizational commitment were mostly assessed on group level. Since I study management teams, it is at the crux of this analysis to study if and how these management teams may affect not only themselves (internally) but also those they manage, their employees (extrovertly). In the next chapter I will investigate job satisfaction and organizational commitment as they have a vital role in this study.

3 Subjective Outcome Dimensions

In this chapter attention is directed to the dependent variables job satisfaction and commitment. The aim in this chapter is to elucidate how team management affects job satisfaction and commitment which are the central dependent variables in the thesis. Therefore, it is crucial to clarify the concepts: job satisfaction and commitment, and to work out how they are going to be studied in this project. As job satisfaction and commitment are some of the most studied concepts in organizational research, the literature is extensive. A central focus in the discussions of these variables is therefore to detect what this research has found out concerning antecedents to these variables, effects of them, and to describe the relationship between job satisfaction and commitment. A further purpose in this chapter is to detect how team management is connected to job satisfaction and commitment in previous research, and then especially: how the job satisfaction and commitment of the bottom line in organizations may be affected by team management?[31]

Job satisfaction and commitment are often approached with the aim of gaining more insight into how these attitudinal dimensions of employees may be improved. It is important to expand this knowledge because high scores on job satisfaction and commitment are assumed to have a positive impact on organizational performance and efficiency (cf. Hackman and Oldham 1975; Kalleberg 1977; Spector 1997; Beam 2006). Research on these dimensions furthermore demands for more investigations of factors that increase or obstruct levels of job satisfaction and commitment (cf. Caldwell and O'Reilly 1981; Khaleque and Rahman 1987). In this way one contributes with knowledge which could be used to improving the job satisfaction and commitment of employees. Accordingly, much of the research on job satisfaction and commitment is conducted consistent with the logic of the modernistic

---

[31] Job satisfaction and commitment are attitudes that may vary according to cultural context. Studies of satisfaction and productivity of subordinates under different types of leaders reveal the influence of national cultures on how leaders are perceived and on how workers give preferences to certain managerial styles (Hofstede and Hofstede 2005:270). Based on this one can infer that subordinates within different cultural (and national) contexts will have varying demands regarding how management should function and how this will affect their level of satisfaction in work. The Power Distance Index (PDI) is used by Hofstede (2005:41-5) to describe cultural differences among workers. The index furthermore measures how people in different countries perceive the fact that people are unequal and hold different hierarchical positions in society. The Scandinavian countries, as opposed to Asian and eastern European countries, have low values on the PDI, which means that people within Scandinavian countries not often are afraid of their bosses, bosses are not often autocratic or paternalistic, and that people *express a preference* for a *consultative* (a boss who consults with subordinates before reaching a decision) style of decision-making. In this way one can say that conditions suit flatter managerial structures such as for example management team.

epistemic paradigm. This is not the main focus in this dissertation, even though instrumentally methods are applied. The main task in this thesis is rather to analyze the relationship between team management and job satisfaction and commitment per se. This study seeks to investigate the conditions under which team management affects job satisfaction in proportion to hierarchical traditional management. I will rely upon insight of the institutional theoretical framework concerning how team management may take different forms in practice, which again, signifies that job satisfaction and commitment are affected variously. Still, job satisfaction and commitment may occur in connections with attitudinal dimensions, affect efficiency, outcome, or other organizational related behaviors also in the organizations under scrutiny here.

To begin with, I explain the concept of job satisfaction generally, and how it has been measured and studied. The aim is to make clear how job satisfaction is studied in this project. Secondly, an outline of commitment following much of the same structure as for job satisfaction is conducted. Since job satisfaction and commitment are some of the most widely studied concepts within organizational literature, it is important to capture how they have been defined, measured, and what independent variables they have been studied in relationship with from early on in this extensive body of literature. Because, insights from the early research on these concepts still imprint the study of them today, and it is useful to have knowledge concerning the origin of these concepts and the way they have been approached. The outline of job satisfaction and commitment is thus conducted as a backward mapping so that the origin and development of these concepts become evident. In addition, subsequently, a narrower outline of job satisfaction and commitment is performed by examining how team literature has analysed job satisfaction and commitment. Based on this, it is an aim, prior to the data analysis, to establish the connection between team and the subjective outcome variables: job satisfaction and commitment, and ultimately, to make some assumptions regarding how team management may affect job satisfaction and commitment.

3.1 *Job satisfaction*

What does it mean that workers in an organization are satisfied with their jobs? This question opens for various answers. But to put it simple, job satisfaction is a construct that expresses how people feel about their job in general, and/or about certain aspects of their job. In other words, job satisfaction concerns the extent to which employees like their job. In this way job satisfaction is perceived as an affective response to ones' job rather as a cognitive response to ones' job.

Nowadays it has become common to define job satisfaction through the attitudinal perspective, and this definition takes as it's starting point that job satisfaction is a person's attitudinal response to his or her job. Job satisfaction is one of the most studied concepts in organizational research (Agho, Mueller et al. 1993:1008; Spector 1997:1). The explanations for this interest in the job satisfaction construct lies in the relationship it is suggested to have to other variables. It has for example become common to consider job satisfaction as a mediating variable in a system of causal linkages which affect organizational performance and employee behaviors (Agho, Mueller et al. 1993). Job satisfaction is by scholars, especially within management theory (Kim 2002:232), proposed to increase organizational productivity and develop labour achievement, it is also considered to be an important instrument to improve organizational functioning by advancing quality of work experiences of employees (cf. Hackman and Oldham 1975; Kalleberg 1977). Intuitively these are appealing assumptions. Despite the seductiveness of the notion that job satisfaction affects organizational performance, it seemed clear in the literature that this relationship between job satisfaction and performance has proved poor empirically correlations (Iaffaldano and Muchinsky 1985; Agho, Mueller et al. 1993; Spector 1997). Yet a vast number of meta-analyses have more recently revealed that positive job attitudes, such as commitment and job satisfaction, are accompanied by better work outcomes (cf. Meyer, Stanley et al. 2002; Cooper-Hakim and Viswesvaran 2005; Harrison, Newman et al. 2006; Riketta 2008). The recent attention directed to job satisfaction has primarily been focused on its impact on an affective attitudinal dimension like commitment (Mowday, Porter et al. 1982:472; Glisson and Durick 1988), or behavioral dimensions such as turnover and absenteeism (Cordery, Mueller et al. 1991; Weisman, Gordon et al. 1993; Spector 1997; Poon 2002). But the concern regarding job satisfaction may also be explained according to a more humanitarian

perspective in which people deserve to feel comfortable and to be fairly treated, which makes job satisfaction a benefit per se (Spector 1997).

In relation to this project it would be interesting to gain insight in how job satisfaction has been approached theoretically in terms of what has been emphasized as antecedents of job satisfaction of employees and managers. Because, what is clear is that job satisfaction has been approached from different angles. But it is common to categorize the various approaches according to four models: 1) the need-satisfaction model, 2) the value-satisfaction model, 3) the dispositional model, and 4) the organizational or situational context of work (cf. Salancik and Pfeffer 1978; Glisson and Durick 1988; Brief and Weiss 2002). In order to locate my project in proportion to these four models it is convenient to conduct a brief discussion of them.

First, Hackman and Oldham (1975) directed attention to job satisfaction as the individual workers' affective and attitudinal response to his or her job. Research on job satisfaction has from early on been approached according to a need-satisfaction model (cf. Salancik and Pfeffer 1978; Glisson and Durick 1988:62; Spector 1997:2). A need-satisfaction model implies: "[t]hat people have needs, jobs have characteristics, and job attitudes (…) result from their conjunction" (Salancik and Pfeffer 1978:224). That is, whether or not the job met the employee's physical or psychological needs for things provided by work. The assumptions on which this paradigm is based stress individual attributes as predictors of behavior and attitudes in work situations rather than situational factors. Salancik and Pfeffer (1978:226) nevertheless point out that although these affections and attitudes are defined as personal attributes it does not necessarily entail that they are individually determined. But, furthermore, that these associations between individuals and organizations in fact occur in a social context and is influenced by the context. A need-satisfaction perspective on job satisfaction is not applied in this project, since focus is on how specific management types affect job satisfaction. Indeed, this does not mean that it is rejected that individual attributes are relevant when it comes to predicting attitudes or behaviors for that matter. It rather gives voice to an analytical preference of organizational and situational factors such as type of management conducted in organizations when it comes to studying job satisfaction, because those explanations solely emphasizing personal traits are inadequate as they ignore situational characteristics with the job (Kalleberg 1977:124).

Second, the formation of attitudes such as job satisfaction has additionally been studied through lenses directing attention to worker's subjective values rather than on their needs (Glisson and Durick 1988:62). Locke (1976) is according to Glisson and Durrick the spokesperson of this analytical approach in which subjective values are considered to be more diverse across workers than are needs, and relationships among job characteristics and worker attitudes are therefore seen as less stable than they would be in need-satisfaction models. In this way job satisfaction is considered an affective reaction to one's job (cf. Brief and Weiss 2002:283). The affective dimension thus became stressed in the literature, but it was also called attention to that the satisfaction construct had cognitive dimensions. It is thus pertinent to question the extent to which commonly used measures of the construct capture both these dimensions (ibid). Three frequently used measures were empirically explored for affective and cognitive content: the Faces scale, the Job Descriptive Index, and the Minnesota Satisfaction Questionnaire (cf. Brief and Roberson 1989). It was revealed that only the Faces scale intercepted both affective and cognitive components about equally and that the two other measures mostly caught the cognitive components. Scholars detected the paradox that job satisfaction is defined in affective terms but it is only the cognitive aspects of the construct that is measured, this inconsistency remains a challenge in today's research on job satisfaction (ibid). This study of team management in relation to satisfaction of managers and employees is not based on a perspective focusing on values and affections as predictors of satisfaction. Because, this perspective does not direct the attention to the primary focus of the research question of my thesis, which, again, is the organizational and situational factors constructed through the specific team management model. However, this does not indicate a rejection of the existence of values among workers, but rather that these internal and individual characteristics are not given analytically priority as the most important in understanding how job satisfaction is affected by team management. Organizations and utilization of team management imply social interaction through representation, participation, and identification. It thus is a primary goal to study how this interaction conditioned by the management teams affects satisfaction of people in the organization.

Third, job satisfaction has been examined by applying a dispositional model. A dispositional model is in conflict with the need-satisfaction and the value-satisfaction models since workers in this model are susceptible to certain attitudes. In a dispositional model attitudes, or more precisely personality traits, furthermore persist independently of the extent to which either needs or values are satisfied by job characteristics and independent of other situational

characteristics (Glisson and Durick 1988:62; Brief and Weiss 2002). This is not only at odds with the need-satisfaction and value-satisfaction approaches but it is certainly also at odds with some of the modernistic assumptions I argue is present in much of the research on job satisfaction. Because, by treating individuals as predisposed to certain attitudes which are independent of situational factors such as job characteristics and organizational conditions the modernistic urge to improve job satisfaction is made redundant. And furthermore, the link between job satisfaction and performance disappears as well. Again, as stated in relation to the need-satisfaction model, it is not argued in this project that individual traits not affect the extent to which people like their jobs. But it is rather called attention to how organizational situational factors such as functioning of management affect job satisfaction. Dispositional research has still detected relationships between negative and/or positive affectivity and job satisfaction, and this is now routine in the job satisfaction literature (Brief and Weiss 2002:284). If the unexplained variance is reported to be high in the data-analysis it could imply that individual, dispositional antecedent or other contextual factors can be found as having more explanatory power than expected theoretically. Before leaving individually-based perspective it is important to mention that even though I state that the study is not based on perspectives stressing individual-based psychological properties such as: needs, values and dispositions is individual traits, still, to some extent integrated in the data material. Because, demographic variables are a collected in the quantitative data material, as they in line with Pfeffer's (1983:301) arguments, are important explanatory variables offering directly observable data. These demographic variables are however not an expression of the needs, values, or dispositions of the workers, but they rather function as background variables.

Fourth, models directing attention to the broader organizational or situational context of the work is also identified in the literature as a major source of variation in the attitudes of workers (Glisson and Durick 1988). This approach is distinguished from the previous perspective accentuating job characteristics or individual workers' needs, values or personal traits. In an organizational situational perspective attitudes of workers are explained through structural context within which the work occurs. Salancik and Pfeffer (1978) and their social information processing theory implies that worker attitudes are constructed through social interaction with other workers in the workplace rather than determined either by individual worker characteristics or by objective job characteristics. In this dissertation organizational and situational context constitute the analytical basis for approaching the influence of team management on attitudinal dimensions. The reasoning for this is multifaceted. For one thing,

as the previous discussion of the need-satisfaction, value-satisfaction, and dispositional perspectives indicate, it is not sufficient solely to direct attention to individual properties in order to capture organizational and situational functioning of team management. Furthermore, perspectives calling attention to individual traits do not emphasize how attitudes may be formed due to social interaction.

Drawing upon an organizational situational perspective that stresses the impact of socializing elements within organizations (cf. Lægreid and Olsen 1978) it is natural to study attitudinal dimension since they in many ways can be argued to be outcomes of socializing mechanisms within organizations. What makes an organizational situational perspective especially relevant is that it accommodates management models as having major influence on attitude formation of employees in organizations. Management models constitute a vital part of the organizational context in an organization in two structural ways: First, due to modernistic and instrumental arguments, management is materialized in the formal structure of an organization. Formal structures are well established as constraining forces in organizations (cf. Scott 2001; Scott 2003), and as argued in previous chapters team management is associated with certain formal implications when it comes to representation and participation. Team management ensures that several professional groups should be represented and participates in management, and it is this variation from traditional management I argue that may affect job satisfaction and commitment. Second, an organizational perspective does also accommodate an institutional view on management that advocates that team management is expressed, not only in the formal structures, but also in the normative and symbolic structures in organizations. These analytical lenses regard management teams as social systems capable of developing social meaning and routines which have impact on the attitude formation and behaviors of organizational members. Employees identify team management with values and meanings which they commit to, and they therefore regard team management as management type they want to be guided by.

Focus on organizational and situational factors builds on the notion that individuals are adaptive organisms in the sense that we adapt attitudes, behavior, and beliefs from our social context. Organizations and their structures constitute distinct contexts that may constrain attitude formation and behaviors. This notion directs to the inevitable conclusion that one can find out most about individual attitudes and behaviors by studying social environment of the organization within which these attitudes and behaviors take place and to which

organizational members adapt (cf. Salancik and Pfeffer 1978). A central argument in this study is that management teams at department level goes beyond being a merely formal element in organization, since team management is also a social element which can take various forms which influence constructions of attitudes and behaviors in an organization. A hospital conducting a more hierarchical and traditional management structure is also included in the study in order to control for the results. That is, if these hospitals report the same extent of satisfaction and commitment among their managers and subordinates, the implications are that different management structures may create the same conditions for attitude formation.

A starting assumption in this project is that team management may affect the extent to which employees are satisfied in their job. This assumption is related to the arguments developed by applying instrumental and institutional lenses. In this way it was called attention to some of the distinguishing features of team management such as: representation, participation, and identification. These are the conditions that I argue may affect attitudinal measures as satisfaction and commitment of workers. Consideration of representation and participation as antecedents to job satisfaction are in line with research on participative management (cf. Wagner 1994; Spreitzer, Kizilos et al. 1997; Kirkman and Rosen 1999; Kim 2002). Within this approach it is pointed out that the main issue of the quality-of-life movement are enhancing employee satisfaction, improving intrinsic motivation, and helping employees to feel good about their work and jobs, and thus, job satisfaction was one of the first expected outcomes of empowerment (Kim 2002:232). On one hand, participative management is in principle not equivalent to a formally established team management structure, since participative management rests on a basic conjecture that managers who share their decision-making power with employees will enhance performance and work satisfaction. When it comes to participative management it is more about a kind of management style that some managers believe in and therefore practice, and ultimately in this study how employees perceive this management style. On the other hand, participative management may in practice take form and function in much of the same way as a formalized team management structure as it is measured based on participation through practices of involvement in strategic planning processes, and the degree to which workers perceive their managers as employing a participative management style. Finally, in the study of participative management of Kim, participative management is understood as degree to which workers find their communication with their supervisors are effective. It is furthermore hypothesized that workers who score high on these measures of empowerment are likely to express higher levels of job satisfaction.

64

The findings indicate that all three measures, as assumed, increased the level of job satisfaction. In the concluding discussion it is drawn attention to the importance of conducting research on job satisfaction, despite lack of evidence of the relationship between satisfaction and performance, because there is consistent evidence that low levels of satisfaction results in absenteeism, reduced commitment to organizations, turnover and stress. Thus, it is vital for research to clarify the factors affecting employees' job satisfaction in the context of organizational environment changes (Kim 2002:236).

In a study of Macy, Peterson et al. (1989), in which they test participation theory in relation to organizational efficiency, and the quality of work life operationalized through for example job satisfaction. They allude to prior definitions of participation as inadequate and non-theoretical based. They define participation in structural and interpersonal terms:

> "Participation implies a system of management in which all members influence organizational decisions. Participation, therefore, means that employees at lower ranks exercise some legitimate control over decisions along with managerial control" (Macy, Peterson et al. 1989:1104).

Participation may be direct, all members entering into the decision-making process, or indirect through elected representatives. It may also be extensive in its implications and may concern decisions about organizational policy and profit, or it may be limited to specific decisions about work assignments or work methods on the shop floor. On the one hand, structural participation refers to involvement in terms of instrumentally based means like formal structure explicitly creating decision-making procedures or structures through which members contribute to decisions. In this thesis it is argued that management teams may be an example of such a formal structure. Because, by formalizing team management it is created an arena in which different professional groups are represented, and in this way they are given ability to participate in decision-making processes. As a result of letting different professional groups into management it is argued that employees to a greater extent identify themselves with managerial decisions. Hence, characteristics of teams such as representation, participation, and identification are maintained to affect attitudes such as job satisfaction. On the other hand, interpersonal participation signifies a system in which superiors are personally responsive to the ideas and suggestions of subordinates. Based on formally defined procedures this kind of participativeness is informal in the sense that it is not defined in the charter of the organization (Macy, Peterson et al. 1989).

3.1.1   Assessing Job Satisfaction

When it comes to operationalizing and measuring job satisfaction it is common to distinguish between global measures and facets of satisfaction (cf. Spector 1997). A global measure of job satisfaction refers to how satisfied workers are with their job in general, whereas facets of job satisfaction refer to degree of satisfaction related to specific aspects of a job. According to Spector (1997:2-3) the global approach is employed when overall or bottom line attitude is of interest in relation to other variables, whereas facets of job satisfaction is employed to detect which parts of the job produce satisfaction or dissatisfaction. According to Fincham and Rhodes (2005:218) it is also possible to combine facets measure of job satisfaction to produce global satisfaction measures. In this project I combine a global and a facet measurement of job satisfaction as I adapt the Hackman and Oldham (1975) scale, which in its originally form covers both facets such as growth, pay, security, social, and supervision, as well as general measures (Spector 1997:17). One advantage by employing such an established measurement of satisfaction is that it is carefully developed and its reliability and validity have been ascertained throughout many studies. I have adopted parts of the Job Diagnostic Survey (JDS) scale, on which the respondents indicated the extent of their agreement with each item on 5 point Likert scale (1 = strongly disagree, 5 = strongly agree). The scale used in the survey involves items regarding job dimensions and affective reactions to the job like 1) tasks: The extent to which employees are satisfied with the tasks they have now? 2) Feedback from agents: To what extent do you get recognition for your work? 3) Social interactions: To what extent are you satisfied with the social environment? 4) Opportunity for personal growth and development on the job: Do you think you have too little responsibility according to your competence? 5) And last, general satisfaction: All in all, to what extent are you satisfied in your job?

3.2 Organizational Commitment

Organizational commitment refers to the psychological attachment of the employees to their organization. It concerns the intensity of the employee's identification with and involvement in a particular organization[32]. According to Mowday et al. (1979) it is distinguished by three factors: (1) a strong belief in and acceptance of the organization's goals and values; (2) a willingness to employ considerable effort on behalf of the organization; and (3) a strong desire to maintain membership in the organization. In this way commitment expresses the degree to which members have an active relationship with the organization and are prepared to make an effort to facilitate the success of the organization. Despite the fact that individuals will be committed to other collectives such as their families or sports clubs, the organizationally committed individual will be apt to exhibit the three established behaviors identified above in a professional organization. Thus, organizational commitment is argued to be a more comprehensive and affective dimension that refer to the organization as a whole, as opposed to job satisfaction which is limited to the job of the individual and certain facets of the individual's job (Mowday, Steers et al. 1979). However, not unlike how I have described research on job satisfaction previously in this project, is commitment often described in the same way:

> "The concept of commitment in the workplace is still one of the most challenging and researched concepts in the fields of management, organizational behavior, and HRM" (Cohen 2007:336).

As regards the relationship between job satisfaction and commitment, this is an association which has been addressed in the literature (cf. Glisson and Durick 1988:61), when they point out how difficult it has been to clarify how job satisfaction and commitment are connected with each other. The discussion has (for one thing) regarded the direction of the causality between the two attitudinal dimensions. Williams and Hazer (1986:219) have argued that despite the vast number of studies on how attitudinal dimensions affect behavioral outcomes

---

[32] The content of commitment is not that different from what Lægreid and Olsen (1978:25) referred to as *socialization* when studying what influenced decisions of civil servants in Norwegian government offices. In this study, socialization referred to the capacity of an organization to efficiently conveying norms, viewpoints, and apprehensions that are dominant in the organization to new members through training and daily work routines. If an organization has "strong mechanisms of socialization" the need for management through other formal structures decreases. Commitment in many ways describes the outcome of this socialization process because it expresses the affective relationship between organizational members and the organization. This indicates that commitment is connected with the normative and constructive elements in an organization.

such as turnover, this research has not contributed sufficiently to increase knowledge regarding the causal relation between job satisfaction and commitment. This lack of contribution is explained by alluding to that either job satisfaction or commitment most often have been separately studied in relation to turnover. They aimed at being conducive to expand knowledge concerning the relationship between job satisfaction and commitment, and thus, anticipated that job satisfaction was a causal antecedent to commitment. Through analysis their anticipation was strengthened, since individual and organizational characteristics only affected job satisfaction directly. Commitment was only influenced indirectly through impact on satisfaction (Williams and Hazer 1986:228). Others have nevertheless found that commitment is a precursor to job satisfaction (cf. Bateman and Strasser 1984; Glisson and Durick 1988), or that there exists no causal relations in either directions between these dimension (Glisson and Durick 1988). Based on previous research it seems it seems difficult to make any clear assumptions regarding how job satisfaction and commitment correlate, this is however not the main task of this thesis either. The analytical focus is rather directed to considering how team management affects the two dependent attitudinal variables. Whether or not, and how, the attitudinal variables correlate is an open question which will be

However, when it comes to how organizational commitment has been defined and measured, it is evident that conceptual agreement is lacking (cf. Mowday, Steers et al. 1979; Reichers 1985; Allen and Meyer 1990; Cole and Bruch 2006). Despite these disagreements regarding the conceptual interpretation of organizational commitment, some tendencies on which one agrees are recognizable in the literature. One of these tendencies is the distinction made between committed-related *behaviors* and committed-related *attitudes* (Mowday, Steers et al. 1979; Reichers 1985). Commitment in terms of behaviors means that attention is put on the process by which individuals are bounded to behavioral acts. According to Caldwell and O'Reilly (1981) behavioral commitment is conceptualized on the basis of the assumptions that individuals attempt to settle inconsistencies between behaviors they perform and attitudes they hold, and furthermore, that the result of commitment is to make an act or behavior less changeable in such a way that people proceed by acting in accordance with previous behaviors. The point is that acts that are performed and bounded in an organizational setting cause greater commitment than acts that are made based on extrinsic causes such as pay or coercion, because individuals that act voluntarily tend to retrospectively explain their behaviors in positive terms and be more committed to this course of action. Contrary, commitment related to attitudes refers to cases in which the identity of a person is linked to

the organization, or when the goals of the individuals and the organization become congruent and integrated (Caldwell and O'Reilly 1981). Much of the research and measurement of attitudinal commitment, as established in the section above, draws upon the work of Porter and Mowday (1979). The distinction between attitudinal and behavioral approaches is reflected in the research traditions that have been associated with each. In the attitudinal approach the focus has been on:

> "[i]dentification of the antecedent conditions that contribute to the development of commitment and the behavioral consequences of this commitment []" (Meyer and Allen 1991:62).

Whereas in the behavioral approach attention has been directed to:

> "[i]dentifying conditions under which a behavior, once exhibited, tends to be repeated, as well as on the effects of such behavior on attitude change []" (ibid).

The lack of conceptual agreement regarding the definition and measurement of organizational commitment is criticized for being deficient in precision and for concept redundancy. However, Allen and Meyer (1990; Meyer and Allen 1991) argue that both definitions result in different ways of measuring the dimension that reveals one of the three general themes: affective connection to organization, perceived costs related to leaving the organization, and obligation to remain with the organization. These are referred to as *affective, continuance, and normative commitment* respectively. The communality of these themes is that they regard commitment like a psychological state, as referred to in the introduction of organizational commitment. Affective commitment, like attitudinal-related commitment, calls attention to an affective or emotional orientation of individuals toward the organization expressed through identification and involvement in the organization (Meyer and Allen 1991). The most common way to measure affective commitment is to employ the Organizational Commitment Questionnaire (OCQ) developed by Mowday, Steers et al. (1979). The perceived costs with leaving the organization tends to be included under the behavioral commitment category, because both of these emphasize the likelihood of continuing a course of action (Meyer and Allen 1991). It refers to situations in which commitment is assessed based on a consideration of costs and benefits associated with organizational membership. This type of commitment manifests itself for example when something of importance to individuals, e. g. pension or insurance, becomes contingent upon continued employment in a particular organization. This means that a person in certain situations will draw up a balance sheet between the "profits" associated with staying in the organization and the "costs" associated with exiting the organization. Some has made use of the term "calculative" when describing commitment

based on this consideration of costs and benefits connected to organizational membership (Meyer and Allen 1991). Lastly, the normative element infused in some definitions and measurements of commitment views commitment as an obligation to remain with the organization. This obligation is not affective like the attitudinal, but it rather calls attention to how a match between the behavior of some individuals and the goals and interests of the organization they are member in is based on the individual's moral conviction that this is the right thing to do. This way of defining and measuring commitment has however not received a great deal of attention in the commitment literature (Meyer and Allen 1991), and it will therefore not be a part of the definition or measurement of commitment in the thesis either.

Therefore, I subscribe to the affective commitment approach, and employ OCQ to measure the affective attachment of the employees to the hospitals their working in. The reason for following an affective commitment path rests on the acknowledgement of organizational commitment as the relative strength of an individual's identification with and involvement in a particular organization. This involves that commitment is characterized by at least three factors (Mowday, Porter et al. 1982:27): (a) strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization. Defining organizational commitment in this fashion suggests that it is something more than a passive condition expressing the loyalty to the organization. Rather it suggests that this loyalty towards the organization comprises an active relationship with the organization (ibid) in which the individuals are inclined to make an effort in order to facilitate the success of the organization. Obviously, this definition of commitment does not prevent the individual being committed to their organization from also being committed to other social collectives such as families, trade unions etc. It is however important to notice that the cut between an attitudinal and behavioral approach to commitment is not so clear in practice. It certainly also makes it reasonable to consider commitment as an attitude which may be enhanced or hampered based on situational and organizational conditions. Two of the OCQ items assess the employees desire to maintain organizational membership such as: I would like to spend the rest of my career with my present employer, or I would like to continue to have the present position. These are close to an intention to quit or stay items which again are predictors of turnover (cf. Reichers 1985). This makes the distinction between attitudinal and behavioral commitment less clear than first established, because the definition comprises both the construct and its effects.

Commitment has been approached by directing analytically attention to various antecedents to it. First, in tandem with job satisfaction, commitment has also been associated with worker attributes like personality, personal needs, and values as explanatory impetus for degree of organizational commitment (Glisson and Durick 1988). Personal characteristics have involved age, tenure, educational level, gender, race, and various personality factors (Mowday, Porter et al. 1982:30). Secondly, commitment has been associated with employee roles and job characteristics. Job scope or challenge, role conflict, and role ambiguity are all aspects of work roles that significantly have influenced level of commitment. The basic assumption regarding job scope is that increased job scope augments the challenge employees experience and thereby increases commitment. Built-in in this assumption is a presupposition that employees are supposed to respond positively when provided with more challenge in their job (Mowday, Porter et al. 1982:32). Third, during the 1980's a new realm of antecedents was developed in that the influence of organizational structures on commitment was stressed. Embedded in this organizational structure perspective management has been considered and found as a valid predictor of commitment (Glisson and Durick 1988:67). In this project it is this third approach to commitment which is given analytically priority. This does however not mean that the other approaches not are deemed to have any explanatory power in relation to commitment. It rather purports that expression is given to situational and organizational factors when it comes to detecting how team management affect attitudes of employees and managers.

3.2.1 Assessing Organizational Commitment

In this thesis commitment is measured by combining items developed in the scales of Mowday, Steers et al. (1979) and Allen and Meyer (1990). Respondents were asked to locate their answers on a 5 point Likert scale on which 1 signifies that one strongly disagrees, and 5 indicates strong agreement. The items adopted to the scale of the questionnaire are: 1) I would like to spend the rest of my career by my present employer; 2) I enjoy discussing my organization with people outside it, 3) I will engage in promoting the concerns/issues of my organizations, 4) to work for this organization is meaningful for me, 5) I am proud of being a part of this hospital, and 6) I would like to continue in my present job.

3.3 Connection between Team Management and the Subjective Outcome Dimensions

In this chapter, I have paid most attention to studies of the subjective outcome dimensions in general, e.g.: definition of the concepts, scale developments, and antecedents to job satisfaction, commitment and professional training, it is now time to concentrate on how these dimensions have been approached in the team literature. The focus of this examination of team literature concerns team management in particular, and it is a main task to detect how teams may affect the subjective outcome dimensions. In chapter 2 it was established that subjective outcome dimensions are mostly studied in connection with teams on lower levels in organizations as the TMT literature typically directs attention to objective outcomes, and I therefore have to consider literature regarding teams on lower levels in organization. Still, teams with managerial responsibility do not only exist on top level of organizations, but also on lower levels in organizations such as on department and unit level. A distinct literature on management teams on lower organizational levels does not exist, as it does for the TMT literature, this may be due to the assertion that fewer studies are conducted on management teams on lower levels than on TMTs. Literature on lower level teams is more fragmented as it concerns different types of teams that function in organizations.

These issues that I have listed concerning the team literature indicate that it is difficult to describe the form of the connections between management teams and subjective outcome dimensions. Still, the relationship between teams and attitudinal outcome dimensions is well established in organizational literature (cf. Cohen and Bailey 1997). One issue that Cohen and Bailey (1997:269) point out as important is the division between different levels of outcome in the team literature. TMT literature is characterized by employing objective measures on organizational level like for example organizational performance, whereas studies of lower level teams such as work teams and parallel teams[33] tend to focus on a combination of objective and subjective measures of *team level* outcome indicators (Cohen and Bailey 1997:248). These studies of work teams and parallel teams furthermore reveal that team work operationalized through substantive participation and autonomy indicate a positive impact on attitudinal measures such as satisfaction and organizational commitment of team members (cf. Cordery, Mueller et al. 1991; Weisman, Gordon et al. 1993; Cohen and Bailey 1997). In these

---

[33] Work teams refer to continuing work units responsible for producing goods or providing services and parallel teams are composed of people from different work units or jobs to perform functions that the regular organizations is not equipped to perform well (cf. Cohen and Bailey 1997:242).

studies are however not satisfaction and commitment outside the team relevant since they do not consider how teams affect other employees in the organization. In this thesis it is yet relevant to consider both how management teams affect subjective attitudes of team management members as well as of employees being managed by the teams. This is based on the assertion that management teams may be distinguished by degrees of representation, participation, and identification which may influence not only the management members' satisfaction and commitment, but also the attitudes of the subordinates being managed by the management teams in the organization. The exclusive interest in subjective outcome measures[34] relates to an urge to exploring how team management function and affect managers and employees in an organization in view of the wide credibility the team concept has earned as organizational tool in western cultures. In light of this it would be interesting to explore if team management makes a difference in an organization in terms of how it affects satisfaction and commitment of managers and employees.

It is furthermore common in management studies to explore how management affects subordinates, but in studies of teams it is more common to study how the teams are affected on team level (cf. Cohen and Bailey 1997), either in terms of overall team task performance, level of conflict among team members, or along attitudinal dimensions such as satisfaction and commitment of team members. In this thesis I seek to map satisfaction and commitment of subordinates of the management teams in addition to satisfaction and commitment of team management members. Outcome is in other words assessed along both team- and underlying employee level.

3.4   Assumptions for Analysis
In this section the aim is, based on the examination of subjective outcome dimensions and team management in this and the previous chapter, to work out some assumptions concerning how job satisfaction and commitment may be affected by team management. The intention is to propose assumptions for analysis, rather than to create stringent hypothesis that should be verified or falsified through analysis. As I have sketched up modernism and constructivism as fundamental analytical tools when approaching team management it is innate to also draw on these tools when constructing assumptions for analysis, in addition to the insight regarding the

---

[34] This means that objective measures are not paid analytical attention in the thesis, which however not means that the objective measures are not considered as important variables. Indeed they are, as they offer objective and vital information concerning how organizations perform.

subjective dimensions worked out in this chapter. The analysis of how team management affects job satisfaction and commitment has an explorative character. It is explorative in the sense that effects of lower level teams on outcome has earlier mostly been studied on team level by mapping the team members objectively or subjectively evaluation of the teams' performance. In this study is the influence of team management on job satisfaction and commitment studied by asking both team management members and employees being managed by the team concerning these issues. In this way the study also concerns conditions outside the teams.

Attitudinal dimensions have been approached by directing attention to a variety of properties that may have impact on how people perceive their job: a need-satisfaction model, a value-satisfaction model, a dispositional model, and lastly the organizational and situational context of work. Whereas the three first of these models emphasize explanatory factors that direct attention to individual attributes of organizational members and how these affects level of satisfaction and commitment, the fourth model is more concerned with situational and organizational factors. I have argued that team management amount to defining the situational and organizational context, and thus that a contextual perspective is relied upon to account for job satisfaction and commitment of organizational members. But with respect to the other models which has been called attention to in the literature when accounting for the dependent attitudinal variables, an important analytical question concerns the degree to which such contextual factors contributes to explaining level of satisfaction and commitment in the organization under study? According to the models advocating individual attributes as main constraints on organizational members' level of satisfaction and commitment, would contextual factors comprising team management not play a key role in defining the scores of organizational members on attitudinal dimensions. Contextual factors such as team management would be accused for being a too distant contextual factor in relation to individuals' perception of their job and their degree of commitment to the organization. Based on this it is apt to propose that: team management may not contribute to explaining variation on attitudinal dimensions? Simply because other factors are more imperative in regard to give reason for individual attitudes in an organization. To solely base the analysis on the proposition that the contextual perspective, on which I base the analysis of how team management affects the attitudinal dimensions, and not account for the outcome variables, would however be odd since I throughout the thesis argue that team management affects job satisfaction and commitment. So there is to expect that the next propositions views team

management as affecting satisfaction and commitment. Moreover, based on modernism and constructivism I have argued that team management can be expressed in two fundamental different ways in organizations. It is nevertheless important to keep in mind that these are analytical tools applied in this study. This is stressed in order to make clear that (all) the analytical assumptions and conditions maintained within instrumental and institutional approaches respectively, are not directly transferable and recognizable in the organizations under study. When team management is approached through instrumental and institutional lenses it is not done deterministically with the aim of unveiling the same sort of variation and direct connections. Modernism and constructivism are rather utilized as analytical tools to approach, comprehend, and interpret the functioning of team management in relation to job satisfaction and commitment.

The perception of team management in the modernistic perspective regards team management as an instrument organizations implement to improve efficiency and goal achievement. In order to actuate organizational tools such as team management they are implemented into the formal structure of the organization since formal structure above all is regarded as constraining organizational behavior (cf. Scott 2003). In chapter two, obvious characteristics in formal structure for organizations conducting team management were pointed out: several of the professional groups are formally represented and enabled to participate in management. Since there is a broader representation of professional groups in management, it may mean that managerial decisions should be based on overall consideration since more professional groups participate in decision-making and have a chance to impact on managerial decisions, and hence, that a broader spectrum of professionals would find decisions well-considered. Based on a modernistic approach to team management one may assume that team management is introduced in an organization as an instrument with the purpose of increasing job satisfaction and commitment in the department. Taking a modernistic perspective as a starting point regarding team management and how it will affect subjective outcome measures, leads to a research question assuming a straight-forward relationship between team management and attitudinal dimensions which can be expressed in a question: team management will (strongly) affect level of satisfaction and commitment among managers and employees compared to departments conducting hierarchical management?

According to the insight of the social constructivist approach to team management and its relationship with attitudinal dimensions, the relationship between team management and job

satisfaction and commitment is assumed not to be as strong as expected within the modernistic approach, and more fluctuated than when following a modernistic thinking. Following the logic in constructivist institutional theory, team management is regarded as being a constructed symbol which takes form through normative and informal structures in the organization. The background for implementing team management subsequent to this perspective is not referred to as a rational instrumental choice for goal achievement. Organizations may rather implement team management because this management model is a symbol that organizations demand to demonstrate affiliation to values like efficiency, rationality, and renewal (Røvik 2007:51). It is not only organizations that associate team management with these positive values. The trend is also noticeable among most communities and people in western culture: people seem to prefer more democratic management models like team management at the expense of more hierarchical inspired management models. Despite these positive associations with team management, institutional theory contrarily points to how structures like team management could be inefficient regarding goal attainment (cf. Meyer and Rowan 1977). In these situations it may happen that the organization adopts team management into formal structure, but that the management conducted in practice varies from these formal structures dependent upon the practical and technical requirements of the task at hand in the different departments. However, newer institutional contributions have pointed out the need for paying more attention to how the adoption and implementation of new structures evolve inside organizations, and how this may affect functioning of new structures before concluding that newly implemented structures are decoupled from organizational practice. Because, when organizations employ structures like for example team management they give the concept of team management a specific meaning when they translate, interpret, and/or adopt it according to the local context of the specific organizations with its department and units. This means that the idea team management may appear in different local variants according to which organization and department one approaches. It is more open how this variation in team management may affect job satisfaction and commitment of managers and employees. Following an institutional perspective it is opportune to assume that the connection between team management and the subjective outcome dimensions are weaker and more fluctuated since team management may function differently. This assumption may be summarized in a question: the connection between team management and subjective outcomes is more varied according to different local versions of team management?

Another point made in chapter 2 concerning team management approached through institutional lenses, which may further support the assumptions made according to an institutional perspective, was that the management teams may have a symbolic effect both inside the management group but also outside the team. Because, management teams could signify a greater degree of representation and participation of different professional groups in management, which may create a greater extent of identification with managerial decisions among professional groups which had been a constant challenge in Norwegian hospitals. At the same time it was called attention to that team member representing their professional group may develop a certain management entity symbolizing managerial values that do not apply to professional values of the subordinates on the shop floor. In this way, it is possible that team management members report a great degree of satisfaction and commitment because the management team provides them with situational factors that are beneficial to subjective outcome dimensions. And contrarily, that subordinates on the shop floor experience the integrated management teams and its' values as opposing to their professional values, and hence, job satisfaction and commitment are negatively affected.

I will now turn to methodical issues in the study.

4 Methodical Approach

In this chapter, the aim is to account for *what* data I have collected and *how* the data is collected. A key concern in this regard is to point out what specific methods have been used, as well as to indicate how these procedures became relevant as the course of the research conduct developed. The research question concerns how team management in mental departments affects the subjective outcomes of both team management members and subordinates. I have collected quantitative data in order to answer these research questions, and the analysis is mainly based on quantitative data. In addition, qualitative interviews have been conducted. The reasons for conducting this approach with qualitative interviews and questionnaire which was concluded with statistical analysis are multifaceted. The purpose is to give reasons for how the work with the research phenomenon of team management, its context in hospitals, and the development of the research question resulted in the use of different practices of data collection. For example, I started out with one case, i.e. the team management case, as the hospital that conducted team management was the contractor. However, one of the first things I saw after assessing team literature and detailed statements regarding management in Norwegian hospitals was that team management was often referred to as a management model opposed to traditional management. In this manner, I got the idea that team management could be contrasted with other management models. I begin by, describing this development from one to two cases.

4.1 From One to Two Cases

As mentioned in chapter 1, the selection of the team management case is a result of this project's character as a contract research project initiated by the contractor and representatives of the University of Tromsø. This project originated in the eagerness of contractors and organizational researchers to investigate how team management affected managers and employees at UNN. This was based on the reflections of some of the contractors working in UNN, who also had experience from the time before 1990 when UNN conducted a more traditional and hierarchical type of departmental management. These reflections were conveyed to researchers and the project was initiated. The character of this project as a contract research project has, in other words, provided the premises that team management and mental wards at UNN should constitute the main theoretical and empirical parameters for developing the research design of this project. In this manner, team management and UNN became essential for the project.

As I applied for and was granted this project, my knowledge about team management and the current research on management in health care organizations was scarce. When I started out in this project a prime task to me was, on the one hand, to absorb the necessary information concerning team management and what current research on this topic was concerned about, which I lacked. On the other hand, I was eager to become acquainted with the specific organizational field in which team management was practiced and what current research on health care organizations had brought into focus. I discovered that the contributions on different types of team in the literature were countless. Since management teams were the focus of analysis in this dissertation, I narrowed my readings to this specific type of teams.

From coverage in the media, I certainly knew that hospital management, with their constant efficiency challenges been a subject of political and professional debate for decades. The Norwegian authorities prepared several detailed statements on these topics and conducted public reforms concerning management. In order to acquire more knowledge on management in hospitals these detailed statements became natural sources of information. What caught my attention in one of these statements[35] was the constant comparison between the different management models in Norwegian hospitals, and how a formalized team management model was pointed out as preferable at the departmental level as opposed to the then-prevailing traditional hierarchical model in Norwegian hospitals. I pondered on whether it would make any difference in organizational practice whether the management was formally organized in either of these ways. In my conversations with informants in the team management model who also had worked within a traditional management model and who constantly throughout interviews and informal conversations compared team management with their former management model (hierarchical management), I was led to the question: what would the opposite management model mean in practice? And furthermore, would it make any difference on outcome whether team or hierarchical management was conducted in practice? In sum, I was inclined to compare team management with another management model, and in this manner a second case arose, that of the traditional hierarchical management. I started to investigate whether any hospitals in the region had utilized such a hierarchical management

---

[35] The statement referred to here is the "The Patient First!" (NOU 1997), which was a preparatory work in advance of the reform putting the legal demand for unitary management into practice, as was mentioned in chapter 1. The Ministry of Health and Social Affairs had requested this report and appointed the committee to prepare it.

model, and I discovered that Nordland Hospital in Bodø, organized management in line with such formal structures. Bringing the second case into the study enables me to consider whether team management makes a difference on the subjective outcome measurements according to traditional management, both for managers and employees, in the two management cases. Now, I will account for the design of the study.

4.1.1 Selection of Cases: Application of the "Most Similar" Systems Design

In this study a comparative design is applied. According to basic elucidations on comparative design in the methodical literature, there are in principle two opposite strategies that are accessible when conducting a comparative study: the "most different" versus the "most similar" systems[36] design (cf. George and Bennett 2005:50-1; and Berg-Schlosser and De Meur 2009:21-f). In regard to this study which consists of two cases[37] that share a whole range of similar characteristics, it is the intention to examine whether or not one *specific theoretical variable*, namely management, creates *different* variation on two outcome variables. This signifies that it is the "similar system" strategy that is applied in this analysis. Furthermore, the selection of these cases is not done on the basis of a random sample of cases, but they are rather carefully selected due to their many common characteristics combined with the managerial distinction between them. The similarities between the mental hospital departments which empirically demarcate the management cases under scrutiny in this analysis are accounted for in chapter 4.2. Other vital control variables are included in the regression models so that the models should not be underspecified. This is done to avoid a situation in which team management and its effects are attached with greater importance than they have (Midtbø 2007). The other control variables are age, sex, permanent position, manager of decision-making processes, professional loyalty, participation in decision-making,

---

[36] The term system is used to designate a complex case (Rihoux and Ragin 2009:21). System and case are in this elucidation used synonymous.

[37] In the thesis, the origin of the main case in the thesis is sometimes referred to on the basis of its organizational boundaries. This may result in the inference that UNN is the case by virtue of being the formally structured *organization* UNN, and that the formal organizational boundaries limit the the case in scope. The case concept has however meaning beyond the the strictly empirical interpretation of it (cf. Ragin and Becker 1992:7-11). The basis for this research project is founded in the theoretical construct team management, and in this way team management demarcates the main case in the thesis. The meaning of team management as a construct has become more and more evident along the course of the project as the construct has faced empirical data, and theory and empirical evidence have challenged each other. When I began this project team management demarcated the boundaries of the project. I was open to study this concept also in the somatic wards in UNN, not only in the mental departments, and thus the empirical boundaries were not clear in the beginning of the process. As the course of the conduct developed in this project, team management has been demarcated in proportion to what has been regarded as empirical relevant.

legitimacy of decision, goals, support from manager, and decentralization of authority. Nonetheless, the specific interest in the team management model is not solely related to the fact that this management model contrasts the management model practiced at the other hospital in the study, because it additionally represents a break with the way management has been practiced for years in Norwegian hospitals. In this manner team management is a decisive case in regard to the practice of management in Norwegian hospitals in general, and in order to examine its relevance in practice it is compared to another case which represents the more common way to conduct management in Norwegian hospitals. The quantitative data collected by means of the questionnaire make it possible to demonstrate the *impacts* of team management on the subjective outcome dimensions. Whereas the qualitative interviews ensure that the impacts of team management may be examined more closely and that the time dimension is added to the cross sectional data. The informants can for example point out what kind of management models they have experience with in the hospitals they have worked in, how these different types of management affected the daily work in the hospital departments, and if and how team management is distinguished from former management models they have experience with. This may greatly enhance the "internal validity" of the observed relationships (Rihoux and Ragin 2009:22).

In contrast, the most different design implies that the sample of cases contains maximal heterogeneity, and the analytical point is to find the relevant similarity that explains a similarity in outcome. To compare cases in this manner accordingly eliminates all factors across the observed collection that is not linked to an identical outcome. Similar outcomes of the heterogeneous cases are like this linked to the remaining commonalities of the cases. The researcher is in other words searching for a set of vital common characteristics (theoretical variables) that may account for similar outcomes. Contrarily, the most similar method refers to cases which generally are characterized by sharing a set of similarities, but among these systems it still will be revealed a number of significant differences which can be employed in explanation. The advantage with this approach lies in the possibility to match these similar cases as much as possible at the same time as most of the variables can be controlled for. It rarely happens that a single factor remains to which the effect can be attributed, but at least by this approach many other factors may be eliminated, and the one which remains may be examined more closely in a theoretically guided qualitative manner (cf. Rihoux and Ragin 2009:22).

4.2   Brief Remarks on Institutional Background and Structure of Cases

In this section, I give an account of the team management and the traditional hierarchical management models under scrutiny in the thesis. But before I start the empirical outline of these management models, it will be necessary to demarcate the institutional context that contains these management models. Thus, I will now turn attention to the hospitals in which the two management models function.

Both the hospitals and their mental wards that constitute the data basis in the thesis are enterprises within the Northern Norway Regional Health Authority (NNRHA). In accordance with the enterprise structure, all public hospitals in Norway are subordinated to one of the four regional Health Authorities. NNRHA covers the three northernmost counties: Finnmark, Troms, and Nordland. The University Hospital of North Norway (UNN) in Tromsø and Nordland Hospital (NLSH) in Bodø are the largest hospitals within this region. UNN and NLSH differ when it comes to the formal status of the hospitals, as the hospital in Tromsø is a university hospital, and the hospital in Bodø is a general district hospital. This hospital structure is based on white paper nr. 9 (1974-1975),[38] in which the Norwegian hospitals were split into three main categories: regional hospitals, county hospital 1, and county hospitals 2. As a result of the hospital reform in 2002, the regional hospitals now have university hospital status, the county hospitals 1 are district general hospitals, and county hospitals 2 are local hospitals. The three different hospital categories differ according to size in terms of number of employees, average lay-time, share of immediate assistance, and share of physicians per bed (NOU 1997:chapter 5). These differences are especially pronounced between the university hospitals and the local hospitals, whereas the differences between university hospitals and general district hospitals are minor (ibid). Furthermore, the distinctions pertaining to specialization are particularly established in the field of somatic medicine. In the somatic wards the rule is that university hospitals have a higher level of medical specialization than general district hospitals. In practice this means that a vast number of patients with certain somatic diseases are transmitted from the general district hospitals or local hospitals to the university hospitals, because the former two do not have the prescribed medical specialization to treat the diseases of all patients. Such a functional organization is a trend that the health authorities have aimed at halting by emphasizing the need for increasing specialization within

---

[38] White Paper number 9 (1974-75): "Sykehusutbygging mv. i et regionalisert helsevesen" (in English: Hospital Expansion in a Regionalized Publich Health Service).

each individual hospital (NOU 1997:chapter 4.1.4.1). However, when it comes to mental sections, the university- and the general district hospitals share the same degree of specialization. The explanation for this lies in the historical structural development of the mental and somatic institutions.

Within mental health services there has been a belief in treating most patients close to their home environments, along with policlinic treatment (cf. NOU 1996-1997),[39] which has resulted in a geographic dispersion of mental health services. In 1961, 15 of the 20 counties in Norway already had "insane asylums" as they were referred to at that time. During the 1970s, psychiatric health care was restructured due to the sector principle, which split the counties into different geographical catchment areas. Mental clinics or wards were furthermore made responsible for providing services to the population of their specific catchment area. The rather extensive dispersion of mental hospitals and the division into geographical catchment areas within counties, combined with the emphasis on keeping the most specialized and competent psychiatric services in the university hospitals and general district hospitals, made the mental clinics highly equal and specialized in treating a broad range of mental illnesses within their geographical catchment areas.[40] Therefore, the formerly uniform psychiatric institutions Åsgård Mental Hospital in Tromsø and Nordland Mental Hospital in Bodø had, and still have, equal expertise and competence in treating mental illnesses. In accordance with the demands of the enterprise model of the hospital reform in 2002, they were incorporated into the University Hospital of North Norway (UNN) in Tromsø and Nordland Hospital (NLSH) in Bodø, respectively. The mental wards brought along their geographical catchment areas when they were incorporated into the somatic hospitals: mental wards at UNN have Finnmark and Troms, and NLSH has Nordland as their catchment area. In this way, the mental wards still have the same distribution among the mental diseases they treat and are

---

[39] This trend is not a particularly Norwegian trend, but it is recognizable in most western countries as a partial result of the critique of mental institutions during the 1970s, which led to the process of "deinstitutionalization" (cf. Schönfelder 2008:16-f for a more exhaustive explanation of the process of "deinstitutionalization"). The "deinstitutionalization" of mental health services led to the conclusion that mental patients are most effectively treated when they are in their home environment (Schönfelder 2008:17).

[40] University hospitals and general district hospitals are termed the third line in the Norwegian health care system. The line system refers to the three lines that make up the structure of the Norwegian health care system: 1) the primary health- and social service that encounter the patients close to their home environment, 2) community mental health centers which makes up the new priority area in the modernization of the psychiatric services (NOU 1996-1997), and 3) university hospitals and general district hospitals. Giving priority to the community mental health centers is related to the aim at decentralizing psychiatric services so that patients are treated close to their home environment. Furthermore, community mental health centers are indeed as the connecting link between the municipalities and the third line.

therefore equal in terms of medical specialization and competence. UNN has three mental wards for adults[41]: the Department for Special Psychiatry, Department for General Psychiatry, and a Community of Mental Health Center for Tromsø and its neighborhoods. The Department for Special Psychiatry has four inpatient units: two for safety psychiatry (each holding 8 beds), one for old-age psychiatry (14 beds), and one for drug-related problems (8 beds). General Psychiatry has four inpatient units: two emergency units (with respectively 13 and 10 beds respectively), and two temporary units (with 12 and 11 beds respectively). In the Community of Health Center, there is one emergency unit with a capacity of 10 beds.

NLSH has two psychiatric clinics: Salten Psychiatric Center and the General District Clinic for Adults. At Salten Psychiatric Clinic, there are four departments: the Department for General Psychiatry, Department for Emergency Psychiatry, Department for Adult Psychiatry and Department for Rehabilitation. The General Psychiatry department has two bed units with 12 beds each and Emergency Psychiatry has one with 10 beds; both departments are included in the study. The General District Clinic for Adults is larger with five functional departments: Emergency Psychiatry, General Psychiatry, Old-Age Psychiatry, Rehabilitation, and Habilitation. The Emergency and General Psychiatry departments are units of analysis in the thesis. In Emergency there are two units of 10 beds, and in the General psychiatry there are two units that contain 12 bed-ridden patients each.

The incorporation of uniform mental hospitals into the somatic hospitals involved building the mental hospitals into the existing hospital structure as clinical mental departments or as mental clinics. The structures in which the mental hospitals were incorporated have their distinct character, and thus differ in terms of how the mental hospitals are integrated and structured according to organization and management. I will now describe the organization of management in the mental wards at UNN, and then the organization of management in the mental wards at NLSH is organized.

---

[41] However, this department structure is currently undergoing a process of change at this point in time (April 2008). During the autumn of 2007, a change process named LUO (Long-term development and reorganization at UNN) was initiated. The Board of the hospitals approved the new organizational model for the hospital that the project group had come up with on December 17, 2007. Central in this restructuring process was a transition from the department structure on the hospital to a clinic structure. This transition started on March 31, 2008 and is ongoing. In relation to the mental wards, this meant that there were two mental clinics: the Clinic for General Psychiatry and DPS (Community Mental Health Center), and the Clinic for Substance Abuse and Special Psychiatry. Subordinate to these clinics are the old departments, which still have a team management structure.

At UNN, management is conducted through interdisciplinary teams. This is a formalized structure that originated from the challenges the somatic hospital experienced during the late 1980s known as the "Tromsø conflict." The managerial position is in other words held by a management team. These management teams are composed of four members of different professions. The matter of which professional groups are represented in a management team depends upon the functional demands of each ward or unit. Usually, however, the chief physician, the head nurse, the chief psychologist, and the office manager are represented in the team at the ward level, and one of these holds the team manager position. The team manager is a position for which one has to apply, and the superintendent makes the appointment. The appointment of team managers is one way of complying with the legal demand for a unitary management. As a means of the larger hospital reform in 2002,[42] the legal rule requiring a unitary manager on every hierarchical level was put into practice in all public hospitals in Norway in January 2001. In practice, this means that the team manager is ultimately accountable for all managerial issues and decisions. However, medical responsibility is reserved for medical professionals, and in cases where the team manager belongs to other professions than the medical ones, the medical responsibility is delegated to the chief physician in the management team.

At NLSH the management in the wards is organized according to more traditional and hierarchical structures, in that the wards are managed by one office manager. This office manager constitutes the unitary accountable manager which is required by law. Office managers who belonged to the medical profession and were in these positions when unitary management was put into practice are still addressed as chief physician in the hospital. The office managers have the "old" unit nursing officer as support function. Such positions as unit nursing officers were decided to be removed as of January 1, 2001 (NOU 1997), but at NLSH these positions will exist until the staff holding them leaves the position. When a new staff is appointed for such positions, however, the positions will be renamed to advisor or administrative advisor. This advisory support function is developed according to how the office managers decide to exploit this position in their department. Most of the advisors contribute to the economic aspects of managing the ward, and some have consultant

---

[42] It was in 1999 (Law concerning Specialist Health Services 1999) that unitary management was introduced as the new management principle in Norwegian hospitals in the coming hospital reform.

functions, or they aid the nurses in charge of managing the underlying units when it comes to the procedures of appointments.

4.3   Qualitative Interviews: Purpose and Procedure

In the data collection, I have conducted qualitative interviews. The qualitative interviews were carried out at an early stage of the project and prior to the distribution of the questionnaire. This is connected with the multifaceted purpose of the interviews. One of the main purposes of the interviews was to come closer to an operationalization and design of team management and other effect- and outcome variables with which team management could be connected in order that this could be operationalized in a questionnaire. The aim in this subchapter is to give an account of both the purpose and structure of the qualitative interviews.

Qualitative interviews have as their key strength an understanding of the world through the perspective of the interviewee (cf. Kvale orig. 1997, 2008:17). When I began this project on January 1, 2005, my knowledge regarding both the concept and conduct of team management was scarce. A primary goal to me was therefore to get a better grasp of team management, theoretically and empirically. The second chapter of the thesis is the account of how I theoretically approached team management throughout the process and the outcome of this approach. I also read literature regarding how the detailed statements of different authority bodies, like the Norwegian Board of Health, related challenges in Norwegian hospitals to managerial issues, as mentioned in the opening chapter of the thesis. There was a lot of research on how Norwegian authorities have aimed at making health care organizations more efficient through public reforms and how these reforms affect practices on different levels in health care organizations. This literature was useful in the way it provided information concerning hospitals and their current problems. However, one of the first things I discovered in the relevant literature was that although there was agreement on the definition of the team construct, this did not offer any insight into how teams function in organizational processes and thus what a team can mean in an organization. To know that a team is a collection of individuals who are interdependent in their tasks, share responsibility for outcomes and regard themselves and other organizational members as a cohesive social entity did not reveal much about what role and implications the management teams I was going to study had in the organization under scrutiny. In addition to this, early in the project I studied literature regarding teams and their relationship with other theoretical effect- and outcome dimensions on order to come closer to a theoretical and methodological design of the study. But the

relevance of all of these dimensions in relation to the specific organization I was going to study and the research question I posed was yet not clear to me. In order to move forward in the project and to add more content to the team concept in the specific organizational context and its implications, I decided to conduct interviews with people who had experience with team management in the organization under study. An interview guide was developed prior to the conduct of the interviews.[43] An important aspect of conducting the interviews was to develop a questionnaire, and to ensure that the theoretical dimensions in this were going to be relevant both theoretically and empirically. Thus, the questions in the interview guide are open-ended, with a what-do-you-think-character. This is to ensure that participants are free to choose how they answer the questions and represent their points of view. The interview guide was followed in most of the interviews, but as I got more familiar with the interview situation and gained more insight into the phenomenon under study, the guide became less important during the interviews. In the spring of 2006, I was ready to conduct qualitative interviews and spend some time at UNN to get to know more about how management teams worked in the mental wards and what implications this had in the mental departments of the organizations. The next step was to establish contact with informants (managers) with the aim of getting access to conduct the interviews. I will briefly outline how this contact was established.

4.3.1   Strategy for Establishing Contact with Informants

First, this project is characterized as contract research, and some of the managers in the mental departments at UNN who initiated the project were key figures in regard to the project and in one of the mental departments at UNN. At the beginning of the project, I kept in frequent contact with the managers at UNN. In light of this, when it was time for data collection, I contacted these managers when I was going to establish contact with other managers and employees for both the interviews and the emission of the questionnaire. The two key figures are both department managers, and when the project started they had already made it clear that the project would be given access to several departments in their hospital. I presented the research project to all the department- and unit managers in their department at a meeting for all managers. In addition, the key figures told department managers at other departments about the research project. In this way, the word about the project was spread. In order to inquire about the other two department's participation, I directly contacted the management at department level and informed them about the nature and purpose of the

---

[43] The interview guide is enclosed in the Appendix of the thesis.

project. Most of them were enthusiastic and responded positively to my request. I think some of the enthusiasm can be explained by the fact that they had heard about the project from the other department manager, which made them confident about participating, so that they immediately allowed for me to collect data on their department too. After getting access from the department management, I sent them a description of the project, emphasizing the aim of the research, the overall research question, and the methods applied for collecting the data and what this implied for them.[44] The department management forwarded this description to the units, and two of them agreed to participate. Next, I contacted the two unit managers and arranged dates for interviews, and informed them about the coming questionnaire. I made it clear to all departments that the project would mean not only interviews, but also a questionnaire at a later time.

When I outlined the cases earlier, I described how the second case was discovered through both working with literature and informants of the team management case. The challenge of establishing contact was however bigger in this case than with UNN, since only a few managers at NLSH had heard about my project. My key informants at the mental departments at UNN recommended that I should contact the research department at NLSH regarding getting access to the hospital in Bodø. In February 2006, I telephoned the research manager in Bodø and asked about this access. The research manager introduced me to the guidelines I had to follow in order to get the hospitals' approval to conduct my data collection at the hospital.[45] After having the application approved, I directly contacted the two clinic superiors to in detail make an appointment about the qualitative interviews and further inform them about the project. In the application, I also described the subsequent questionnaire. When contacting the clinic superiors, I again mentioned the questionnaire to make sure that they were aware of it. This was also a good occasion to inform them about when and how the questionnaire was going to be handed out, and to let them pose questions about my research project.

---

[44] The letter describing the PhD-project that I sent to the department managers at UNN is enclosed in the Apendix.
[45] The guidelines asked for an application describing the research project; title, aim of the research and overall research question; the duration of the data collection; in which department the data was to be collected, etc. The research manager forwarded the application to the superiors of the two clinics I wanted to access, and the clinic superiors approved the application.

Additionally, I requested the participation of the specific departments and units at NLSH, which were the same departments and units I had requested at UNN. But it was up to the two clinic superiors at NLSH to ultimately decide which particular departments and units were going to participate in the project and to contact them about participation in the project. The clinic superiors then contacted me regarding which units and departments they had given their approval for participation in the project, and gave me the names of the particular department managers and unit managers to contact about interviews. All the departments I had requested agreed to participate. I first directly contacted the two department managers from each clinic, and then the two unit managers from each department of the clinic. Thus, I arranged six interviews with the clinic superiors, department managers, and unit managers of the two clinics in Bodø.

Discussions with the key informants at UNN and the two clinical superiors at NLSH helped me figure out who I was going to interview. It was important to speak with department managers and listen to how they regarded management with respect to their department. However, it was just as important to talk with the employees being managed of these managers in the two cases about how they experienced the management in their department. I therefore conducted interviews with department managers of two departments in both cases; in the team management case, this meant that all the members (eight persons) of the management team were interviewed. In the hierarchical management case, this meant that I interviewed two managers. In addition, I conducted interviews with employees (three employees in each case) who were managed by these managers in each case. The information sheet I had developed when contacting managers concerning the project and its purpose was handed out to the interviewees when the interviews started. It was made clear in this letter, and I informed informants orally at the beginning of each interview that their participation was voluntary, and if they found any questions inappropriate they did not have to answer them.[46] The interviews were finalized at the end of June 2006 in both UNN and NLSH, and the total number of interviews was 20.[47] As mentioned in the introduction to this subchapter regarding the purpose and procedure of qualitative interviews, the purpose of conducting interviews was multifaceted. After conducting and processing the interviews, the purpose of

---

[46] I also informed about that they could drop out from the interview at any time. All the interviews were recorded on tape. During and after accomplishing the interviews, I worked on transcribing the interviews.
[47] A year later, in the spring of 2007, I conducted 3 more additional interviews with employees to learn more about what they thought of the team management conducted in their department. This brought the total number of interviews to 23.

these interviews became clearer to me. When I began this project, my knowledge regarding both team management and the organizational context in which this type of management was practiced was scarce. Hence, the interviews turned out to be a great way to augment my knowledge, with respect to both team management and the specific context of hospitals along with the challenges that these public organizations have. The fact that I was going to conduct interviews got me started with studies of literature on teams, but I also started to revise the constantly growing research literature on health care organizations and the detailed statements regarding management in hospitals issued by official committees. In this way, I learned that management in hospitals had been at issue for years in Norway, and that the authorities had instituted several reforms in order to change the functioning of management and organizations to make hospitals more efficient. Prior to the interviews, I had the idea that the interviews would facilitate some of the theoretical dimensions that would be further issued in the questionnaire. As it happened, in addition to pointing out dimensions for the questionnaire, the interviews helped me see the relevance of distributing the questionnaire not only to team management members but to enlarge the population to also comprehend subordinates. For example, several team management members were explicit in stating that to organize management in teams is vastly superior to the models they had experienced earlier in hospitals. When I enquired further as to why they regarded it like this, they responded that decisions were made on a broader basis since several professionals participated in making decisions than what they had been used to earlier, and that to be part of a management team made them more satisfied in their job. This made me reflect on whether it was solely the managers who held this opinion, or if the subordinates also felt the same way. As a consequence, I perceived the usefulness of including subordinates in the group of respondents to the questionnaire. In this way, the interviews facilitated me having first-hand experience with how the management teams were shaped and how they worked. A year later, in the spring of 2007, after the completion of the data collection in the questionnaire, I conducted three additional interviews with employees to better understand what they thought about the team management conducted in their department. Hence, the total number of interviews is 23.

4.4   Quantitative Data Collection: Purpose and Procedure

As the main section of the analysis is based on quantitative data, I would like to elaborate on why this source of data is preferred. This includes a clarification of specific issues, such as the advantages of this technique for this project and its research question, how it has been conducted, and furthermore the challenges this course of conduct has involved. Just as the interviews were conducted for a large number of reasons, the decision to collect quantitative data was reached due to a multiplicity of considerations. When I applied for this project, it was clear that the contractors of the project from UNN and researchers at the University of Tromsø had worked on the possibility of basing parts of the analysis on quantitative data. At the same time, they alluded to the importance of methodological triangulation in the project, which indicated that several methodological approaches were relevant for the project in order to establish a solid database regarding team management in mental departments. Although the idea about collecting quantitative data and basing my analysis on statistical methods applied to me since I was familiar with statistical techniques, my task at the outset was to work out a robust methodological approach which suited the research question(s) I was working on at that point in the process. The research questions were then at a rather incipient stage as they at that moment in the project concerned, firs, what team management in different mental departments implied in practice, and second, how team management affected the outcome in these departments.

On the one hand, the intention was to use the interviews to come closer to answering to the former question, and to draw on the information regarding (team) management practices to answer the second question regarding their effects. This was important, since the literature I had reviewed up to that time often concerned teams on other organizational levels and in other organizational contexts. The literature was mostly quantitative, and it was concerned in large part with examples of teams in organizations representing distinct industries or organizational fields. To make sure that the questions I was going to pose to answer the latter research question represented theoretically relevant dimensions, it was important to talk with mental department employees who worked in or were in contact with management teams. On the other hand, the second research question regarding the effects of teams constituted the key question, as it still does, and it called for quantitative data collected by means of a questionnaire. For one thing, the advantage of collecting the data that required for statistical techniques in the analysis was to stringently demonstrate the effect of team management

91

while controlling for any effects of other relevant variables. This is a vital aspect of studying effects. With respect to this study, in which team management is compared to hierarchical management, it means that the specific effects of the management models may be demonstrated while controlling for any effects of other relevant variables inwards in the cases. Hence, another argument in favour of collecting data with a questionnaire relates to what previous research has done. In accordance with my analysis in chapter 2, in which parts of team research was shown to be pervaded by the logic and methods of a modernistic approach to organizations, contributors within team research often tend to base their analysis on statistical techniques; this is true for the top management team literature as it is for team research conducted in health care organizations. What distinguishes the approach in this project from previous research on TMTs is that I conduct a comparative study of middle management teams, which in addition to the team case, involves a hierarchical management case in order to demonstrate the effects of teams. This comparative character of the study, together with the assumption that team management could affect different organizational members differently, calls for an in-depth study of the two management cases. In-depth study here refers to the need for information regarding management from a broad range of organizational members, which is reflected in the data by including both managers and subordinates from several departments in the hospitals under study. A questionnaire appeared to be an optimal technique for gathering data from managers and employees in the several mental departments of the two mental hospitals. I will now account for the process and procedure of collecting quantitative data.

4.4.1   E-mail as Channel for Distributing Questionnaire

In this study, the questionnaire was prepared in a Questback file and distributed as an attachment in e-mails sent to the respondents. The advantage of using Questback in the data collecting process is the possibility of importing the data directly into SPSS. Furthermore, sending the questionnaire directly to a person's e-mail address can overcome the inherent weaknesses of distributing surveys by mail to organizations. When surveys are distributed by mail, it often happens that the addresses of the recipients are either lacking or are not their actual addresses (cf. Nerland 2005 for a discussion of these issues with addressing). On the other hand, however, distributing the questionnaire by e-mail to the respondents in the two organizations also raises some concerns of a technical and methodological character in the data collection process. Obviously, it is crucial that e-mail is an available resource for the respondents in the sample. This was a topic I discussed with some of the key informants in the

two hospitals, who informed me that e-mail was a commonly tool among the respondents in their daily work. I therefore regarded e-mail as a convenient medium for data collection. When these issues had been resolved, the next vital concern was the reliability of the list of e-mail addresses of the respondents. These issues of quality of e-mail addresses depended on the internal IT systems of the organizations under study which often vary from organization to organization. This variation of quality was evident in the two cases in my study. Even though the two hospitals are trusts in the same health enterprise and are served by the same IT department, which would normally indicate the same system of arranging e-mails, their systems were incompatible due to difficulties and delays in the process of coordinating the systems. At the first hospital, the e-mail addresses were arranged according to the ward and unit of each employee. This was an advantage, as the sample was based on a *selection* of specific wards and units. At the other hospital, the e-mail addresses of the respondents were only arranged in correspondence with the clinic in which the respondent was employed, and not classified according to wards or units within the clinics. Since there was no link between the e-mail addresses of the single employee and the ward and the unit in which he or she worked, it resulted in problems in distributing the questionnaire. This made it impossible to send the questionnaire to a restricted selection of personnel according to ward and unit.

To get past these problems, I submitted a written application to the human resource department (HR), requesting access to lists of employees according to ward and unit so that I could arrange the e-mail addresses myself according to requirements of the sample. The answer to this application was negative, because the HR department lacked a complete list of employees. I then had to look for other solutions for distributing the questionnaire. Basically, I considered two strategies. First, the questionnaire could be distributed to the managers of the wards and units constituting the sample, as I had their names and contact information. The managers could then be asked to convey the e-mail containing the link to the questionnaire to their employees. The drawback to this approach was that an "unnecessary" intermediary would be involved in the process, which jeopardizes the data collection process on several levels. For one thing, one would have to devote time and effort to involving managers of the wards and units. If the number of wards and units constituting the sample is relatively large, this job becomes time-consuming and the uncertainty about who receives the link is open to question. The researcher has to be sure that the managers forward the link to the respondents and that these are included in the accurate sample. Another crucial drawback is that letting the managers forward the link requires that the link is open to everybody all the time. This means

that respondents can respond to the questionnaire several times, since the Questback system does not have the ability to shut out respondents who have already completed the form. In contrast, when sending out the questionnaire directly to the e-mail addresses of the individual respondent, the link is accessible only to the owner of this e-mail address. When the questionnaire is completed, the link becomes inaccessible to the respondent. When this function of the electronic questionnaire is jeopardized, it affects the reliability and validity of the data. The option of a having a middleman was therefore not a satisfactory means of distributing the questionnaire.

The second strategy was based on the fact that I had the e-mail addresses to all wards and units in the two clinics. It was thus possible to distribute the questionnaire directly to every single employee's e-mail address. A filter could be installed on some of the first few questions of the form assuring that only respondents working in the wards or the units relevant to the sample could complete the questionnaire. If the respondents placed themselves in categories that did not match the selected sample of wards and units, they would get a message informing them that that they were not in the target group of the questionnaire, and thus they could not complete the questionnaire. The drawback of this approach is that all the employees have busy schedules, and hence some irritation could arise among those who received this e-mail, since they first were disturbed by the mail and then eventually they were not included in the sample. One way to prevent this situation is to inform the contact person. I made the contact person aware of this fact, and explained why I had to choose this procedure. The feedback I got was that it was not a big issue, since they were all continuously used to being "bothered" by e-mail questionnaires. This perception among managers in the organization, that employees are frequently "bothered" by questionnaires, was not the optimal circumstance in which to achieve a high response rate in the study. Another concern regarding this strategy which decreased my prospects of a high response rate, related to sending out a questionnaire to respondents, knowing that a relatively large part of them would fall out of the target group because they were not in the population after all. This, as well as the fact that the actual size of the population was unknown, indicated that the expectations for a high response rate had to be lowered.

4.4.2　Measurement and Scaling

To intercept and measure the individual's understanding of the theoretical dimensions relevant to the organization of management, scaled answer categories have been applied. The scales are constructed symbols – numerals – on which the respondents place themselves and thereby express their opinions about specific subjects. A scale is used for two purposes: to indicate a measuring instrument and to indicate the systematized numerals of the measuring instrument (Kerlinger and Lee 2000). The response categories in this study are mainly based on closed answer categories through five point Likert scales, except for the background variables categorizing personal and organizational information. The value 1 indicates to a very little degree, while 5 means to a very large degree on attitude questions.[48] On statements, 1 indicates that the respondent strongly disagrees, and 5 means that the respondent strongly agrees. The scales from 1 to 5 express the different degrees or agreement/disagreement, on which the respondents are free to place themselves. The main advantage for applying a five-point Likert scale is that it allows for agreeing/disagreeing or agreeing/disagreeing strongly, which allows for greater variance (Kerlinger and Lee 2000:454). This expression of opinion is narrowed if the response categories are reduced to two or three categories. A further advantage of the scale is its uniformity which makes it easier and faster for the respondents to complete the questionnaire. At the same time, the data preparation becomes easier and more reliable.

4.4.3　Pretesting, Adaption, and Distribution of Questionnaire

As I have mentioned, to compose and execute the questionnaire was, as I was told in advance, a time-consuming task. The process of designing the questionnaire started in the summer of 2006, and in January 2007 the first draft of the questionnaire was ready. Since it was the first time I had written a questionnaire, I was uncertain about its quality. Prior to its distribution, I therefore tested the questionnaire after appointment with a selection of employees working in both the hospitals and in the university. Three of them worked at UNN, two at NLSH, and three at the University of Tromsø. It was important to me to get feedback on the content and design of the questionnaire to ensure a respondent-friendly questionnaire and for the general quality of the outline. Therefore, I tested the questionnaire on practitioners at different levels

---

[48] There are some exceptional questions with different alternatives than to a very little degree, which constitute the main trend on the attitude question. The exceptions are rendered for reasons of accordance between various questions and answers, and are still scaled from 1 to 5. For example, questions concerning the quality of decisions are scaled from 1 to 5, where 1 indicates very badly and 5 indicates very well.

in the mental hospitals under scrutiny with insight in, for example, how the content and language would be understood by people in these organizations; in addition, I tested it on researchers who were experienced with the process of composing and designing questionnaires. I solicited their critical testing and comments on how they responded to the questionnaire in general, as well as such particular aspects like: 1) the formulation of the questions and whether or not they were easily understood, 2) how much time they used to complete the questionnaire, and 3) how they responded to the information sheet. These questions were posed on the understanding that if, for example, the information sheet accompanying the questionnaire underestimated the time needed to complete it; it could exasperate the respondents, which in the worst case would result in their discontinuing the questionnaire. Similarly, if the questionnaire contained a lot of ineptly formulated questions, and if respondents due to generally inadequate information did not understand how to answer the questions, it would also impede respondents' eagerness to complete the questionnaire.

The responses I received in this test run turned out to be helpful. One of the comments concerned the construction of the questionnaire; in that prior to the different categories of questions in the questionnaire there should be more detailed information and explanations for the respondents so that the passage from each set of questions to another was clearer and more intuitive to the respondents. Questions that directly concerned the respondents' perception of the management in their department were also requested, and this resulted in the construction of the inductive variable called "support from manager." In this manner, a direct link between the independent variables and the dependent variables was formed. One of the comments, from one of the practitioners in the mental hospital concerned how some of the answer categories did not reflect the language used in the mental departments. This was a useful remark and led to a rephrasing of questions regarding decisions. In addition, it was asked why only the specialization of the physicians was included in its own answer-category, and not the positions indicating the degree of specialization for nurses and psychologists. Lastly, it was pointed out that the questions being posed to both managers and subordinates could cause confusion, as in the worst case could result in the managers' evaluating themselves on some of the questions. This led to more detailed introductions to the questions in order to point out that with questions regarding management, the respondent should think of his/her closest management team/manager. Overall, the pretesting of the questionnaire emerged as a useful way of improving its composition and design. Ultimately, after I had adapted the questionnaire according to these comments, it was time to distribute it to the respondents.

Prior to the distribution of the questionnaire, I contacted all middle managers in the two hospitals with e-mails containing an information sheet about this research project[49] and the upcoming questionnaire, and I telephoned most managers. Some of the managers I had already interviewed at an earlier stage of the project, and most them were therefore eager to find out how the project was developing. This enthusiasm made it easy to introduce the questionnaire as the next vital step in the project; moreover, it was a good occasion to ask the managers to spread the word about the upcoming questionnaire to colleagues and subordinates. Not all managers were as enthusiastic, and they conveyed their frustration over answering "another" questionnaire during an already busy workday. This, together with the varying quality of the e-mail lists I described in the previous subchapter, made the gross size of the population uncertain; obviously, I was concerned about the response rate, which I knew was often low in hospital organizations due to previous researchers' experience of medical personnel as reluctant to use their valuable (clinical) time to respond to the needs of researchers. In order to solve these issues, I presented my research project to managers and subordinates in order to motivate them to participate in the project through the questionnaire and interview. The link on which the questionnaire was attached was distributed to the respondents by e-mail on April 18, 2007, and the last day on which they had an opportunity to answer was May 4, 2007. The link was thus active for a period of two weeks.

At UNN the questionnaire was distributed to 625 respondents, and at NLSH, it was distributed to 694 respondents. The gross population from which I drew the sample was, however unknown, but it was estimated by managers on the basis of the authorized positions each department held. In this manner, the reasoning for calculating the response rate was made more accurate as the size of the population came closer to the gross population. Furthermore, the managers indicated that all employees would be on the e-mail lists, but that the lists would certainly include individuals who for different reasons did not work in the hospital anymore or at least not in the department the e-mail address was connected to. The managers could report the approximate number of authorized positions to be as follows: at NLSH 380 employees at the General District Clinic, and 150 at Salten Psychiatric Center, and at UNN, 180 authorized positions at the Department for Special Psychiatry, 180 at

---

[49] The information sheet is included in the appendix, prior to the questionnaire.

Department for General Psychiatry, and 154 at the Community of Mental Health Center for Tromsø and neighborhoods.

Shortly after the link with the questionnaire was sent to the respondents, I had a feeling about the weakness of distributing the questionnaire by this procedure. Answers started coming in from respondents who were out on a leave of absence, on vacation, or for various other reasons were out of office, or else the e-mails came back from the system operator with a message that the e-mail did not reach the recipient(s) or that the delivery failed. All in all, at UNN, 11 respondents were out of office during the two weeks allotted for the questionnaire, and the e-mails did not get through to 26 of the respondents. This means that the sample size at UNN was decreased to 477 respondents.[50] At NLSH, 37 respondents were reported not to be in the target group of the inquiry, leaving us with 493 respondents in the sample.[51] In addition to the respondents who informed me by e-mail that they were out of the office it is possible to assume that I did not receive information from all respondents who were out of the office for different reasons and thus not were able to fill in the questionnaire. This means that it is possible that more respondents could have been removed from the sample prior to the estimation of the response rate. It is also worth mentioning that some of the employees who were on the e-mail list could have been working part-time as assistants, so that they might not be able to answer to the questionnaire since they did not work during these two weeks. At any rate, 141 respondents answered the questionnaire at UNN and 131 at NLSH. This leaves me with a response rate of 29, 5% at UNN and 26, 5% at NLSH, respectively. [52]

4.5   Preparation of Quantitative Data Prior to the Analysis

In this section, I will account for the data and the distribution of the sample on the variables in the questionnaire. To account for the distribution of data is important prior to further analysis, because many statistical techniques rest on the *assumption of normality*. This implies that the sample has been drawn from populations that are normally distributed (Kerlinger and Lee 2000:415). Even though the cases in this study are not random samples, but rather are selected and predetermined due to their specificity in regard to the research question, there is no reason

---

[50] That is, if I take the total number of authorized positions for each department as a starting point.
[51] That is, if we take the total number of authorized positions for each clinic as a starting point
[52] The whole data collection process (both interviews and questionnaire) has after evaluation been approved to be conducted and managed in accordance with the guidelines of the Norwegian Social Science Data Service. The letter from the Norwegian Social Science Data Service that documents this is enclosed in the Appendix.

to assume that the items are not normally distributed. But it is important to check this, which is the purpose of this subchapter.

I examine the distribution of data by checking the mean, standard deviation, skewness, and kurtosis of each variable[53]. The standard deviation should be less than half of the mean[54]. Skewness assesses whether the distribution on each variable is *skewed.*[55] Kurtosis is a measurement of how much a sample varies from a normal distribution; this measurement should be reported to be between -2 and 2. Ideally, variables should fall within all the conditions I have lined up for standard deviation, skewness and kurtosis. However, there may be variables in the sample that will not fall within all of these conditions, variables that are far from these limits may be omitted from the data matrix for further analysis. Variables that are not commented on are all reported to be within the margins on the distribution measures.

I will first examine the data from the team management data material. First, there are two questions that have both skewness and kurtosis outside of the limit values of -2 and 2[56]: Question 12 ("*Approximately what has your employment fraction been in the last 5 months, in percentage?*") and question 13 ("*What kind of duties (night, day, or afternoon) have you been working the last 5 months?*"). Both of these questions are for which we want the sample to be unequal, since these questions concern whether respondents work during the night or day, and if they work less than 80 percent of a full-time job. It is desirable that most of the respondents work day shift and hold a position of 80 percent or more, because these respondents will be best equipped to say something about how the management functions in daily work. In this way, these two questions are crucial variables that are mostly relevant in order to check whether the respondents are properly equipped to express their opinions regarding team management and how this affects their job satisfaction. Frequency tables of these variables indicate that 80 percent of the sample has been working day shift and has had an 80-percent position or more during the last five months; skewness and kurtosis for question 12 is -3.94

---

[53] Tables 11.4.1 and 11.4.2 in the appendix summarize these measurements for each variable in the questionnaire for both the team management and the hierarchical management case.

[54] If the standard deviation is greater than half the mean on any of the variables, this indicates that the dispersion around the mean is too great.

[55] A *skewed* condition refers to a situation in which there are more categories with small numbers of observations on one side of the median than on the other side of the median. If the mean and median are identical, skewness equals zero. But if the mean and median differ by large amounts relative to the distribution's standard deviation, skewness takes on either large amounts of positive or negative values (cf. Knoke, Borhnstedt et al. 2002:52-3). In this thesis it is a rule of thumb that skewness should be reported to be between -2 and 2.

[56] The table in which mean, standard deviation, skewness, and kurtosis are reported, is included in the Appendix.

and 18.13, and for question 13 -2.08 and 3.22. These variables will however not be important in any further analysis, as the information they give is most relevant prior to analysis.

The kurtosis for question 15 ("*Who usually manages decision-making processes on your workplace?*") is 2.34, which is slightly above the limit. Skewness is however -1.74, and the standard deviation, 0.65, is less than half of the mean 2.65. Empirically, it is interesting that as much of 70 percent of the sample hold the opinion that decision making processes are managed by a team with a team manager, and that 19 percent believe that these processes are managed by a department manager consulting with staff or personnel. Since it is only is the kurtosis that is above its limit, and because of the substantial importance of this question in regard to the research question, this item will not be omitted from the data matrix.[57]

In the traditional hierarchical management material, the number of N is 131, ten less than in the team management case.[58] In addition, for question 12, ("*Approximately, how many percents have your employment fraction been the last 5 months?*"), and question 13 ("*What kind of duties (night, day, or afternoon) have you roughly been working the last 5 months?*") measurements are not within the lower and upper margins on the distributions measurements.[59] These variables are background variables, providing us with important information about the respondents and their attributes. It is an advantage that most of the respondents work full time (which 87% of the sample), day shift (80, 7%), and have a permanent position (92%) in the organization, because they then have a good basis for expressing their opinions regarding how the management in their department works and how this affects their satisfaction and commitment. These variables will not be included in any further analysis, but they provide us with vital information concerning the sample prior to analysis. Then, question 20a ("*What do you think about the quality of the decisions regarding*

---

[57] Kurtosis is also slightly higher than 2 for question 29 ("*Is it clear to you in which situations you may make decisions in your job?*"), question 31 ("*I feel loyal towards my professional group*"), 31a ("*I am proud when telling others that I belong to this professional group*"), 31b ("*In general, I care about how my professional group is perceived by other people*"), question 32c ("*It is meaningful for me to work at this hospital*"), question 33h ("*I develop the most professionally while working with patients*"), and lastly question 37b ("*Employees in my unit stand up for each other*"). These variables are, however, within the limits in the other measurements and are therefore kept in the data matrix.
[58] See table 11.4.2 in the Appendix
[59] Question 12 reports a skewness of – 4.120 and kurtosis of 19.803, and question 13 has -1.955 skewness (which is within the rule of thumb) and a kurtosis of 2.334. For question 13, the nonconformity is however not striking, since it just exceeds on kurtosis. Also, question 14 ("*Do you have a permanent position?*" has distribution measurements that are greater than the upper and lower limits on skewness and kurtosis, as skewness is -3.228 and kurtosis is 8.551. Again, on these questions we want the sample to be unequally distributed.

economy in your department?"), has a kurtosis on 2.770 which is rather high. Skewness for this variable is – 1.047 which is within the limit, and the standard deviation is less than half of the mean. Since these measurements are within the limits, the item is kept in the data matrix for further analysis.[60]

---

[60] Question 25 ("*How often do you discuss professional questions with employees with another professional background than yourself?*") has a kurtosis on 2.476, but since skewness is -0.587 and the standard deviation is 0.547 with a mean of 3.98, the variable is retained in the data matrix. This is also true for the variables of question 31a ("*I am proud to tell others that I belong to occupation/professional group*"), question 32c ("*It is meaningful for me to work at this hospital?*"), question 33 ("*My workplace arranges for me to continuously learn new things?*"), question 33b ("*I learn more about my profession when working here*"), 33c ("*All in all, I feel that I develop professionally in my job*"), and question 34d ("*All in all, are you satisfied with your job?*"). All of these variables are of substantial importance for further analyses, and they all have values for kurtosis that are just outside the limit of -2 and 2, but the skewness is within the limits and the standard deviation is less than half of the mean. These variables are therefore retained in the data material.

5 The Process of Constructing New Variables

In this chapter, I will discuss the construction of new variables. The construction of new variables is based on the questionnaire, which was designed by asking a set of questions about the theoretical dimensions under study.[61] The items in the questionnaire provide manifest and direct information concerning certain issues. The aim now is to construct new variables of these sets of questions to be used in further analysis; the newly constructed variables thus become latent variables that are not directly observable in the sample.[62] The new variables express theoretical dimensions and are composed of several indicators, and they are based on a measurement model that is reflexive. A reflexive measurement model means that the new variable is going to measure a case that is affected by the indicators (Hellevik 1999:309). To measure cases based on several indicators is common in social science, as this captures more aspects of the theoretical dimension and therefore produces a more solid and resilient measurement. Besides, many of the cases we study in social science are general and abstract phenomena that are not directly observable (Berglund 2004). This complexity is handled by posing more questions regarding the phenomenon under study; these questions together provide better empirical measurements of the theoretical concepts than single questions. The new latent variables also provide a more precise placing of the units along the underlying dimension they express than single indicators (cf. Ringdal 2001).

A challenge one often encounters when constructing new variables concerns which method one should employ to construct them. Different statistical techniques, such as comparing bivariate correlation coefficients to construct new variables in the form of indexes[63] and factor analysis to construct new variables, are available. It is common to employ factor analysis

---

[61] The questionnaire is enclosed in the Appendix (ref).

[62] The distinction between manifest and latent variables is basic in methodological literature (cf. Tacq 1997:32). As mentioned in the text above, a manifest variable provides directly observed information concerning a characteristic, for example whether or not respondents cast votes in the last election. A latent variable is a characteristic not directly observed, as for example the consumer price index, and hence the use of the term index. An index is in other words a latent variable composed of several other items, and in this way an index is not a directly observed variable.

[63] The terms indexes and scales are often used interchangeably, although the meaning differs. Scale is most common in the literature written in English, whereas index is more common in Norwegian. To use them interchangeably conceals the original content of both terms. More precise, scales are usually composed of effect indicators, whereas indexes consist of cause indicators (Ringdal 2007:319). In practice, this means that on a scale, it is the scale (the latent variable) that forms the answers to the questions (i.e. the values on the indicators), while in an index it is the answers to the questions that cause (form) the values of the latent variable (index). As regards the content of the terms, it is important to keep this in mind even if the terms are used interchangeably.

when constructing new variables in organizational studies. However, in this thesis, I will employ both bivariate correlation analysis and factor analysis. I do this to figure out whether or not it makes a difference which of the techniques I use. At first sight, it may seem to be a technical issue which of these methods one chooses; leaving decisions concerning what items should be extracted or retained in the new variable up to statistical criteria. But when constructing new variables it is evident that theoretical and substantial knowledge about the social object under study is vital as well, and this indicates that the composition of new variables should not depend upon any specific statistical procedure. It means that even though the statistical criteria are fulfilled this is no guarantee that the new variable will stand, because many phenomena correlate with each other although they are not theoretically connected (cf. Berglund 2004). Statistical software does not discriminate between theoretically connected and theoretically not unconnected phenomena, and except for an article by Berglund (2004), the methodological literature generally provides little information concerning the techniques in relation to variable construction. This makes it challenging to assess the strengths and weaknesses with the techniques in different situations. It gives rise to a discussion about how the new variables shall be constructed. What are the arguments for and against correlation analysis and factor analysis? Furthermore, one may ask whether it matters what statistical technique one employs when constructing variables, in terms of deciding what indicators should be included in the variable. For example, do correlation analysis and principal component analysis (PCA) give dissimilar results when it comes to composing new variables? In order to answer the first two questions, I will briefly examine correlation analysis and principal component analysis as means to construct variables.

5.1   The Process of Indexing by Means of Correlation Analysis

Constructing new variables in the form of indexes based on correlation analysis means that the strength of each indicator's bivariate correlation coefficients is considered (Ringdal 2001). It is a suitable technique, for continuous variables since Pearson's r correlation coefficient is the most common measurement in such situations. Pearson's r correlation is also employed in this case. It has become more and more common to also employ it when ordinal variables are under scrutiny (Jacobsen 2002:332), although Pearson's r correlation coefficient is originally a correlation measurement for continuous variables. This is because it has become habitual to treat ordinal variables with relatively many categories, as if they were continuous (Ringdal 2007:82). Pearson's correlation coefficient varies between -1 and 1. A positive sign indicates that high values on the one item correlate with high values on the other item. A negative sign

implies that higher values on the one item are connected with lower values on the other item. The closer the value of the correlation coefficient is to 1 or -1, the stronger the relationship between the items. If the value of the coefficient is 0, it means that there is no correlation between the items at all. There are no clear criteria for how strong the coefficients have to be, but a rule of thumb is that items with correlations between 0.3 and 0.8 are included in an index (Hellevik 1999:309). The underlying logic of this selection of items is that if the correlation is situated below the lower bound, then the items are too dissimilar to be combined in the same index. In contrast, if the correlation is above the upper limit, then the items are so similar that it would be superfluous to use both of them in the same index, as one of the items supplies the index with little beyond the other items.

5.2 On Factor Analysis

Factor analysis is another statistical technique that can be used when constructing new variables, and as mentioned earlier in this chapter, this is probably the most frequently used technique in organizational theory when constructing new variables. A common understanding of factor analysis is that this technique is a means of reducing data by finding hidden structures in the data material. It is often referred to as an explorative analysis. The original aim with the analysis was exploration in the sense that new structures or dimensions, which may be the basis for correlations between a set of observed items, could be revealed. But in many research projects, the explorative character of factor analysis is equivocal as the items in the questionnaire are supposed to fit into specific theoretical dimensions (variables) based on theoretical considerations made in advance of the variable construction.[64] Therefore, the use of factor analysis in this study has a more confirmative character. This must not be confused with the distinct technique of *confirmative factor analysis* (cf. Kline 1994; Knoke, Borhnstedt et al. 2002), but must rather be seen in relation with the purpose of the factor analysis in the thesis. Here, the factor analysis is employed to test whether the empirical findings match the theoretical arguments for constructing variables, and to inquire whether or not it gives other results on this than the correlation analysis.

There are many kinds of factor techniques, but a general classification is to separate them into principal component analysis and common factor analysis (cf. Kline 1994; Tacq 1997).

---

[64] According to Hayton, Allen et al. (2004) exploratory factor analysis is particularly appropriate for scale development when there is little theoretical basis for specifying a priori the number and patterns of common factors.

Principal component analysis (PCA) is the most widely used factor technique, and this is the type of factor analysis that is used in this thesis as well. It is beyond the aim of the thesis to go further into the statistical debate about the different types of factor analysis, and I will therefore restrict the discussion of factor analysis to an examination of the technique that is employed in this thesis. Principal component analysis is based on a different mathematical model than common factor analysis, but they are founded on the same calculation method the principal axis method (Tacq 1997:300). Strictly speaking, the variables computed in factor analysis should be continuous. However, according to Ringdal (2007:324), it is usual to employ factor analysis on ordinal variables if they can be assumed to measure a continuous latent variable. Furthermore, in PCA it is possible to take out as many components as variables, thus exhausting all of the variance in the matrix (Tacq 1997). It is, however, usual to take out less than this number, since the aim is to reduce the complexity of the data with a smaller number of components than variables (Kline 1994:37). This has to do with the similar aim of reducing the complexity of the data by extracting a smaller number of factors than variables in both techniques.

PCA helps to unveil which points of view and attitudes are empirically connected to each other in the data material (Aardal 2003:67). One could say it is a way to control that the theoretical dimensions are also present in the specific data material. If one finds single items that connect up in the empirical material, it is reasonable to unite the items into a new variable. Items that strongly correlate with each other constitute a factor,[65] and they express an underlying dimension that is not directly measurable. To put it in another way, one can say that the components can be considered as a compressed expression of the connections between a set of variables (Kline 1994). Furthermore, the components are constructed in such a way that they explain as much variance as possible in the data material. The correlations between the single items and the factors (which are the non-observed latent variables) are expressed as *factor loadings*. An item can load on more than one factor and in this way complicate the interpretation of the principal component analysis, which is one of the weaknesses of this method. But the higher the factor loading is, the stronger the item's connection to the relevant factor. The rule of thumb, as in the correlation analysis, is 0.3

---

[65] These correlations are referred to as factors in common factor analysis and components in principal component analysis. Tacq (1997) argues that strongly correlated items should be referred to as components rather than factors when interpreting the principal component analysis. It is however usual to refer to them as factors, so I will use the terms factors and components interchangeably.

which means that component loadings above this lower limit are acceptable for an item to be a part of an index. As the Pearson's r correlation coefficient the factor loadings vary between -1 and +1.

As most factor extraction methods produce results that are difficult or impossible to interpret, another issue that has to be considered when executing factor analysis is how the data are going to be rotated. The objective of rotating the factors is to reduce the factor loadings to a simpler structure (Tacq 1997:287). Basically there are two ways of rotating the data: *orthogonal (most often varimax) or oblique*. In orthogonal (varimax) rotation the factors are rotated in such a way that they are always at right angles to each other. This means that there is no correlation between the extracted factors. By orthogonal rotation the number of variables with high loadings on each factor is minimized. In relation to the research question in the thesis, how team management affects subjective outcome dimensions for both managers and subordinates, it is not obvious that orthogonal rotations should be employed since the model on which the research question is based presumes that the latent variables constructed through PCA correlate. An oblique rotation does not require an orthogonal situation, but allows more freedom in selecting the position of the factors in factor space (cf. Kline 1994). Oblique rotation is considered to be more difficult to interpret and involves some problems. First of all, the factors are mutually correlated. Second, the factor pattern and the factor structure are not equal. Third, the communality of a variable can no longer be calculated as the sum of squared factor loadings in the columns equals the total variance in the matrix. And lastly, the proportion of explained variance of a factor can no longer be explained by the factors. In the thesis I therefore use *varimax* orthogonal rotation, which is one of the most frequently used variants of orthogonal rotation. Another advantage of factor analysis, which correlation analysis lacks, relates to the fact that factor analysis reports the contribution of explained variance of the components relative to the total variance in all the variables. I therefore also report explained variance for the components relative to the total variance in all the variables when I report the results of the PCA. In addition to illustrating that the items are empirically and theoretically connected to each other, PCA makes it in this way possible to demonstrate the degree to which the variance of the components is accounted for by the total variance of the items constituting the component.

Factor analysis entails some problems that need to be addressed in relation to variable construction. As I mentioned earlier, problems occur when items load on more than one

factor. This suggests that they have their origin in more than one theoretical dimension, and this confuses the interpretation of such items and their factor loadings. Constructing new variables based *exclusively* on factor loadings is problematic because the factor scores primarily express the variables that are loading highest, but they are also affected by variables with lower loadings. It is especially problematic when variables are loading strongly on several factors, since it brings a lot of confusion to the interpretation of the new variable (Berglund 2004). This may not seem so important in regard to the data material in the thesis, as the number of items included in each principal component computation is relatively low, which obviously limits the number of factors extracted. Still, it indicates that the results of the factor analysis should be assessed with caution. It may also count as an argument for using correlation analysis as the main analysis when constructing new variables. Another drawback of basing variable construction on factor analysis concerns the possibility of saving the factor scores as a factor (variable). These factor scores (variables) will primarily express the items that load more strongly, but will also be affected by the items that load more weakly. To use these factor scores in further analysis may complicate the analysis and make the interpretation of the results difficult. This may be bypassed by using the PCA as a tool to select the items relevant for the new variable based on their factor loadings, and then constructing the new variable on the basis of the compute function in SPSS, instead of using the "save as variables" function in SPSS, which is common in organizational studies.

Based on the distinctions of the strength of the correlation coefficients, correlation analysis makes it possible to construct indexes. But such an approach is cumbersome when the number of new variables to be constructed is high is high. Derived from this discussion regarding correlation analysis versus factor analysis in variable construction, and the fact that most of the variables in the data matrix are variables on an ordinal measurement level,[66] I employ correlation analysis as the principal method for constructing the new variables. However, the results from correlation analysis are also tested by running principal component analysis (PCA) to investigate whether they yield other results concerning what items should be employed to construct the new variables. As mentioned in an earlier section, I report the items loading on the factors after varimax rotation, and contribution of explained variance of the components relative to the total variance in all the variables when running the factor analyses. In any case, what is clear is that index construction not only is a matter of statistics, but also

---

[66] This is what Bohrnsted and Knoke (2002:18-19) define as orderable discrete variables.

prescribes substantial insights as to the theory and the content of the indicators relevant for the indexes.

5.3 Internal Consistency Reliability

To summarize the quality of the new variables, it is common to consider Cronbach's alpha of the items in each variable. This measures internal consistency for a given set of indicators based on average correlation between the indicators and the number of indicators composing it (Knoke, Borhnstedt et al. 2002:239). Cronbach's alpha ranges from zero (no internal consistency) to perfect (perfect internal consistency). Furthermore, it can be worth drawing attention to the fact that the size of Cronbach's alpha depends upon the number of items that are included in the index. This means that increasing the number of items raises the scale's reliability, and a reduction of the number of items decreases the reliability score. It is therefore important to account for the number of items included in each index. It should be mentioned that a high alpha score as a result of a high number of items in the variable does not necessarily have a great substantial value (Berglund 2004). There is no statistically determined critical limit value for how strong Cronbach's alpha has to be. Nevertheless, an alpha score above 0.7 is generally considered to be sufficient to ensure the reliability of a variable (Ringdal 2007:87). However, it is worth mentioning that this rough calculation is not a valid digit for every phenomenon under study, because the principle concerning how strong Cronbach's alpha needs to be in order to accept the consistency of a variable varies according to the substantial phenomenon the researcher is measuring. For example, for ideology the lower limit for Cronbach's alpha is usually set to 0.5 (Berglund 2004).

5.4 Construction of New Variables: Team Management

I will now start to construct new variables for the relevant theoretical dimensions. For each index, correlation analysis is computed first, followed by principal component analysis. The total number of N in the team management case is 141. I start out with the construction of job satisfaction.

Table 5.4.1: Correlation Matrix: Job satisfaction

	Q34	Q34a	Q34b	Q34c Recoded
Q34 Satisfaction with tasks	1			
Q34a Recognition of work	*,541(**)*	1		
Q34b Satisfaction with social environment	*,605(**)*	*,617(**)*	1	
Q 34c Recoded accordance between responsibility and competence	*,332(**)*	,169(*)	,222(**)	1
Q34d Satisfaction with work	*,793(**)*	*,579(**)*	*,624(**)*	*,230(**)*

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
N for each correlation in the table: 141

Table 5.4.1 summarizes the items that are relevant for the job satisfaction index. The correlations are relatively strong, and all items occur in combinations that are within the upper and lower limits. The correlations that are within the upper and lower limits are italicized in the table. Item 34c ("Do you think you have too little responsibility in proportion to your competence") has coefficients that are mostly below the lower limit. The reasons for including the item are therefore not compelling based on the correlation analysis. Conducting the principal component analysis makes it clear that one component[67] is extracted, and all the loadings are relatively strong meaning that they span from 0.781 to 0.879. But also, in this case, item 34c[68] is at variance with the other items, since this item loads more weakly than the others. However, in this case, the loading of the item on the component is above the lower limit, as it is 0.405. Despite this, I will exclude this item on the jobsatisfaction variable, because this leaves us with a more theoretically uniform measurement of the job satisfaction dimension. The alpha score before excluding the recoded item 34c is 0.808, and after excluding it the alpha score increases to 0.867, which is a relatively strong alpha score.

---

[67] This component accounts for 59, 9% of the total variance in all the variables.
[68] Question 34c has been recoded since it was coded in opposite directions than the other items.

Table 5.4.2: Correlation Matrix: Goals

	Q 35 Recoded	Q36
Q35 Recoded: Awareness of operating goals[69]	1	
Q36 Knowledge about content of operating goals	,702(**)	1
Q36a Attainment of operating goals	,547(**)	,605(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 134 (missing cases are excluded listwise.). There are 7 missing cases on item 35recoded.

Item 35 ("Do know if the unit in which you work sets operating goals?") has been recoded in table 5.4.2. This item has only three values: yes, no, and don't know. After recoding, the value 1 means no, value 2 indicates don't know, and value 3 means yes. Recoding item 35 ensures a similar numerical scaling of the items, since items 36 ("Do you know the content of the operating goals in your unit?"), and 36a ("Have the operating of the unit been attained?") are coded from 1 to 5, where 1 indicates to a very little degree and 5 means to a very large degree. All the correlations are within the rule of thumb. The results of principal component analysis[70] reveal the same tendency as in the correlation analysis, as the three items load strongly on one component. The alpha score of these items is reported to be 0.765, which means that the internal consistency between the items is sufficient. All the items therefore enter into the variable of goals.

Table 5.4.3: Correlation Matrix: Professional Loyalty

	Q37	Q37a	Q37b
Q37 Defense from criticism of outsiders	1		
Q37a Getting along among personnel	,154	1	
Q37b Standing up for each other	,158	,755(**)	1
Q37c Encouraging working with colleagues	,005	,575(**)	,705(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 141

The correlations of items 37a ("Employees in my unit get along well"), 37b ("Employees in my unit stand up for each other") and 37c ("It is encouraging to work with my colleagues") are relatively strong. In contrast item 37 ("Employees in my unit defend each other against criticism from outsiders") does not occur in any relatively strong correlations. The items are adapted from the social integration scale of Smith et al.(1994) and Shaw (1981). The principal component analysis gives similar results as the correlation analysis, which means that one component[71] is extracted. Except for item 37, this has a loading of 0.207 on the component,

---

[69] Item 35 ("Do you know in the unit in which you work sets operating goals?") in table 5.4.4 has been recoded.
[70] There are 7 cases missing on the recoded version of 35, and N is therefore 134.
[71] This component accounts for 59, 6 percent of the total variance in all the variables.

and the entire items load within the rule of thumb. The relatively weak connections between item 37 and the other can be explained by the empirical fact that the degree of contact between the different units is rather low in the two cases I study. This makes item 37 empirically more distant and also less relevant compared to the other. In this thesis the theoretical focus is on loyalty to one's colleagues within the units. Item 37 incorporates another aspect, contact with other units. In order to ensure the theoretical focus is on loyalty to one's colleagues within units I exclude item 37. Cronbach's alpha increases from 0.734 to 0.859 when item 37 is removed from the variable, which indicates that the reliability of the new variable is satisfactory and that item 37 does not contribute sufficiently to the reliability of the new variable.

Table 5.4.4: Correlation Matrix: Organization of Management

	Recoded Q38	Q39
Q38Recoded: Functioning of management	1	
Q39 Room for interdisciplinary cooperation	,177(*)	1
Q39a Superior's degree of actual teamwork	,206(*)	*,656(**)*

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 141

In general, the correlations in table 5.4.4 are relatively weak. Item 38 ("How do you perceive that the management at your unit functions?" has been recoded and some values have been merged. It originally had six categories including don't know, and these are now merged into three categories to create two aspects of management structure: the team versus hierarchical management structure. Still, it correlates weakly with the other items, which are 39 ("In your opinion does the organization of your ward make interdisciplinary cooperation possible?") and 39a ("To what extent do you think that your nearest superior/manager/management team really work in team?"). The correlation between these two latter items is however very strong. Before deciding whether item 38 should be extracted from the variable, I first conduct principal component analysis.[72] All the items load above the rule of thumb on the one extracted component[73]. But item 38 loads more weakly relative to the other items since it has a loading of 0.448, whereas item 39 has 0.876 and item 39a has 0.886. Including all the three indicators in the variable gives an alpha value on 0.638. If item 38 is extracted from the variable, the alpha value is 0.788, which is theoretically and technically more satisfying than if item 38 is included in the variable, especially taking the low number of items into

---

[72] Number of N in the PCA is 141.
[73] This component accounts for 77.2 percent of the total variance in all the variables.

consideration. This means that whether or not item 38 should be retained in this variable depends upon theoretical considerations. The background for this item is however not derived from theory, but based on an empirical observation, and the item is therefore extracted from the variable.

Table 5.4.5: Correlation Matrix: Support from Manager

	Q40	Q40a	Q40b	Q40c
Q40 Superior ensures your job satisfaction	1			
Q40a Superior ensures your professional development	,772(**)	1		
Q40b Usefulness of manager's answers	,751(**)	,663(**)	1	
Q40c Managers knowledge about your work day	,684(**)	,640(**)	,704(**)	1
Q40d Satisfaction with manager/management team	,785(**)	,671(**)	,800(**)	,673(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 141

All the indicators in table 5.4.5 occur in correlations that are strong. Theoretically speaking, these items are related because they construct a dimension which includes information about how management functions in an organization. Results from the principal component analysis prop up the correlation analysis as one component is extracted.[74] All items load strongly on this component. This indicates that the empirical arguments match the theoretical ones, and that all the items are sufficiently connected with each other to enter into a variable. Cronbach's alpha is reported to 0.925, which is a rather high score. It means that the consistency between the indicators is very strong. The substantial content of the index is clear, since the items concern the same theme: how management affects the subordinates.

---

[74] Number of N in the PCA: 141

Table 5.4.6: Correlation Matrix: Decision Making

	Q15	Q16	Q16a	Q16b	Q17	Q19	Q20
Q15 Manager of decision-making processes	1						
Q16 Participation:hiring of new personnel	,111	1					
Q16a Participation: new methods of treatment	,167(*)	,631(**)	1				
Q16b Participation: change of operating goals	,139	,772(**)	,692(**)	1			
Q17 Involvement of professional groups in decision-making processes	-,012	,512(**)	,502(**)	,564(**)	1		
Q19 Correspondence between decisions and goals	,081	,308(**)	,332(**)	,416(**)	,446(**)	1	
Q20 Quality of decisions: treatment of patients	,139	,204(*)	,190(*)	,310(**)	,318(**)	,697(**)	1
Q20a Quality of decisions: economy	-,052	,229(**)	,244(**)	,277(**)	,394(**)	,513(**)	,381(**)

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 141

In the table above, there are eight items regarding how decision-making processes take place and about the quality of the outcomes of these processes. On the theoretical level decision-making processes and the legitimacy of their outcomes are usually two distinct dimensions, which may be a valid interpretation here too. Indicator 15 ("Who usually manages decision-making at your workplace"), only correlates weakly with the other items and does not occur in any correlations which are within the rule of thumb. This is largely consistent with theoretical assumptions about decision processes, and this item is therefore not included in the variable. When it comes to the other items, it seems like that the empirical connections coincide with the theoretical; on the one hand, items regarding decision processes correlate strongly, and on the other hand, items regarding the legitimacy of outcomes correlate strongly. Uniformity is an important aspect when constructing variables, which means that the empirical and theoretical distinction between decision processes and the legitimacy of their outcomes results in two separate variables. Indicators 16 ("How often do you participate in decision-making regarding hiring of new personnel?"), 16a ("How often do you participate in decision-making regarding new methods of treatment?"), 16b ("How often do you participate in decision-making regarding changes in new operating goals"), and 17 ("In general, are multiple professional groups involved in decision-making processes in your department?"), correlate relatively strongly with each other. This is also evident when looking at the principal component analysis[75] in which three components are extracted; on the first component[76] items

---

[75] Number of N in the PCA is reported to 141.
[76] This first component accounts for 45, 2% of the total variance in all the variables.

16, 16a, 16b, and 17 load strongly. The alpha score for these indicators is 0.864, and therefore a variable called *participation in decision-making processes* is constructed in the data matrix.

Furthermore, items 19 ("How do you think the decisions made in your department match the goals of the department?), item 20 ("Are the decisions regarding treatment of patients at your department of high quality?"), and item 20a ("Are the decisions regarding economy at your department of high quality?") correlate strongly in the correlation matrix above. These indicators also load strongly on the second component[77] of the principal component analysis. As there are empirical as well as theoretical reasons for including these items into a variable, these items create their own variable called *legitimacy of decisions*. Here, the alpha score for the three items constituting the variable is reported to be 0.762. This is a sufficient alpha score, especially taking the low number of indicators into consideration.

Table 5.4.7: Correlation Matrix: Decentralization of Authority

	Q21	Q21a
Q21 Approval from manager	1	
Q21a Prevented from reaching own decisions	,544(**)	1
Q21b Approval of every decision from nearest manager	,749(**)	,575(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 141

Decentralization of authority is a well-established theoretical dimension. Professional organizations such as hospitals are characterized by a great deal of decentralization with respect to the professionals. It is therefore expected that items regarding decentralization would also demonstrate this trend. As the items correlate strongly and positively, this trend is empirically demonstrated. This empirical finding reinforces the theoretical dimension. The principal component analysis gives the same result as the correlation matrix.[78] The items load strongly on the one extracted component[79]. This means that there are empirical and theoretical reasons for including all the items in the variable. Cronbach's alpha for this variable is reported to 0.832, which means that the internal consistency between the items is reliable.

---

[77] The second component accounts for 17, 5% of the total variance in all the variables.
[78] Number of N in the PCA analysis is reported to 141.
[79] This component accounts for 75% of the total variance in all the variables.

Table 5.4.8: Correlation Matrix: Commitment to profession

	Q31	Q31a	Q31b
Q31 Loyalty towards occupation	1		
Q31a Proud of belonging to professional group	,744(**)	1	
Q31b Caring about other's perception of profession	,545(**)	,666(**)	1
Q31c Promotion of occupational concerns	,685(**)	,719(**)	,567(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 141

In table 5.4.8, rather strong correlations are illustrated between items 31 ("I feel loyal towards my occupation/professional group"), 31a ("I am proud to tell others that I belong to this occupation/professional group"), 31b ("In general, I care about how my occupation/professional group is perceived by others"), and 31c ("I want to promote issues that concerns occupation/professional group"). This means that the empirical tendencies in the sample correspond with theory. Principal component analysis supports these strong correlations, as one component[80] is extracted and all items load strongly on this component.[81] This gives a rather uniform interpretation of the connection between these items. Furthermore, the alpha score is 0.883. This is a very high alpha score, and it indicates that the internal consistency between the items is satisfactory. In other words, the indicators express information about the theoretical dimension, commitment to professional group.

Table 5.4.9: Correlation Matrix: Organizational Commitment

	Q32	Q32a	Q32b	Q32c	Q32d
Q32 Rest of career in organization	1				
Q32a Discussing organization with people outside	,130	1			
Q32b Promoting matters concerning organization	,392(**)	,402(**)	1		
Q32c Meaningfulness of working in hospital	,291(**)	,279(**)	,433(**)	1	
Q32d Proud of belonging to hospital	,525(**)	,163	,386(**)	,564(**)	1
Q32e Continuation in present position	,576(**)	,195(*)	,412(**)	,514(**)	,544(**)

** Correlation is significant at the 0.01 level (2-tailed).
Correlation is significant at the 0.05 level (2-tailed).
N for each correlation in the table: 141

Most of the items in table 5.4.11 correlate strongly with each other. Still, item 32a ("I like to discuss my workplace with people outside the organization"), correlates rather weakly with several of the other indicators in the table. The only correlation in which item 32a occurs and which is within the rule of thumb is with 32b ("I would like to work with promoting matters that concern the organization in which I work"). The other correlations it occurs in lie close to

---

[80] This component accounts for 74.2 percent of the total variance in all the variables.
[81] SPSS reports that the number of N is 141 in the PCA analysis.

the lower limit. The weak empirical reasons for including this item do not, however, fully match the theoretical arguments from the original established commitment scale (cf. Mowday, Porter et al. 1979). It could be argued that this is due to measurement errors in the data sample, which is not unlikely with respect to the rather small number of units in analysis. But, since the variable is composed of several other theoretically relevant items, this item could be extracted from the variable, since the other items are theoretically more uniform because they concern only the respondent; item 32a, on the other hand, concerns the respondent in relation to people outside the organization. It would therefore be interesting to see what principal component analysis reveals. Two components are extracted from principal component analysis.[82] Again, it is item 32a that differ from the other items in the table. Whereas all the other items load relatively strongly on the first component[83], item 32a loads strongly on the second component. In order to investigate how omitting item 32a would affect the correlations between the items, I computed a new principal component analysis leaving out this item. One component[84] was extracted and all the items loaded strongly on this component, which is between 0.647 and 0.816. The alpha score for a variable based on item 32, 32b, 32c, 32d, and 32e is reported to 0.809. This is a rather strong alpha score, and it means that the consistency between the items is sufficient to measure the same theoretical dimension. Before extracting this item, the alpha score was reported to 0.789, which is high, but this may be because of the rather high amount of items in the variable. I therefore extract item 32a from the variable of organizational commitment.

---

[82] Number of N in the PCA is reported to 141.
[83] This first component accounts for 49.9 percent of the total variance in all the variables.
[84] Then, 57.3 percent of the total variance in all the variables is accounted for in this component.

5.5 Construction of New Variables: Hierarchical Management

Also in this case I start out with the construction of the job satisfaction variable.

Table 5.5.1: Correlation Matrix: Job Satisfaction

	Q34	Q34a	Q34b	recodedQ34c
Q34 Satisfaction with tasks	1			
Q34a Recognition of work	*,582(**)*	1		
Q34b Satisfaction with social environment	*,362(**)*	*,325(**)*	1	
Q34c Recoded: Accordance between responsibility and competence	,268(**)	*,304(**)*	*,329(**)*	1
Q34d Satisfaction with work	,603(**)	*,465(**)*	*,411(**)*	,290(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 130. Cases are excluded listwise due to one missing value on the recoded version of 34c is one item excluded listwise.

In the correlation matrix above, items relevant for the job satisfaction[85] index are displayed. It is evident that all combinations of correlation are relatively strong, except for the correlation between the recoded version of 34c ("Do you think you have too much responsibility in proportion to you competence?") and 34d ("All in all, are you satisfied with your job?") which, at 0.290, is just below the lower limit of 0.3, and between the recoded version of 34c and item 34, is 0.268. Going to the principal component analysis, one component[86] is extracted on which all items load strongly, including item 34c recoded, which has a loading on 0.556. Since the item is theoretically relevant, and since the overweight of correlations in which this item occurs are within the rule of thumb, the item is retained in the variable. The alpha score for this item is 0.757 which is satisfactory. It is important to note that the recoded version of item 34c was extracted from the scale in the team management case. This means that the variable depends upon context.

---

[85] Total number of N in the traditional management cases is reported to 131.
[86] This component accounts for 52.2 percent of the total variance in all the variables. The number of N in the PCA is 130.

Table 5.5.2: Correlation Matrix: Goals

	Q35 Recoded	Q36
Q35 Recoded: Knowledge about operating goals	1	
Q36 Knowledge about content of operating goals	,710(**)	1
Q36a Attainment of operating goals	,604(**)	,823(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 124. Missing cases are excluded listwise.[87]

All the items in the correlation matrix occur in strong correlations. In the principal component analysis[88] they all load on one component, and there is no doubt that this theoretical dimension coincides with an empirical one. Cronbach's alpha is reported to 0.836, which means that the internal consistency of the variable is good.

Table 5.5.3: Correlation Matrix: Professional Loyalty

	Q37	Q37a	Q37b
Q37 Defense from criticism of outsiders	1		
Q37a Getting along among personnel	,323(**)	1	
Q37b Standing up for each other	,331(**)	,844(**)	1
Q37c Encouraging working with colleagues	,248(**)	,724(**)	,751(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 131

Item 37 ("Employees in my unit defend each other from criticism from outsiders") in the correlation matrix correlates relatively strongly (i.e. the correlations exceed 0.3) with items 37a ("Employees get along well in my unit") and 37b ("Employees in my unit stand up for each other"), but the connection with item 37c ("It is encouraging to work with my colleagues") lies slightly below the lower 0.3 limit. However, I regard these correlations as sufficient for item 37 to be retained in the variable. The other items occur solely in the strong combinations. Principal component analysis[89] reveals that all items load amply on the one component[90] that is extracted. Again, item 37 loads relatively more weakly than the other, but a loading on 0.481 is plenty with regard to the limit on 0.3. The alpha score for the variable of *professional loyalty* is 0.804, which indicates that the internal reliability of the variable is good.

---

[87] There are 7 missing values on the recoded version of item 35: "Knowledge about operating goals", these 7 missing cases are excluded listwise for this correlation matrix.
[88] Number of N in the PCA is reported to 124, and due to default setting for factor analysis missing cases are exlclude listwise.
[89] The number of N in the PCA is reported to 131.
[90] This component explains 67, 7% of the total variance relative to the variance in all the variables.

Table 5.5.4: Correlation Matrix: Organization of Management

	Q38 Recoded	Q39
Q38 Recoded: Functioning of management	1	
Q39 Room for interdisciplinary cooperation	,037	1
Q39a Superior's degree of actual teamwork	-, 009	,531(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 127 [91]

The reasons for constructing a variable on the items in table 5.5.4 are weak, as the number of items is low and because two of the combinations in which item 38 recoded ("How do you perceive that the management functions in your ward?") enter into correlations close to 0, which means that there is no connection between the items. This was also the case in the team management case. The two other items connect relatively strongly. It is items 39 ("In your opinion, does the organization of your ward make interdisciplinary cooperation possible?") and 39a ("To what extent do you think that your nearest superior/manager/management team work in/as a team?") that correlate relatively strongly. Principal component analysis[92] illustrates that items 39 and 39a load strongly on the one extracted component[93], at 0.874 and 0.876 respectively, whereas item 38 recoded does not load at all. In the team management case, a variable was constructed based on items 39 and 39a because these two items constitute theoretically vital information concerning the conduct of management. The alpha score for items 39 and 39a is 0.685. This is a rather close to the limit on 0.7. Because of the low number of items in the variable, I construct a variable based on these two items.

Table 5.5.5: Correlation Matrix: Support from Manager

	Q40	Q40a	Q40b	Q40c
Q40 Superior ensures for your job satisfaction	1			
Q40a Superior ensures for your professional development	,609(**)	1		
Q40b Usefulness of manager's answers	,664(**)	,569(**)	1	,
Q40c Manager's knowledge about your work day	,586(**)	,470(**)	,587(**)	1
Q40d Satisfaction with manager/management team	,627(**)	,389(**)	,661(**)	,465(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 131.

In Table 5.5.5 above, it clear that all items relevant for the variable of *support from manager* above correlate strongly with each other. They also load strongly on the one extracted

---

[91] There are 4 missing values on the recoded version of item 38 which are excluded from all the bivariate correlaions in the matrix.
[92] The number of N in the PCA analysis is 127.
[93] This component accounts for 51.1 percent of the variance relative to the total variance in all the variables.

component[94] in the principal component analysis. Cronbach's alpha is 0.863. All items are included in the new variable.

Table 5.5.6: Correlation Matrix: Decision Processes

	Q15	Q16	Q16a	Q16b	Q17	Q19	Q20
Q15 Manager of decision-making processes	1						
Q16 Participation:hiring of new personnel	,017	1					
Q16a Participation: new methods of treatment	,192(*)	,494(**)	1				
Q16b Participation: change of operating goals	,222(*)	,693(**)	,725(**)	1			
Q17 Involvement of professional groups in decision-making processes	,187(*)	,482(**)	,643(**)	,632(**)	1		
Q19 Correspondence between decisions and goals	,172(*)	,261(**)	,403(**)	,469(**)	,448(**)	1	
Q20 Legitimacy of decisions: treatment of patients	,130	,141	,371(**)	,313(**)	,372(**)	,670(**)	1
Q20a Legitimacy of decisions: economy	,181(*)	,251(**)	,190(*)	,321(**)	,259(**)	,379(**)	,378(**)

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
N for each correlation in the table: 131.

Item 15 ("Who usually manages the decision-making processes at your workplace") in table 5.5.6 above does not correlate strongly with any of the other items in the table, and it is therefore extracted from further variable construction and analysis. Item 16 ("How often do you participate in decision-making regarding hiring of new personnel?") correlates relatively strongly with items 16a ("How often do you participate in decision-making regarding new methods of treatment?"), 16b ("How often do you participate in decision-making regarding changes in operating goals?"), and 17 ("In general, are multiple professional groups involved in decision-making processes in your department?"). However, the strength of the correlations between item 16 and item 19 ("How do you think the decisions made in your department match the goals of the department?"), item 20 ("Are the decisions regarding treatment of patients at your department of high quality?"), and item 20a ("Are the decisions regarding economy at your department of high quality?" are weaker, as they are lower than the lower limit of correlation on 0.3. In the team management case in subchapter 5.4, two variables were constructed based on the items 15-20a because there were theoretical and empirical reasons for doing so. The variable of *participation in decision-making processes* was composed of items 16, 16a, 16b, and 17, and a second variable *legitimacy of decisions*, consisted of item 19, 20, and 20a. What is clear in this case is that item 20a, which concerns

---

[94] The component explains 65, 3% of the total variance of all the variables computed in the component analysis. Number of N in the PCA analysis is reporte to 131.

the legitimacy of economic decisions only correlates strongly with the items 16b, 19, and 20, which makes it difficult to include it in a variable with the other items with which item 20a loads weakly and weaker than the lower limit. What makes it difficult to decide whether on or two variables shall be constructed is that items 19 and 20 correlate relatively strongly with 16a, 16b, and 17. The principal component analysis extracts two components.[95] On the first component, the items 16, 16a, 16b, and 17 load strongly,[96] and on the second component, the items 19, 20, and 20a load strongly[97] - just as in the team management case, and in line with the theoretical assumption that these items assess two different dimensions regarding decisions: *participation in decision-making processes* and *legitimacy of decisions*. The alpha score for the participation in decision-making processes variable consisting of 16, 16a, 16, and 17 is 0.862, which is good and means that the internal consistency between these items is satisfactory. In the variable legitimacy of decisions (items 19, 20, and 20a), the alpha score is 0.706. This is just on the limit, but it is good enough for composing this variable since there are theoretical and empirical reasons for doing it.

Table 5.5.7: Correlation Matrix: Decentralization of Authority

	Q21	Q21a
Q21 Approval from manager	1	
Q21a Prevented from reaching own decisions	,519(**)	1
Q21b Approval of every decision from nearest manager	,662(**)	,497(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 131.

Table 5.5.7 indicates that all the items relevant for the variable of *decentralization of authority* connect strongly with each other. One component[98] is extracted in the principal component analysis, on which all items load strongly. However, the loading of item 21a ("A person that want to make his/her own decisions will soon be prevented in so doing") is however negative yet strong (-.501). The alpha score for these items is 0.791 which mean that the internal consistency in the variable is satisfactory.

---

[95] The number of N in the PCA analysis is reported to 131.
[96] The first component explains 45.9 percent of the variance relative to the total variance of all the variables.
[97] The second component accounts for 15.8 percent of the total variance of all the variables.
[98] This component accounts for 54, 4% of the total variance in all the variables. The number of N in the PCA analysis is reported to 131.

Table 5.5.8: Correlation Matrix: Professional commitment

	Q31	Q31a	Q31b
Q31 Loyalty towards occupation	1		
Q31a Proud of belonging to professional group	,686(**)	1	
Q31b Caring about other's perception of profession	,512(**)	,605(**)	1
Q31c Promotion of occupational concerns	,593(**)	,522(**)	,594(**)

** Correlation is significant at the 0.01 level (2-tailed).
N for each correlation in the table: 131.

All items relevant for the professional commitment index correlate strongly with each other. Principal component analysis supports this by extracting one component[99] on which all items load strongly, as no items load more weakly than 0.8 on this component. The alpha score for this variable is 0.847, which means that the reliability of the variable is good. Derived from this, the variable of *professional commitment* is constructed.

Table 5.5.9: Correlation Matrix: Organizational Commitment

	Q32	Q32a	Q32b	Q32c	Q32d	Q32e
Q32 Rest of career in organization	1					
Q32a Discussing organization with people outside	,198(*)	1				
Q32b Promoting matters concerning organization	,136	,393(**)	1			
Q32c Meaningfulness of working in hospital	,507(**)	,292(**)	,435(**)	1		
Q32d Proud of belonging to hospital	,447(**)	,323(**)	,524(**)	,744(**)	1	
Q32e Continuation in present position	,606(**)	,236(**)	,396(**)	,606(**)	,534(**)	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
N for each correlation in the table: 131.

Items in the table 5.5.9 above are relevant for the variable of *organizational commitment*. Item 32a ("I like to discuss my workplace with people outside the organization") and 32b ("I would like to work with promoting matters that concern the organization in which I work" both connect relatively weakly with item 32 ("I would like to spend the rest of my career with my present employer"). In addition, item 32a correlates relatively weakly with the items 32c ("It is meaningful to me to work in this hospital") and 32e ("I would like to carry on in my present position"). Since item 32a only occurs in two combinations that pass the lower limit of 0.3, the item is extracted from the variable and further analysis. The rest of the combinations of correlations in the table are strong and within the rule of thumb. The

---

[99] This component accounts for 68.9 percent of the total variance in all the variables. The number of N in the PCA analysis is 131.

principal component analysis extracts two components. On the first components[100], all items except for item 32a load strongly. This item is extracted and another principal component analysis is computed. Now one component[101] is extracted on which all items load strongly. Cronbach's alpha increases from 0.808 to 0.822 when extracting item 32a. Thus, the items 32, 32b, 32c, 32d, and 32e constitute the organizational commitment variable; the organizational commitment variable in the team management case is also composed of these items.

5.6   Correlation vs. Factor Analysis: Did It Make a Difference?

At the beginning of this chapter it was asked whether or not correlation analysis and factor analysis would give dissimilar results in the variable construction. After conducting the variable construction using the two techniques it is time to draw some conclusions concerning this item, based on some examples from the previous variable constructions.

Overall, correlation analysis and factor analysis often give the same results for the variable construction in both the team management case and the traditional hierarchical case. For example, in the team management case, the correlation analysis and the factor analysis yielded the same results regarding the variable decisions. In the correlation analysis[102], it was evident that items concerning decision-making processes all occur in bivariate correlations within the rule of thumb. This means that the theoretical assumption is supported by the empirical findings in the sample and that it is reasonable to construct a variable based on these items called *participation in decision-making processes*. The other three items regarding legitimacy of decisions in the correlation matrix did not correlate strongly with the items on the subject of participation in decision-making processes. However, these three items about legitimacy of decisions correlate strongly with each other, giving rise to another variable called *legitimacy of decision*. Findings from the factor analysis backed up the construction of these two variables, since it also extracted two factors with a structure of loadings on these two components, following the structure in the correlation matrix. All the items[103] about decision-making processes loaded strongly on the first component, whereas the three items about legitimacy of decisions loaded strongly on the second component. This tendency (that

---

[100] This first component accounts for 53, 3% of the variance relative to the total variance to all the variables. Number of N for the PCA analysis is reported to 131.

[101] Now the one extracted component accounts for 60, 3% of the variance relative to the total variance of all the variables.

[102] Except item 15 ("Who usually manages the decision-making processes at your workplace?")

[103] Except item 15 ("Who usually manages the decision-making processes at your workplace?")

correlation analysis and factor analysis give similar results as to which indicators should constitute in the variables) applies for all the variables constructed in the team management case and the hierarchical traditional case. To answer the introductory question in this chapter, this means that the variable construction should not solely depend upon which statistical technique one employs. Theoretical and substantial acquaintances about the phenomena under study are also crucial when constructing variables as was evident in the variables concerning decisions. This is because, as I have illustrated above, in cases of doubt one leans upon theoretical and substantial knowledge when deciding which indicators are going to constitute the variables. Cases of doubt may for example be situations in which the statistical techniques leave us with a coefficient which is difficult to interpret because the strength of it is right below or right above the lower or upper limit, or when items that are not theoretically relevant correlate within the rule of thumbs. This makes it difficult to decide whether or not indicators should constitute variables solely based on the results of the statistical procedures, and it calls for theoretical considerations and substantial knowledge about the phenomena under study. In relation to the data in this case, which is characterized by relatively few indicators in each variable and deals with variables that are rather well established, it is evident that the key point is not which technique one employs, but that it is crucial to have theoretical and substantial knowledge about the phenomena under scrutiny when constructing variables on the basis of the statistical technique.

5.7   Descriptive Presentation of New Variables

Before I begin the regression analysis it is necessarily to present all the new variables that are constructed in this chapter and the demographic background variables in each of the cases. In this manner, an overview of the distribution for each variable in both cases is possible and we get some general ideas concerning differences between the cases.

Table 5.7.1: Descriptive Statistics: Team Management Case

	N	Minimum	Maximum	Mean	Std. Deviation
Q4 Age	125	24	62	41,10	9,129
Q5 Sex	141	1	2	1,36	,497
Q14 Recoded: Permanent Position	141	1	2	1,83	,377
Q15 Manager of decision-making processes	141	0	3	2,64	,647
PROFESSIONAL LOYALTY (37a,37b, 37c)	141	1	5	3,90	,790
PARTICIPATION IN DECISION MAKING (16, 16a, 16b, 17)	141	1	5	2,84	1,181
LEGITIMACY OF DECISIONS (19, 20, 20a)	141	0	5	3,51	,772
GOALS (35 recoded, 36, 36a)	134	1	4	2,99	,894
SUPPORT FROM MANAGER (40, 40a, 40b, 40c, 40d)	141	1	5	3,55	,956
JOB SATISFACTION (34, 34a, 34b, 34d)	141	1	5	3,71	,866
DECENTRALIZATION OF AUTHORITY (21, 21a, 21b)	141	1	5	2,12	,968
ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)	141	1	5	3,56	,872
Valid N (listwise)	120				

Table 5.7.2: Descriptive Statistics: Hierarchical Management Case

	N	Minimum	Maximum	Mean	Std. Deviation
Q4 Age	126	23	65	44,26	9,533
Q5 Sex	131	1	2	1,32	,485
Q14 Recoded: Permanent Position	131	1	2	1,92	,267
Q15 Manager of decision-making processes	131	1	3	1,93	,557
PROFESSIONAL LOYALTY (37, 37a, 37b)	131	2	5	3,78	,689
PARTICIPATION IN DECISION-MAKING (16, 16a, 16b, 17)	131	0	5	2,98	1,139
LEGITIMACY OF DECISIONS (19, 20, 20a)	131	2	5	3,66	,628
GOALS (35 recoded, 36, 36a)	124	0	4	2,62	1,127
SUPPORT FROM MANAGER (40, 40a, 40b, 40c, 40d)	131	2	5	3,71	,825
JOB SATISFACTION (34,34a,34b,34c,34d)	131	2	5	3,48	,576
DECENTRALIZATION OF AUTHORITY (21, 21a, 21b)	131	1	5	1,97	,833
ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)	131	0	5	3,63	,842
Valid N (listwise)	120				

The tables above demonstrate the distribution of the demographic background variables and the new variables constructed in this chapter. One of the first things that is obvious in the tables above is that there for most variables in the team management case, except for on age and goals, has 141 respondents replied. In the hierarchical management case there are 131 respondents for most variables, except again for on age and goals[104]. It is clear that the single item manager of decision-making processes in the team management case has a lower minimum value than this item has in the hierarchical management case. The lowest value in the team management case is 0; this value expresses that the respondent has not answered this question since the scaling starts at 1. Since the value 0 only occurs one time, it is random, and will not affect the results of further analysis. The mean for this item in the team management case is 2.64 with a standard deviation of 0.647, and the mean in the hierarchical management case is 1.93, with a standard deviation of 0.557.[105] A higher mean value which is closer to 3 in the team management case means that here, a management team is more often acknowledged to be in charge of decision-making processes than in the hierarchical management case in which mean value is close to 2, indicating that decisions are managed more frequently by a manager alone, or a manager in consultation with staff or administrative personnel. This is in accordance with the formal management models the two hospitals employ in their organization.

As already demonstrated in the process of indexing, 'professional loyalty' is composed of different items in the two cases. 'Participation in decision-making processes' is an important theoretical variable, as I argue based on an instrumental perspective that team management may result in a broader spectrum of professionals participating in decision-making processes. It is, however, indicated in the tables above that there is little variation in this kind of participation between the two managerial cases. 'Legitimacy of decisions' is the next variable in which there is some variation between the two cases. The minimum value in the team management case is 0, whereas it is 2 in the hierarchical management case. According to the frequency table the value 0 only occurs once. The mean value of this variable is fairly equal across the two cases. When it comes to 'goals' the mean and the standard deviation in the team management case are slightly higher than in the other case. The distribution for the

---

[104] Again, I have checked for skewness on all the variables in the two cases. All variables are distributed normally.

[105] Manager of decision-making processes is coded with three values of which the value 1 indicates that a manager (alone) is in charge of decision-making, 2 indicates a manager who consults with staff or administrative personnel, and 3 indicates a management team with a team manager.

subjective outcome dimensions 'job satisfaction' and 'organizational commitment' are important since they constitute the dependent variables in the thesis. Even though the mean is relatively higher for 'job satisfaction' in the team management case than in the hierarchical case, 1 is the lowest reported value for this variable in the team management case while on this variable in the hierarchical management case the lowest value is 2 for the same variable. In other words and due to the standard deviations of 'job satisfaction' in the two cases, it is clear that the dispersion around the mean is greater in the team management case than in the hierarchical case. The mean for 'organizational commitment' in the hierarchical case is reported to be slightly higher than in the team management case, but the dispersion around the mean is relatively greater in the team management case. In the next chapter I will conduct bivariate regression analyses between each independent variable and the dependent variables of job satisfaction and organizational commitment.

6 Bivariate Analysis: Management and Job Satisfaction and Commitment

The aim now is to analyze the data to answer the research question of the thesis. It is therefore appropriate to remind ourselves of the research question I pose in this thesis and the analytical construction on which this research question is based. My overall research question in this thesis concerns how management teams in mental departments affect subjective outcome dimensions, i.e. job satisfaction and organizational commitment, of both team managers and employees. This research question is the result of a review of team literature combined with information acquired through qualitative interviews with managers and employees in mental wards. Team management members at UNN expressed a concern to organizational researchers at the University of Tromsø (UiT) regarding the team management model that they conducted. They shared the opinion that the team management model contrasted with the traditional hierarchical management model that had been employed in the hospitals earlier. One of the team management members explained in the interviews that they experienced the team management model as very efficient in the regard that it facilitated a uniform and long-term approach to managing a mental department than what they had experience with a traditional management model:

> "I certainly think that the way [team management] we have it today, at least in our department management, we have many more aspects that we discuss jointly, than what we did earlier in the old dual management [model]. Because, then it was just like, I had some general view of what he [medical department manager] dealt with, and that he just assumed that I [nurse who was responsible for economic aspects of the department management] controlled the other stuff. And it worked as long as one felt that we got along ok and relied on each other. Then it worked fairly well, but I would not return to that model. Now we have more focus on the composite set of departmental goals and profession". Informant 3/2006

Management teams at mental departments have as their prime task to conduct the unitary management of their department. Unitary management includes all aspects of the conduct of a department: the medical, personnel, administrative and economic aspects. Moreover, a vital aspect of department management involves affecting underlying segments in the organization like for example subordinates. Department management teams lay some of the premises for, through their decisions and conduct of medical, personnel, administrative and economical aspects management, how they themselves and their employees who are being managed by the teams develop attitudes such as satisfaction and commitment to the organization. As one of the informants puts it:

"Yes, it is clear that it [team management] does something about my well-being at my job: I am heard after all! It certainly ensures that someone listens to me or sees me. Whether they see me enough is another matter. But it goes both ways. And it certainly affects my well-being."
Informant 5/2006

This indicates that team management affects subjective outcomes for both managers and employees, which points to the relevance of subjective outcome dimensions to this thesis. Analytically I base this approach to subjective outcomes by directing attention to team management as a vital part of the organizational and situational context in which the attitude formation takes place. This draws upon and Salancik and Pfeffers' (cf. 1978) notion of organizational and situational context as vital when explaining how attitudes are formed in organizations. I argue that the management models like other organizational phenomena may constitute socializing mechanism that constrain attitude formation in two distinct ways (cf. Lægreid and Olsen 1978). First, drawing upon an instrumental perspective of organizations: management is materialized in organizations through formal structures which are well established as constraining forces in organizations (cf. Scott 2001; Scott 2003). Team management is recognizable in formal structures through representation and participation of several professional groups in the execution of management. My second point, derived from institutional theory, is that management is also expressed in the normative and symbolic structures of organizations. In this manner, team management is regarded as a social system capable of developing social meaning and routines influencing attitude formation and identification of organizational members.

However, exactly how team management may affect subjective outcome dimensions is a rather open question. I have employed the paradigmatic traditions of modernism and constructivism to critically reflect upon how team management may affect subjective outcome dimensions. From a modernistic interpretation of the social and organizational approach to how attitudes are formed in organizations, a strong relationship between team management and subjective outcomes emerges as possible. Team management is materialized in formal structures and in this way it influences how management is conducted and how satisfied and committed managers and employees in an organization are. Another proposition that is possible to deduce based on an instrumental approach to team management concerns how team management may affect its management more members than its employees being managed by the teams. This proposition is founded on the observation that managers in management teams actually practice this specific form of management and therefore we may expect that the effects are stronger on the group of managers than within the group of

employees, since the distance to the management teams is longer for employees than for managers. I furthermore argue that the effects of team management on managers' satisfaction are shaped through formalization of 1) participation, 2) empowerment, and 3) accountability in management teams. This proposition will first be analyzed in the multiple regression analysis. But, in accordance with modernistic inspired theories calling attention to individual attributes when explaining how subjective outcomes are affected, one may expect that there is no relationship between team management and the subjective outcome dimension since individual characteristics are more imperative in defining level of satisfaction and commitment in an organization than what team management is.

Applying a constructivist approach gives a more blurred notion of the relationship between team management and subjective outcomes. First of all, within this approach team management is regarded as a symbol rather as an instrument. Team management as a symbol may be introduced in an organization in order to demonstrate affiliation to values like efficiency, rationality, and renewal. It is possible that team management is adopted into formal structures, but the management conducted in practice may vary from formal structures. In addition, team management may occur in different local versions with distinct local names. Based on this I ask: is the connection between team management and subjective outcomes blurred and can this be explained according to the existence of different local versions of team management? I will now shed light on how these research questions are going to be answered by analyzing the collected data.

6.1 Preparation Prior to Analysis

By using these paradigmatic traditions as an approach to team management, focus is put on how team management is materialized in organizations in two distinct ways, through formal and informal (symbolic) structures, which may constitute the socializing mechanisms that constrain attitude formation. An important aspect in relation to studying how team management materializes itself in both formal and informal structures concerns how to capture this materialization of it along the formal and informal dimensions. In order to operationalize team management I construct a dummy variable when the data sets are merged in chapter 7, this variable will be a contextual variable that intercepts both the formal and informal expression of team management. This dummy will be decisive as to determine whether or not team management makes a difference on managers' and employees level of satisfaction and commitment. However, before merging the data sets and constructing the team management dummy, it is vital to check the two separate data sets for any variation on the control variables on job satisfaction and organizational commitment.

As regards the control variables I will now briefly comment on the background of them. One way to embark on the choice of background variables is to call attention to what managers do or even more accurate what they produce and how "production" processes are distinguished between managers[106]. As mentioned previously in the thesis a vital task for management teams, as for other types of management as well, involve decision making. It is therefore pertinent to control for how decision processes take place when analyzing if and how team management makes a difference on satisfaction and commitment. First, I argue that that team management is distinguished through formal structure when it comes to representation and participation in decision-making processes. I have therefore constructed a variable called participation in decision-making processes in the data set. It is this variable that I am going to employ in further analysis as a control variable for the degree of representation and participation in decision-making processes, and furthermore, how this affects job satisfaction and commitment. Additionally, it is controlled for how decision-making processes are managed in the organizational departments under scrutiny.

---

[106] Here I draw upon arguments developed by Egeberg (1989).

Second, I argue that team management is discriminated in informal structure. This discrimination of team management in informal structures may be evident when looking more closely at how team management is materialized in normative and symbolic structures of the organization. As mentioned in chapter two, one way of assessing the extent to which employees identify with management could be according to their perception of managerial decisions. This also draws upon the notion of decision-making as a vital task for managers, and thus, it is pertinent to study aspects of decision-making in relation to management. I have therefore constructed a variable called legitimacy of decisions that measures how managers and employees regard the legitimacy of departmental decisions concerning patient treatment, economic dispositions, and how well they are aligned with departmental goals. In addition, professional loyalty is added as control variable. This variable is included in the models on the basis of the existence of different professional groups in hospitals. In chapter 1 and 2, it was pointed out how professional considerations seem to be vital in relation to constraining behavior for employees and managers in hospitals which in this manner may impede rational behavior. I have furthermore argued that different management models may constitute variation regarding how these professional considerations are dealt with both instrumental and symbolically. Derived from this it is essential to control for loyalty towards the profession since team management may be regarded as a way to untie professional loyalty.

Third, goals are included in the regression models as control variable. This is based on the modernist approach to organization and their emphasis on organizations as vital instruments for goal achievement. It is possible that different management models or managers for that sake may result in a varying degree of goal achievement. This variable is constructed on the basis of the respondents' perception of whether or not departmental goals are attained. In this manner it is possible to control for a varying degree of goal achievement in the two cases. A team management and a hierarchical management model may lay different premises regarding how authority is distributed and decentralized in the organizations, and I have thus controlled for this factor as well. Furthermore, in line with TMT literature's research on teams, demographic variables like age, sex, and permanent position are controlled for. Support from manager is an inductively constructed on the basis of a need for a coupling between management and employees. Informants underlined the importance of support from managers when they commented on what role management played in regard to their work day.

6.2 On Regression Analysis: Logic and Assumptions

In chapter five I constructed new variables based on correlations between the items collected through the questionnaire. I will now analyze how the constructed variables relate to each other. Correlation techniques signify how well variables are connected, but it does not point out causality in the connections between variables or the influence of intervening variables. The aim in this section is to analyze how team management affects the dependent variables, job satisfaction and organizational commitment, by computing bivariate regression analysis of the independent variables on these two dependent variables. Regression analysis is a well-suited technique for analyzing this since it accounts for how variation in a set of independent variables is expected to affect the variation of the dependent variable(s). I will first conduct bivariate regression in order to investigate how each independent variable relates to the dependent variables, and in the next chapter I will employ multivariate analysis by running all the independent variables through a multivariate regression analysis. I will conduct bivariate regression analysis in order to describe the relationship between each independent variable and the dependent variables, job satisfaction and organizational commitment, in each case. This is important with reference to the research question regarding how team management affects subjective outcome dimensions in comparison to hierarchical management. In this manner, I intend, by means of the bivariate regression analysis, to call attention to any variation between the team management case and the hierarchical management case. A further advantage of conducting bivariate regression analysis is that it will facilitate the presentation of the analysis to the readers and may further keep the reader posted regarding all the steps in the analysis.

Before starting out with the bivariate regression analysis, I will first briefly address some of the technical and theoretical premises on which the use of linear regression is based. One of the basic presumptions for conducting linear regressions is that both independent and dependent variable are continuous. However, there seems to be general agreement on running regression analysis also in cases with ordinal variables with relatively many values, if it is theoretical meaningful in the statistical and social science literature (Knoke, Borhnstedt et al. 2002; Skog 2004; Ringdal 2007:361). The data used in the regression analysis in this thesis is based upon this argumentation, as most variables are categorical. The variables employed in the thesis are, as illustrated in chapter five, constructed based on Likert-scales with five values. These variables are composed of attitudinal and behavioral scales that will be comprehended by the respondents precisely as scales, and most of these scales are in

accordance with Ringdal's criterion (Ringdal 2007:361) that categorical variables employed in regression analysis should contain at least five values.

Another essential conjecture in linear regression is that the relationship between independent and dependent variables is linear, and that the dependent variable are distributed normally at every level of the independent variables (cf. Knoke, Borhnstedt et al. 2002:169). This latter criterion, that both the independent and dependent variables are normally distributed) has been accounted for in chapter 4.5: Preparation of quantitative Data prior to Analysis, where I tested the items for normality by illustrating their means, standard deviation, skewness and kurtosis. Tables demonstrating the distribution on all items in the data set are enclosed in the appendix. Regarding the assumption of linearity, it is clear that this is something that will be inspected through analysis. Finally, it is important when running regression analysis that the independent variables in a regression model are not too highly or perfectly correlated. This is obviously important when conducting a multiple regression analysis and I will therefore come back to this subject of *multicollinearity* in the next chapter in which I will account for the multiple regression analysis. This point regarding not-too-high correlations between the independent variables also applies to the correlation between the independent variables and the residual term in the equation. Regression analysis assumes that unimportant explanatory variables are omitted from the model, and thus intercepted by the residual term. If this presumption is not complied with, the residuals in the model will usually be correlated with the explanatory variables in the model, which will give misleading regression coefficients.

Regression analysis is known to be one of the most robust statistical techniques, even though not all of the presumptions I have sketched up are fulfilled (cf. Knoke, Borhnstedt et al. 2002). Correlation analysis employed in the previous chapter is distinguished from regression analysis in the way that it deals with the variables. Whereas correlation analysis regards the variables as symmetrical, regression analysis treats the variables as asymmetrical. The purpose of regression analysis is often to examine how one or a set of variables (X_1, X_2) cause the variation on another variable (Y). In statistical terms the linear relationship between the dependent (Y) and the independent variable (X) are expressed in the algebraic form: $Y = a + bX + e_i$. This equation signifies that the Y value equal the sum of the constant, a (the point at which the line intercepts the *Y*-axis), plus the product of the slope, b, times the *X* value. The line's Y intercept, a, shows the Y value when X = 0. The line's slope value, b, shows the amount of change in *Y* units for a one-unit change in *X*. In the analysis I will interpret the

coefficient b, the p value for b, and the R square. By interpreting the b value, the strength and direction of the relationship between X and Y is demonstrated. That is, a positive high b value on sex and job satisfaction means that if you are a man it is more likely that you are satisfied with your job than if you are a woman. In contrast, a high negative b value on sex and job satisfaction means that if you are a man it is more likely that you are less satisfied in your job. The tables will also display the other measures such as a, standard error, t, F, and N, but these will not be emphasized in statistical and substantial interpretation. It would not always be empirically meaningful to interpret the constant value a, since this measure indicates the mean value of Y when X equals 0. The independent variables in the thesis, like the two dependent variables in the thesis of job satisfaction and commitment, are constructed as variables along dimensions reaching from 1 to 5, so these have to be recoded and have with their starting value at 0 if it should give any substantial meaning to interpret the value of the constant. The constant is, however, a necessarily term for the equation to add up, and the constant is requisite to make predictions based on the regression analysis. It is not the intention to use the regression analysis to predict behavior or outcomes with the regression analysis in this thesis. The aim of the regression analysis in this thesis is to demonstrate effects of a specific type of management on subjective outcome dimension, and for this application it is not essential to comment on the constant.

6.2.1   Interpretation of Measurements

To interpret the strength of the independent variables on job satisfaction and commitment, the b coefficient and the standardized Beta coefficient are relevant measures. The b coefficient and the Beta coefficient are calculated differently and thus it makes a difference which of them is interpreted in analysis. A vast number of social science studies employ the standardized Beta coefficient (cf. Skog 2004:101). The background for this lies in the argumentation that the b coefficient should mostly be used when the independent and dependent variables have obvious units of measurements (Knoke, Borhnstedt et al. 2002:194-195).[107] They furthermore argue that many variables employed in social science lack intrinsically interpretable scales, such as job satisfaction which is a variable composed of several statements in the questionnaire, each classified on a Likert-scale (ibid). In these situations, they hold that the interpretation of the b coefficient is arbitrary due to the scales that not intuitively make sense, and therefore they argue that the standardized beta coefficient

---

[107] For example, if one regress income in Norwegain kroner (Y) over year of education (X), the interpretation of the b coefficients intuitively makes sense since the variables have obvious units of measurement.

should be used[108]. King (1986:671-4) and Skog (2004:102)[109] are critical to the frequent use of the standardized Beta coefficient and urges for caution when deciding whether to interpret the b or the Beta coefficient. First, they allude to the standardization of b coefficients by converting them into standard deviations, based on the notion that "variables with unclear or difficult-to-understand units of measurement" are easier to interpret when they are standardized is misleading (King 1986:671)[110]. In this manner, the interpretation of effects becomes imprecise and substantially more difficult when the effect of the cause variables is considered according to a constructed scale (in the form of standardized coefficients). Second, attention is called to the fact that the Beta coefficient in addition to measuring the relationship between the explanatory and the dependent variable, also accounts for the variance of the independent variable (ibid)[111]. Third, the argument concerning interpretation of the standardized Beta coefficient, since this renders it possible to figure out which of the X variables affects the Y variable the most, is often pushed too far.[112] For these reasons a comparison of the standardized Beta coefficients across data sets and different studies should be carried out with caution.

Drawing upon this insight regarding the b and the standardized Beta coefficient, it is clear that deciding which of these measures to interpret in the thesis should be based upon the purpose of this specific research project. In this thesis the aim is to compare how job satisfaction and organizational commitment are affected by the set of independent variables in two different management cases operationalized in two various data sets. Based on the critical remarks to the use of the Beta coefficient in the subchapter above it is more suitable to interpret the b coefficient in such cases. It is therefore the *unstandardized* b coefficients that will be

---

[108] According to King (1986:673), this is also done when the point of the regression analysis is to renveal which of the independent variables in the regression model have the most effect on the dependent variable. Standardization means a rescaling of both independent and dependent variables in terms of their standard deviation. This involves first converting both the Y and the X variables to Z scores and then estimating the regression euation by multiplying the b coefficient by the standard deviation of the independent variable and then dividing this by the standard deviation of the dependent variable.

[109] The subsequent arguments against the use of the beta coefficients are based on these two references to King and Skog.

[110] They claim that: "[I]f standardized coefficients do not add information, they certainly do not add meaning" (King 1986:671).

[111] This is superfluous; since researchers are often only interested in the relationship between X and Y, or at least they are interested in effect and variance separately. And it thus makes little sense to standardize the b coefficient.

[112] Since King (1986:673-4) argues that the purpose rarely is to find: "[o]ut which variable will win the race. Most often it is theoretically "good enough" to say that even after controlling for a set of variables [()], the variable in which we are interested still seems to have an important influence on the dependent variable".

interpreted[113]. The b coefficient is preferred because it is calculated on the basis of the original items, and therefore the interpretation of it is not blurred by standardization. Most of the constructed variables in the regression analysis have values on Likert-scales ranging from 1 (to a very small degree/strongly disagree) to 5 (to a very large degree/strongly agree), which should not make it too difficult hard to interpret the meaning of the regression coefficients. In the subsequent tables in this chapter the outcomes of the bivariate regression of the independent variables on job satisfaction and commitment in the team management case is displayed. Before going to the bivariate regression tables I will briefly comment on the interpretation of the coefficient of determination, R^2.

The coefficient of determination indicates the proportion of total variation in Y "determined" by its linear relationship to X. It takes the multiple correlation coefficient as the starting point, and the calculation of R^2 is simply the multiple correlation coefficient, Pearsons R, multiplied by itself. While R varies between -1 and 1, R^2 varies between 0 and 1. The closer the R^2 is to 1, the more the independent variable explains of the variation on the dependent variable, and contrarily, the closer the coefficient of determination is to 0, the less the independent variable accounts for of the variation on the dependent variable. R^2 is commonly interpreted in percent. If, for example, R^2 is reported to be 0.34, this means that the independent variable explains 34% of the variation of the dependent variable. The coefficient of determination may be compared between models with the same dependent variable, even though it is difficult to say what a high or a low score of R^2 would be. The model with the highest score is the one with most explanatory power. However, R^2 is affected by the mean of the dependent variable, and therefore it does not make any sense to compare R^2 in regression models with different dependent variables. R^2 is moreover sensitive to: 1) the variation of the explanatory variable[114], 2) the scope of measuring error, and 3) the variation in omitted explanatory variables – variables that are represented in the residuals. All this means that R^2 may vary strongly from one sample to another (cf. Midtbø 2007:88). In multiple regression analysis it may constitute a problem that R^2 always increases when an explanatory variable is added in a model. To conduct research by building models based on whether or not variables contribute to increasing the coefficient of determination to reach a high R^2 value is therefore unfortunate but common in research (cf. Midtbø 2007:104). Based on this, I will comment on the

---

[113] Yet, the standardized Beta coefficient is reported in the tables so that the information it provides us with is available.
[114] I.e. the less variation the lower R^2

coefficient of determination in the bivariate and in the multiple regression analysis in the next chapter. But the point of the analysis is not to search for variables that to a great extent increase R^2, but rather to investigate how job satisfaction and organizational commitment are *affected* in the two cases. Ultimately, before starting out on the regression analysis, it is worth mentioning that coefficients that are significant on a 10% level will be regarded as significant when considering the statistical results.

6.3 Bivariate Regressions: Management and Job Satisfaction

Table 6.3.1: Job Satisfaction in the Team Management Case

	a	B	Std. Error	Beta	t	Sig	R Square	F	Sig	N
Age	2,74	,024	,008	,251	2,87	,005	,063	8,28	,005	**125**
Sex	3,86	-,111	,15	-,064	-,75	,451	,004	,571	,451	**141**
Permanent Position	3,34	,206	,19	,09	1,06	,29	,01	1,13	,290	**141**
Manager of Decision-Making Process	3,01	,266	,11	,199	2,39	,018	,04	5,73	,018	**141**
Participation in Decision-Making	3,14	,203	,60	,27	3,39	,001	,08	11,52	,001	**141**
Legitimacy of Decisions	2,39	,376	,09	,336	4,20	,000	,11	17,64	,000	**141**
Support from Manager	1,38	,657	,05	,725	12,41	,000	,53	154,2	,000	**141**
Professional Loyalty	,716	,769	,07	,702	11,61	,000	,49	134,8	,000	**141**
Goals	2,72	,337	,08	,346	4,23	,000	,120	17,91	,000	**134**
Decentralization of Authority	4,21	-,238	,07	-,266	-3,25	,001	,07	10,58	,001	**141**

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34d)
Missing cases are excluded listwise[115]

In the above table the bivariate regressions of the independent variables on the dependent variable of 'job satisfaction' for the team management case is displayed. What it is evident from the table is that except for the age variable, it is mostly the composite variables that affect 'job satisfaction' significantly. By the composite variables I mean the variables constructed in chapter 5 based on correlations of several indicators. The two demographic background variables in the table; 'sex' and 'permanent position', do not affect 'job satisfaction' significantly, and additionally, these effects on 'job satisfaction' are relatively weak. 'Age' significantly influences job satisfaction, but the influence is very weak, as it is reported to be 0.024. When it comes to participation in decision making, this variable is clearly significant at 0.01-level. The effect of 'participation in decision-making' is relatively strong as the regression coefficient is reported to 0.203. As regards contents, it means that the more involved people are in decision-making the more satisfied they are in their job. 'Type of manager of decision-making processes' has a regression coefficient on 0.266 which is significant at the 0.05-level. 'Legitimacy of decisions' affects 'job satisfaction' significantly

---

[115] For all regression analysis missing cases are excluded listwise.

and strongly as the regression coefficient is reported to be 0.376. 'Support from manager' has a very strong effect on 'job satisfaction'. The regression coefficient indicates that if the value of 'support from manager' increases with by one unit, the value of 'job satisfaction' increases by 0.657 units. This is a rather strong value, especially if one takes into account that 'support from manager' attains an explained variance of 0.53, which means that this variable accounts for 53% of the variance on 'job satisfaction'[116]. Furthermore, it is evident in the table displaying the results of the bivariate regression that 'professional loyalty' has a significant regression coefficient of 0. 769. This means that the relationship between 'professional loyalty' and 'job satisfaction' is very strong in the team management case. The explained variance of 'professional loyalty' is reported to be 49%. Goals affect job satisfaction significantly and strongly as the regression coefficient is 0.337. 'Decentralization of authority' has a strong negative significant effect on 'job satisfaction'.

Table 6.3.2: Job Satisfaction in the Hierarchical Management Case

	A	b	Std. Error	Beta	t	Sig	R Square	F	Sig	N
Age	3,40	,001	,005	,021	0,233	,816	,00	,054	,816	126
Sex	3,46	,016	,10	,013	,148	,883	,00	,022	,883	131
Permanent Position	3,68	-,104	,19	-,048	-,547	,586	,002	,299	,586	131
Manager of Decision-Making Processes	3,35	,068	,09	,066	,751	,454	,004	,564	,454	131
Participation in Decision-Making Processes	2,9	,197	,04	,389	4,79	,000	,15	22,95	,000	131
Legitimacy of Decisions	2,03	,398	,07	,434	5,48	,000	,19	29,98	,000	131
Support from Manager	1,91	,425	,05	,608	8,69	,000	,37	75,67	,000	131
Professional Loyalty	2,09	,367	,06	,438	5,54	,000	,192	30,70	,000	131
Goals	3,34	,047	,047	,090	1,00	,319	,008	1,00	,319	124
Decentralization of Authority	3,70	-,111	,06	-,160	-1,84	,068	,026	3,39	,068	131

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34c, 34d)
Missing cases are excluded listwise

The table above demonstrates the bivariate regression of 'job satisfaction' on the independent variable in the hierarchical management case. Also in this case, the demographic background variables; 'age', 'sex', and 'permanent position' do not influence 'job satisfaction' significantly. The strength of the regression coefficients in the above table indicates that the demographic variables influence 'job satisfaction' relatively more weakly than they do in the team management case. In addition, the squared R designates that the contribution of 'age', 'sex', and 'permanent position' to the explained variance of job satisfaction is as good as absent.

---

[116] In bivariate regression the R square is equivivalent to the squared correlation coefficient Pearson's r of the two variables.

As opposed to in the team management case, the influence of 'manager of decision-making processes' on 'job satisfaction' is very weak in this case, and the weak influence is not significant at the 0.05-level. 'Participation in decision-making processes' has a significantly weaker impact on 'job satisfaction' compared to the team management case. But 'legitimacy of decisions' is reported to have a significant regression coefficient of 0.398 which is somewhat stronger than in the team management case. 'Support from manager' and 'professional loyalty' had a strong, significant influence on 'job satisfaction' in the team management case. These variables also impact 'job satisfaction' profoundly in the hierarchical case, but the strength of regression coefficients is not as strong as in the team case. 'Goals' hardly affect 'job satisfaction' as the regression coefficient is reported to be 0.047, which is a not significant value. This is a much weaker connection than that between 'goals' and 'job satisfaction' in the team management case. 'Decentralization of authority' also has a weaker impact on 'job satisfaction' in the hierarchical case than in the team case, and besides, in the hierarchical case it is not significant either.

6.4 Bivariate Regressions: Management and Organizational Commitment

Table 6.4.1: Organizational Commitment in the Team Management Case

	A	b	Std. Error	Beta	t	Sig	R Square	F	Sig	N
Age	2,67	,022	,009	,225	2,55	,012	,050	6,53	,012	**125**
Sex	3,83	-,200	,148	-,114	-1,35	,178	,013	1,83	,178	**141**
Permanent Position	3,31	,136	,196	,059	,696	,488	,003	,485	,488	**141**
Manager of Decision-Making Processes	2,99	,214	,113	,159	1,89	,060	,025	3,58	,060	**141**
Participation in Decision-Making Processes	2,79	,270	,058	,365	4,62	,000	,133	21,37	,000	**141**
Legitimacy of Decisions	2,18	,394	,090	,348	4,38	,000	,121	19,19	,000	**141**
Support from Manager	1,69	,526	,063	,577	8,32	,000	,333	69,33	,000	**141**
Professional Loyalty	1,79	,456	,085	,413	5,34	,000	,171	28,61	,000	**141**
Goals	2,65	,315	,081	,320	3,89	,000	,103	15,1	,000	**134**
Decentralization of Authority	3,93	-,176	,075	-,195	-2,34	,020	,038	5,49	,020	**141**

A Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
Missing cases are excluded listwise

The table above displays the bivariate regressions of 'organizational commitment' on the independent variables in the team management case. 'Age' is the only demographic variable that has a significant effect on organizational commitment. Still, the influence of age on commitment is very weak. Both 'sex' and 'permanent position' have a stronger influence on 'organizational commitment', but none of these effects are significant at the 0.05-level. 'Sex' has a negative effect on 'commitment'. This means that as the value of 'sex' goes from female

(1) to male (2), the value of 'organizational commitment' decreases with 0.20 units. 'Manager of decision-making processes' has a relatively strong positive influence on commitment, since the strength of its regression coefficient is 0.214. For example, if one goes from 'a manager consulting with staff or administrative personnel' to 'management team with a team manager', the 'organizational commitment' will increase with 0.214 units. However, this effect is not significant on 0.05-level since the p-value is reported to be 0.06, but it is significant on 0.10-level. 'Participation in decision-making processes' and 'legitimacy of decisions' both affect 'organizational commitment' relatively strongly, and both effects are significant. Just as for 'job satisfaction', 'support from manager' affects 'organizational commitment' relatively strongly; the regression coefficients are 0.526 and 0.703 respectively.[117] 'Support from manager' has a rather high value of squared R as it accounts for 33.3% of the variation on 'organizational commitment'. 'Professional loyalty' and 'goals' have some less effect on commitment as their regression coefficients are reported to be 0.456 and 0.315. The amount of explained variance is also relatively high for these variables. 'Decentralization of authority' accounts for 7% of the variance of the dependent variable, and it has a relatively weak negative influence on 'commitment'[118]. This means that if one increases the values of 'decentralization of autonomy' by one unit, the degree of organizational commitment will decrease by 0.238 units.

---

[117] These effects are significant on 0.01-level.
[118] This regression coefficient is significant on 0.05-level.

Table 6.4.2: Organizational Commitment in the Hierarchical Management Case

	A	b	Std. Error	Beta	t	Sig	R Square	F	Sig	N
Age	3,34	,006	,008	,068	,758	,450	,005	,575	,450	**126**
Sex	3,65	-,011	,153	-,007	-,074	,941	,000	,006	,941	**131**
Permanent Position	4,19	-,290	,277	-,092	-1,05	,297	,008	1,09	,297	**131**
Manager of Decision-Making Processes	3,66	-,018	,133	-,012	-,133	,895	,000	,018	,895	**131**
Participation in Decision-Making Processes	2,94	,230	,062	,311	3,72	,000	,097	13,83	,000	**131**
Legitimacy of Decisions	1,96	,457	,111	,341	4,12	,000	,116	16,9	,000	**131**
Support from Manager	1,82	488	,079	,479	6,19	,000	,229	38,38	,000	**131**
Professional Loyalty	2,13	,398	,102	,325	3,91	,000	,106	15,28	,000	**131**
Goals	3,53	,029	,068	,039	,427	,670	,001	,183	,670	**124**
Decentralization of Authority	4,11	-,242	,086	-,240	-2,80	,006	,057	7,85	,006	**131**

A Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
Missing cases are excluded listwise

In the hierarchical management case, the effect of 'age' on 'commitment' is as good as absent. Also 'sex', however, has a very weak impact on 'commitment', as opposed to in the team management case.[119] In addition, 'age' and 'sex' do not contribute to the explained variance of commitment. 'Permanent position' has a relatively weak negative influence on 'commitment', which means that when going from not having to having a permanent position the degree of commitment to the organization decreases. However, this effect is not significant at 0.10-level. 'Participation in decision-making processes' has a relatively strong, significant effect on commitment, just as in the team management case. 'Legitimacy of decisions' and 'support from manager' have even stronger effects on 'commitment' as the regression coefficients are reported to be respectively 0.457 and 0.488.[120] The explained variance of 'support from manager' is relatively good as it accounts for 22.9% of the variance on 'organizational commitment'. 'Professional loyalty' and 'decentralization of authority' have a strong and significant effect, and the contribution to the explained variance of professional loyalty is 10.6%, whereas for 'goals' it is scarce. 'Goals' has virtually no effect on commitment, as opposed to the other case; however, the effect of 'goals' in this hierarchical case is not significant.

---

[119] Neither 'age' nor 'sex' affect commitment significantly.
[120] Both regression coefficents are significant at the 0.01-level.

6.5 Conclusion Prior to Further Analysis

In this chapter I have conducted bivariate regression analysis of independent variables and the subjective outcome dimensions of 'job satisfaction' and 'organizational commitment' in both the team and the hierarchical management case. The intention with conducting bivariate regression analysis of dependent and independent variables in both cases was two-sided. On the one hand, it was done to examine how the relationships between each independent variable and the dependent variables that are relevant for analysis, since one of the basic premises for running multivariate analysis concerns a linear relationship between the independent and dependent variables. On the other hand, it was important in regard to the research question to shed light on all the differences that may be between the two management cases in the thesis. In addition to this, another goal by guiding the reader through a circumstantial process of bivariate regressions ensures for transparency in regard to all the steps in analysis of data, which will be an advantage for the reader.

First, in regard to 'job satisfaction' it is evident that there are differences concerning which of the independent variables it is that affects 'job satisfaction' in the two cases. Generally, the strengths of the independent variables are stronger in the team management case than they are in the hierarchical management case. 'Manager of decision-making processes' are reported to be strongly and significantly connected to 'job satisfaction' in the team management case, whereas in the hierarchical management case the 'manager of decision-making processes' is not connected to 'satisfaction'. 'Support from manager' and 'professional loyalty' in the team management case is reported to affect job satisfaction very strong, whereas 'legitimacy of decisions', 'goals', and 'participation in decision-making' affect job satisfaction strongly in the hierarchical management case. In the hierarchical management case, 'support from manager' affects 'satisfaction' rather strongly but not as strongly as in the team management case. In addition, 'legitimacy of decisions' has a strong influence on 'job satisfaction', and 'professional loyalty' has a strong effect on 'satisfaction'; it is slightly stronger here than in the team management case. Secondly, with reference to 'organizational commitment', 'support from manager' still has a rather strong effect in the team management case. 'Professional loyalty', 'legitimacy of decisions', 'goals', 'participation in decision-making processes', and 'manager of decision-making processes' all affect commitment strongly in the team management case. In the hierarchical management case 'support from manager' also has

the strongest effect, but not as strong as in the team management case. 'Legitimacy of decisions' conversely affects 'commitment' slightly more strongly in the hierarchical management case than in the team management case.

Before interpreting results of regression analyses at a more substantial level, I will conduct multiple regression analyses. Multiple regressions may change the results of the bivariate regressions since in multiple regressions all variables are included in the model, and in this manner, the effect on each variable is controlled for the effects of all the other variables in the model. In the next chapter I will conduct multiple regression analyses, whereas in chapter 8 the results of multiple regressions are interpreted at a more substantial level.

7 Multiple Regression: The Impact of Team Management on Job Satisfaction and Organizational Commitment

The overall research question concerns if and how team management in mental departments affects subjective outcome dimensions of team managers and employees. In order to answer this question I will analyze the two data sets; in one of the cases team management is formalized as a management model whereas in the other case a hierarchical management model is formalized.

On the one hand, based on an instrumental perspective on team management I argue that management teams may affect managers along subjective outcome dimensions since the formal structure of team management ensures participation, empowerment and accountability to a greater degree than that of a hierarchical management structure. Furthermore, I also propose that team management may affect the outcome for managers more strongly than the employees' outcome, since team managers actually practice this kind of management, and the influence will therefore be stronger on them than on employees. On the other hand, pursuant to an institutional perspective the influence of team management on subjective outcome dimensions are ambiguous. Institutional theory directs attention to the informal and symbolic aspects of team management, which opens up the possibility that the way in which team management is performed may differ from department to department, although the formal structures of management are the same. This perspective supports the proposition that there may be variation between managers' and employees' outcome. Even though team management ensures participation, empowerment, and accountability for several professionals, employees may develop a set of distinct values and norms which may contrast with the norms and values of the management teams. In this way the benefits of participation of several professionals in management may be blurred by informal and normative structures that develop within management teams, making it difficult for professionals to appear as their professional group's representative. In order to answer to these propositions, managers and employees will be kept separate in the multiple regression analysis.

7.1   The Subject of Multicollinearity

Multiple regression has the advantage that it offers a more complete and suitable picture of the phenomenon that is studied. The descriptions of the causal relationships in a multiple regression model are more precise and more credible than if a model just contains one variable. A bivariate (regression) effect may change character totally when it comes to strength, significance and even sign when it is analyzed in a multiple model (cf. Midtbø 2007:97), since in multiple regression analysis the effect of each independent variable is displayed after controlling for the effect of the other independent variables in the model. In this regard the issue of multicollinearity becomes vital.

Multicollinearity refers to the condition of high or nearly perfect correlation between the independent variables in a multiple regression equation. It is a serious concern when conducting regression analysis, since it breaks with the fundamental assumption of regression analysis that the independent variables should not be perfectly correlated with each other. High correlations between the independent variables, pairwise or groupwise, signify that the variables are measuring the same theoretical dimensions, and that consequently it is superfluous to bring both of them into a multiple analysis. Multicollinearity could result in increasing the standard errors of the regression coefficients of variables that are multicollinear, and it could also produce unstable models. Drawing upon this insight concerning collinearity it is important that the models are scrutinized for this condition to ensure their resilience. The problems related to collinearity are often limited to the variables that are multicollinear, which Ringdal refers to as having low "tolerance" (Ringdal 2007:398-9). This measure of tolerance is and assessment of how much the independent variables relate to each other linearly.[121] Tolerance is a standardized measure that ranges from 0 to 1. Values that are very low (i.e. lower than 0.1) may create problems in the multiple analyses. In order to ensure that the condition of multicollinearity is not taking place in the multiple regression models I will account for tolerance when conducting the multiple regression analysis by displaying this measure in all tables. In addition to reporting the measure of multicollinearity,

---

[121] Tolerance is calculated by the formula: $1 - R^2_k$. This formula indicates that we take one of the independent variables, X_1, and calculate the multiple determination coefficents with X_1 as the dependent variable and all the other independent variables as independent variables. R^2_k is the explained variance of X_1 accounted for by all the other independent variables in the model. The remainder, i.e. the tolereance $1 - R^2_k$ is the proportion of the variance of X_1 that is not explained by the other independent variables. It is a measure of the absence of multicolinearity (Tacq 1997:129).

tables that display the correlation among all variables in the multivariate regression analysis are enclosed in the appendix. Ultimately, before starting out on the regression analysis, it is worth mentioning that as in chapter 6 coefficients that are significant on a 10% level will be regarded as significant when considering the statistical results.

7.2 Job Satisfaction in the Two Cases

I will now comment the results of the multiple regression analysis. I will begin by comparing the dependent variables for all respondents in the two cases. Furthermore, in order to answer the research question regarding if and how team management in mental departments affect subjective outcome dimensions for both team managers and subordinates, I will also conduct a regression analysis based on data from each of these groups separately.

Table 7.2.1: Job Satisfaction in the Team Management Case

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	-,146	,518		-,281	,779	
Q4 Age	,006	,006	,062	,953	,343	,669
Q5 Sex	,019	,105	,010	,178	,859	,834
Q14 Recoded: Permanent Position	,081	,150	,033	,541	,590	,756
Q15 Manager of decision-making processes	,102	,078	,076	1,314	,192	,871
Professional Loyalty	*,459*	,076	,430	6,006	,000	,561
Participation in Decision-Making	-,016	,055	-,022	-,291	,771	,511
Legitimacy of Decision	,009	,089	,008	,106	,916	,515
Goals	,017	,067	,018	,253	,801	,586
Support from Manager	*,400*	,072	,432	5,584	,000	,481
Decentralization of Authority	-,028	,058	-,029	-,476	,635	,759

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34d)
R Square: 0.686
Missing Cases are excluded listwise

The first thing that is evident in the table above is that the number of significant effects on job satisfaction is low. It is only 'support from manager' and 'professional loyalty' that affect 'job satisfaction' significantly. 'Professional loyalty' is the variable that influences job satisfaction the most strongly, since the regression coefficient is reported to be 0.46. This means that the tendency is very strong, and that the more loyal respondents are to their colleagues within their organizational unit in the hospital, the more satisfied they are in their job. The strength of the regression coefficient of 'support from manager' is 0.40, which is also a pretty strong effect. In substance, this means that if the value of 'support from manager' is increased by one unit, then job satisfaction will increase by 0.40 units. Variables such as 'participation in decision-making' and 'legitimacy of decisions' hardly affect job satisfaction at all, but these lacking of effects are not significant at the 0.5-level. The model explains 68, 6% of the

variance of job satisfaction, which is a pretty high score. A high value of the coefficient of determination may be explained by the rather high number of variables in the model, and there should not be attached too much importance to this. But what is interesting in relation to the research question is to look more closely at how job satisfaction is affected in the hierarchical management case.

Table 7.2.2: Job Satisfaction in the Hierarchical Management Case

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	1,038	,517		2,008	,047	
Q4 Age	,001	,004	,013	,181	,857	,923
Q5 Sex	,065	,090	,052	,720	,473	,920
Q14 Permanent position	-,226	,170	-,097	-1,335	,185	,907
Q15 Manager of decision-making processes	-,013	,078	-,012	-,168	,867	,907
PROFESSIONAL LOYALTY	*,201*	,069	,237	2,923	,004	,729
PARTICIPATION IN DECISION-MAKING	*,085*	,047	,166	1,798	,075	,562
LEGITIMACY OF DECISIONS	*,195*	,086	,210	2,265	,025	,560
GOALS	-,056	,045	-,106	-1,241	,217	,660
SUPPORT FROM MANAGER	*,277*	,068	,390	4,050	,000	,517
DECENTRALIZATION OF AUTHORITY	,082	,055	,117	1,499	,138	,780

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34c, 34d)
R Square: 0.477
Missing Cases are excluded listwise

It is 'support from manager' and 'professional loyalty' that has strongest significant effects in this management case as well, with regression coefficients on respectively 0, 28 and 0, 20. Even though, these effects are relatively strong, they are significantly weaker than the effects of 'support from manager' and 'professional loyalty' in the other management case. In addition 'legitimacy of decisions' has an effect of 0, 19 on 'job satisfaction' and this effect is significant on a 0.05-level. It means that respondents evaluating decisions as being of higher legitimacy tend to be more satisfied in their job in the hierarchical management case, unlike the team management case. The independent variables in the table above explains 47, 7% of the variance on job satisfaction.

7.2.1   Job Satisfaction: Team Management Case

In order to fully answer the research question in regard to whether or not team management makes a difference on subjective outcomes of both managers and subordinates I will now display how job satisfaction of these two groups are affected. Is for example team managers more satisfied in their job than employees in the team management case? And, how is this in the hierarchical management case? The point with this comparison is first and foremost to compare between managers and employees within each case. In this manner, it is possible to scrutinize the connection between management type and subjective outcome dimensions

along a distance axis (according to management) stretching from proximity/managers to remoteness/employees.

Table 7.2.3: Job Satisfaction in the Team Management Case for Managers

	B	Std. Error	Beta	T	Sig.	Tolerance
(Constant)	-,824	,810		-1,017	,318	
Q4 Age	,011	,011	,104	1,074	,292	,790
Q5 Sex	*,535*	,179	,313	2,990	,006	,675
Q14 Recoded: Permanent Position	-,312	,374	-,088	-,834	,411	,670
Q15 Manager of decision-making processes	-,135	,119	-,104	-1,130	,268	,873
PROFESSIONAL LOYLATY	,170	,174	,124	,979	,336	,457
PARTICIPATION IN DECISION-MAKING	-,182	,129	-,210	-1,413	,169	,335
LEGITIMACY OF DECISIONS	,169	,153	,143	1,101	,280	,439
GOALS	,419	,178	,307	2,349	,026	,434
SUPPORT FROM MANAGER	*,614*	,117	,637	5,255	,000	,504
DECENTRALIZATION OF AUTHORITY	,008	,084	,010	,091	,928	,633

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34d)
R Square: 0.80
Missing Cases are excluded listwise

In the table above the 'job satisfaction' of team management members in the team management case are displayed. The background for distinguishing between managers and employees when it comes to the subjective outcome dimension is rooted in the assumption that the effect of being a team management member is stronger for the team managers since they are in management. In this manner, the management team may develop distinct values and meaning beyond the strictly instrumental aspects of conducting management, which may result in a stronger connection between the management form and job satisfaction for managers than for subordinates in the organization. What is evident in the table above is that more of the independent variables are reported to have an effect on 'job satisfaction' than in the previous tables displaying job satisfaction for all respondents in the team management case. 'Support from manager' has a very strong influence on 'job satisfaction' as the regression coefficient is reported to be 0.61[122]. For team managers it is evident that sex strongly affects job satisfaction. The regression coefficient is reported to be 0.53[123]. This means that if the value of 'sex' is increased by one unit, that is if one goes from being female to male, the value of 'job satisfaction' will increases by 0.061 units. It also means that male team management members tend to be more satisfied with their job than female team management members. The variables 'participation in decision-making', 'goals', and 'legitimacy of decisions' also affect the 'job satisfaction' of managers more strongly than was

---

[122] This regression coefficient is significant at the 0.01-level.
[123] This regression coefficient is significant at the 0.01-level.

the instance for all respondents in this case. 'Goals' has a regression coefficient of 0.42 which is a very strong effect[124]. This signifies that the team management members who believe that the operating goals of their organization and unit are known and attained will to a greater extent report that they are satisfied in their job than those who do not. 'Participation in decision-making' has regression coefficient on -0.18, however, this regression coefficient is not significant at the 0.10-level. 'Legitimacy of decisions' has a weak positive effect on job satisfaction, i.e. a regression coefficient of 0.17[125]. In order to compare how satisfied managers are with the satisfaction of their employees within this team management case, a table with job satisfaction regressed on the independent variables of employees is presented below.

Table 7.2.4: Job Satisfaction in the Team Management Case for Employees

	B	Std. Error	Beta	T	Sig.	Tolerance
(Constant)	,264	,721		,366	,715	
Q4 Age	,008	,007	,083	1,086	,281	,626
Q5 Sex	-,172	,125	-,094	-1,373	,174	,773
Q14 Recoded: Permanent Position	-,016	,156	-,007	-,101	,920	,758
Q15 Manager of decision-making processes	,152	,095	,109	1,593	,116	,774
PROFESSIONAL LOYALTY	*,466*	,085	,459	5,473	,000	,520
PARTICIPATION IN DECISION MAKING	,188	,078	,181	2,414	,018	,651
LEGITIMACY OF DECISIONS	,003	,106	,003	,032	,975	,521
GOALS	,017	,072	,016	,232	,817	,746
SUPPORT FROM MANAGER	*,263*	,089	,285	2,959	,004	,394
DECENTRALIZATION OF AUTHORITY	-,091	,078	-,088	-1,178	,243	,651

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34d)
R Square: 0.741
Missing Cases are excluded listwise

The table above displays how the independent variables of employees in the team management case connect to job satisfaction. At first glance, it is evident that the overall strength of the egression coefficients of these independent variables is less for the employees than it than it was for the managers within this case. 'Professional loyalty' is the variable with the strongest significant effect for employees[126]. This variable did not have a significant effect for managers and the strength of it was rather weak. Again, 'support from manager' has a relatively strong and significant[127] effect on 'job satisfaction' for the subordinates of management teams as well. What is new and interesting regarding this group of employees is that 'participation in decision-making' has a weak but significant effect on 'job satisfaction'. 'Participation in decision-making' had a weak non-significant negative effect for managers,

---

[124] This regression coefficient is significant at the 0.05-level.
[125] This regression coefficient is significant at the 0.01-level.
[126] This regression coefficient is significant at the 0.01-level.
[127] This regression coefficient is significant at the 0.01-level.

but since subordinates report a weak significant influence, this signifies that, unlike managers, they tend to be more satisfied in their job the more actively they participate in decision-making. Furthermore, the sex variable for managers has a very strong positive effect on job satisfaction. Contrarily, for subordinates the sex variable has a weak negative effect which is not significant. This means that if the value is increased by one unit for the 'sex' variable, i.e. if one goes from being female to male, this will decreases 'job satisfaction' with 0.172 units, although this is not significant at the 0.10-level. All in all, the effects of the independent variables on job satisfaction are stronger for managers than for subordinates in the team management case. This denotes that the effect of management forms is stronger for managers than for subordinates. The effects of for example 'sex' and 'participation in decision-making' have different signs for the two groups of employees in the team management case.

7.2.2   Job Satisfaction: Hierarchical Management Case

Table 7.2.5: Job Satisfaction in the Hierarchical Management Case for Managers

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	1,19	,732		1,63	,166	
Q4 Age	7,66E-005	,006	,001	,013	,990	,770
Q5 Sex	-,068	,090	-,067	-,76	,456	,895
Q14 Recoded: Permanent Position	,373	,249	,132	1,50	,147	,900
Q15 Manager of decision-making processes	, 084	, 078	, 105	1, 08	0, 291	,743
PROFESSIONAL LOYALTY	*,174*	,080	,225	2,17	,040	,652
PARTICIPATION IN DECISION-MAKING	,039	,063	,081	,62	,540	,407
LEGITIMACY OF DECISIONS	*-,240*	,116	-,293	-2, 07	,050	,346
GOALS	-,016	,046	-,039	-,34	,738	,530
SUPPORT FROM MANAGER	*,517*	,085	,864	6,11	,000	,348
DECENTRALIZATION OF AUTHORITY	*-,138*	,080	-,173	-1,72	,098	,692

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34c, 34d)
R Square: 0.84
Missing Cases are excluded listwise

In the hierarchical management case there are fewer significant and strong effects for managers than for managers in the team management case. 'Support from manager' has a very strong positive effect on 'job satisfaction'; the regression coefficient is 0.517[128]. Still, the effect of 'support from manager' is not as strong here as in the team management case. 'Professional loyalty' has a regression coefficient of 0.174; in other words, it has a weak positive effect. But according to a significance level at the 0.10-level, which I have mentioned earlier that I will rely on, then variables such as 'legitimacy of decisions' and 'decentralization of authority' will also have significant effects that are weak and negative.

---

[128] This regression coefficient is significant at the 0.01-level.

First, regarding the weak, negative effect of 'legitimacy of decisions', this implies that the more convinced on is that decisions made within one's own organizational unit are legitimate, the less satisfied one is with one's job. Secondly, when it comes to 'decentralization of authority', this signifies that the more authority the respondents have at their job, the more satisfied they are with their job[129]. In comparison with managers in the team management case, it is clear that the strength of the effects in the hierarchical management case is generally weaker than in the team management case, and that 'support from manager' is the only variable that has a strong positive effect in both cases. It would now be interesting to see how the 'job satisfaction' of employees in this case is affected by the independent variables.

Table 7.2.6: Job Satisfaction in the Hierarchical Management Case for Employees

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	,872	,652		1,336	,186	
Q4 Age	,000	,006	,002	,023	,982	,851
Q5 Sex	,144	,123	,110	1,176	,243	,854
Q14 Recoded: Permanent Position	-,307	,211	-,138	-1,457	,149	,834
Q15 Manager of decision-making processes	-,062	,111	-,052	-,554	,581	,841
PROFESSIONAL LOYALTY	*,239*	,087	,275	2,782	,008	,735
PARTICIPATION IN DECISION-MAKING	,067	,070	,105	,951	,345	,617
LEGITIMACY OF DECISIONS	*,299*	,109	,304	2,749	,007	,610
GOALS	-,015	,064	-,024	-,234	,815	,704
SUPPORT FROM MANAGER	*,219*	,093	,295	2,362	,021	,479
DECENTRALIZATION OF AUTHORITY	,074	,071	,108	1,044	,300	,705

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34c, 34d)
R Squared: 0.832
Missing Cases are excluded listwise

In the table above, it is 'legitimacy of decisions' that that has the strongest positive effect[130] on job satisfaction. For managers within this case, 'legitimacy of decisions' had a negative influence on 'job satisfaction'[131] and the effect was not as strong as for subordinates. This signifies that the more confident subordinates are with the legitimacy of decisions reached in their organizational entity, the more satisfied this group of subordinates will be in their job. However, 'professional loyalty' and 'support from manager' have relatively strong positive effects[132] on the job satisfaction of the subordinates as well. This is in line with the tendency for managers and the sample in general that the more they perceive the work environment as

---

[129] Decentralization of authority is coded so that low values means that the respondents have a high degree of autonomy in their job, whereas for job satisfaction does low values indicate that the respondent has a low degree of satisfaction in his/her job.
[130] This regression coefficient is significant at the 0.01-level.
[131] The regression coefficient of 'quality of decisions' for managers was only significant at the 0.10-level.
[132] The regression coefficient of 'professional loaylty' is significant on 0.01-level. 'Support from manager' is signifcant at the 0.05-level.

positive, the more satisfied they are with their job, and the more support subordinates get from managers the more satisfied they are in their job. What is interesting is that 'permanent position' has a rather strong negative effect on 'job satisfaction'[133]. This means that as the value of permanent position is increased from 1, indicating that the respondents do not have a permanent position, to 2, meaning that the respondents have a permanent position, their level of 'job satisfaction' decreases.

7.3   Organizational Commitment in the Two Cases

Table 7.3.1: Organizational Commitment in the Team Management Case

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	,706	,718		,983	,328	
Q4 Age	,015	,009	,153	1,721	,088	,669
Q5 Sex	-,101	,146	-,055	-,690	,491	,834
Q14 Recoded: Permanent Position	-,281	,208	-,113	-1,352	,179	,756
Q15 Manager of decision-making processes	,109	,108	,079	1,017	,312	,871
Professional Loyalty	,085	,106	,078	,798	,426	,561
Participation in Decision-Making	*,136*	,076	,181	1,776	,078	,511
Legitimacy of Decisions	,174	,124	,142	1,404	,163	,515
Goals	-,041	,093	-,042	-,440	,661	,586
Support from Manager	*,376*	,099	,397	3,784	,000	,481
Decentralization of Authority	,049	,080	,051	,606	,546	,759

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
R Square: 0.423
Missing Cases are excluded listwise

The table above displays the multivariate connection between the independent variables and the dependent variable of 'organizational commitment'. It is evident that also for 'organizational commitment' it is 'support from manager' that has the strongest effects. The strength of the regression coefficient[134] is reported to be 0.376, which is pretty high. 'Participation in decision-making' has a strong influence on 'organizational commitment' as the regression coefficient is 0.136[135]. 'Permanent position' and 'legitimacy of decisions' affect 'organizational commitment' relatively weakly, but these effects are not significant. The squared R for the model above is 0.423. In other words, the independent variables account for 42.3% of the variance on 'organizational commitment'. I will now compare the results of the team management case with the multiple regression results of the hierarchical management case.

---

[133] The regression coefficient is strictly speaking not significant at a 0.10-level, but since it close to 0.10 I regard it as important in affecting the job satisfaction of employees.
[134] This regression coefficient is significant at the 0.01-level.
[135] The regression coefficient of 'participation in decision-making' is significant at the 0.10-level.

Table 7.3.2: Organizational Commitment in the Hierarchical Management Case

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	2,024	,860		2,353	,020	
Q4 Age	,008	,007	,094	1,142	,256	,923
Q5 Sex	,089	,150	,049	,595	,553	,920
Q14 Recoded: Permanent Position	*-,516*	,282	-,152	-1,830	,070	,907
Q15 Manager of decision-making processes	-,162	,130	-,104	-1,250	,214	,907
Participation in Decision-Making	,086	,078	,116	1,104	,272	,562
Legitimacy of Decision	,188	,143	,138	1,307	,194	,560
Decentralization of Authority	-,090	,092	-,088	-,979	,330	,780
Support from Manager	*,303*	,114	,292	2,661	,009	,517
Professional Loyalty	*,194*	,114	,157	1,694	,093	,729
Goals	-,081	,075	-,104	-1,073	,286	,660

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
R Square: 0.321

'Support from manager' is again one of the independent variables that affects organizational commitment the most. A regression coefficient of 0.303 is rather strong[136], and means that the more support the respondents perceive from their managers, the more committed they are to the organization in which they work. 'Permanent position' is the only one of the demographic background variables that has a strong negative effect on organizational commitment[137]. This means that if one goes from a permanent position, the value 1 meaning that the respondent does not have a permanent position, to a value of 2 meaning that he/she has a permanent position, the value of 'organizational commitment' will decrease by 0.516 units. The coefficient of determination is reported to be 0.321. This means that all the variables in the model account for 32.1% of the variation in 'organizational commitment'.

---

[136] This regression coefficient is significant at the 0.01-level.
[137] The regression coefficient of 'permanent position' is only significant at the 0.10-level.

7.3.1 Organizational Commitment: Team Management Case

Table 7.3.3: Organizational Commitment in Team Management Case for Managers

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	-,003	1,170		-,002	,998	
Q4 Age	,018	,015	,172	1,172	,252	,790
Q5 Sex	,400	,258	,246	1,547	,134	,675
Q14 Recoded: Permanent Position	-,656	,540	-,194	-1,215	,235	,670
Q15 Manager of decision-making processes	,084	,172	,068	,485	,631	,873
PROFESSIONAL LOYLATY	-,160	,251	-,123	-,637	,529	,457
PARTICIPATION IN DECISION MAKING	,143	,186	,174	,771	,447	,335
LEGITIMACY OF DECISIONS	,076	,221	,068	,345	,732	,439
GOALS	,364	,258	,281	1,414	,169	,434
SUPPORT FROM MANAGER	*,511*	,169	,557	3,026	,005	,504
DECENTRALIZATION OF AUTHORITY	,061	,121	,083	,507	,616	,633

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d
R Squared: 0.800
Missing Cases are excluded listwise

In the table above, which displays the independent variables distinct for managers in the team management case, it is evident that it is only 'support from manager' that has a strong significant effect on organizational commitment[138]. The strength of the regression coefficient is reported to be 0.511 which is a very strong effect. In general, if we take into consideration all the results of the multiple regression analysis, it is pertinent to point out that there is a clear tendency towards 'support from manager' being connected to subjective outcome dimensions such as job satisfaction and organizational commitment. It is not necessarily right to assume that 'support from manager' is connected with the form of management in the organization, but the empirical data indicates that the effect of 'support from manager' is generally stronger in the team management case than in the hierarchical management case. Furthermore, 'permanent position', 'sex', and 'goals' are all independent variables that affect 'organizational commitment' strongly, but none of the effects of these variables are significant at the 0.10-level. It will now be interesting to look more closely at the connections between team management and 'organizational commitment' for employees.

---

[138] This regression coefficient is significant at the 0.01-level.

Table 7.3.4: Organizational Commitment in the Team Management Case for Employees

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	1,060	1,115		,951	,345	
Q4 Age	,020	,011	,200	1,739	,086	,626
Q5 Sex	-,308	,194	-,165	-1,593	,115	,773
Q14 Recoded: Permanent Position	-,344	,242	-,149	-1,422	,159	,758
Q15 Manager of decision-making processes	,070	,147	,049	,478	,634	,774
PROFESSIONAL LOYLATY	,066	,132	,063	,500	,619	,520
PARTICIPATION IN DECISION MAKING	*,233*	,121	,218	1,930	,058	,651
LEGITIMACY OF DECISIONS	,224	,164	,172	1,365	,176	,521
GOALS	-,086	,111	-,081	-,771	,443	,746
SUPPORT FROM MANAGER	*,332*	,137	,350	2,418	,018	,394
DECENTRALIZATION OF AUTHORITY	,020	,120	,019	,169	,867	,651

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
Squared R: 0.413
Missing Cases are excluded listwise

With this regression coefficient of 0.332, 'support from manager' has a strong and positive effect[139] on the 'organizational commitment' of employees. Based on the results from the other multivariate regression tables this is not new. For subordinates, a relatively strong positive effect of 'participation in decision-making' is demonstrated on 'organizational commitment'; the strength of the regression coefficient is reported to be 0.233[140]. This means that the more the subordinates participate in decision-making processes in their organizational unit, the more committed they are to the organization in which they work. 'Permanent position', 'sex', and 'legitimacy of decisions' all influence organizational commitment strongly — the first two do so negatively and the latter positively. None of these influences are significant, however. If I compare the results of employees with those of managers, it is evident that the connection with 'support from manager' is stronger for managers than for employees. However, for subordinates, 'participation in decision-making' influences organizational commitment strongly, whereas for managers this independent variable has a weak non-significant influence on organizational commitment. In other words, 'participation in decision-making' is more important for employees in regard to organizational commitment than it is for managers.

---

[139] This regression coefficient is significant at the 0.05-level.
[140] The regression coefficient is significant at the 0.10-level.

7.3.2 Organizational Commitment: Hierarchical Management Case

In this subchapter, the results of multiple regressions for both managers and employees in the hierarchical management case I displayed. Firs, the results of managers are displayed.

Table 7.3.5: Organizational Commitment in the Hierarchical Management Case for Managers

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	3,801	2,087		1,821	,082	
Q4 Age	-,006	,017	-,050	-,352	,728	,770
Q5 Sex	-,181	,257	-,092	-,703	,489	,895
Q14 Recoded: Permanent Position	,149	,709	,027	,209	,836	,900
Q15 Manager of decision-making processes	-, 224	,222	-,145	-1,01	,323	,743
PROFESSIONAL LOYALTY	*,579*	,228	,389	2,540	,018	,652
PARTICIPATION IN DECISION-MAKING	,080	,179	,086	,445	,661	,404
LEGITIMACY OF DECISIONS	-,049	,331	-,031	-,148	,883	,346
GOALS	*-,255*	,132	-,327	-1,929	,066	,530
SUPPORT FROM MANAGER	,172	,241	,149	,713	,483	,348
DECENTRALIZATION OF AUTHORITY	*-,887*	,229	-,575	-3,871	,001	,692

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
R Squared: 0.65
Missing Cases are excluded listwise

In the table above it is for the first time evident in this data material that 'support from manager' does not have an influence as strong and positive on the subjective outcome variable 'organizational commitment' as it has had all along. Actually, it is not a surprising result that the variation on 'support from manager' in the hierarchical management case does not create as much variation on managers' commitment as earlier. In the qualitative interviews a few department managers in the hierarchical management case reported that they did not have much contact with their superiors. 'Decentralization of authority' has a very strong negative effect on organizational commitment[141]. This indicates that if the value of 'decentralization of authority' is increased by one unit, meaning that the degree of authority decreases, this will result in a decrease in the managers' commitment to the organization. In this instance, 'professional loyalty' has a very strong positive influence on commitment, as the regression coefficient is reported to be 0.579[142]. The more positive the managers assert the work environment to be in their organizational unit, the more committed they are to the organization in which they work. 'Goals' affect 'organizational commitment' relatively strongly and negatively.[143] This means that the more knowledgeable the managers are regarding the operating goals of their organizational unit, the more committed they are to the

---

[141] This regression coefficient is significant at the 0.01-level.
[142] This regression coefficient is significant at the 0.05-level.
[143] This regression coefficient is significant at the 0.10-level.

organization. The coefficient of determination is reported to be 0.65, which means that the independent variables in the model above explains 65% of the variance in organizational commitment for managers in the hierarchical management case.

Table 7.3.6: Organizational Commitment in the Hierarchical Management Case for Employees

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	1,650	,904		1,818	,073	
Q4 Age	,008	,008	,092	,934	,353	,851
Q5 Sex	,102	,171	,059	,600	,550	,854
Q14 Recoded: Permanent Position	*-,592*	,293	-,202	-2,020	,047	,834
Q15 Manager of decision-making processes	-.140	,155	-,090	-,904	,369	,841
PROFESSIONAL LOYALTY	,096	,122	,084	,791	,431	,735
PARTICIPATION IN DECISION-MAKING	,034	,098	,041	,351	,726	,617
LEGITIMACY OF DECISIONS	,142	,152	,110	,939	,351	,610
GOALS	-,015	,089	-,019	-,172	,864	,704
SUPPORT FROM MANAGER	*,482*	,129	,493	3,737	,000	,479
DECENTRALIZATION OF AUTHORITY	,067	,099	,073	,673	,503	,705

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
R Squared: 0.375
Missing Cases are excluded listwise

In the table above it is 'permanent position' that affects how committed the subordinates are to the organization in which they work the most strongly. The effect is negative,[144] which means that there is a tendency for employees that if the value is increased from 1, not having a permanent position, to 2, having a permanent position, their commitment to the organization decreases by 0.592 units. 'Support from manager' has, in this case, a strong positive effect on 'organizational commitment'[145] for subordinates, as opposed to the managers. The more support they have from managers, the more committed the respondents are to the organization. The other independent variables in the table above do not affect organizational commitment strongly. If we compare this with the findings for the managers in the same case, it means that for managers, 'support from managers' does not correspond to the managers' commitment to the organization, but it does for the subordinates. The connection between 'goals' and 'organizational commitment' is stronger for managers within this case than for subordinates, for whom this connection is absent. There is also a tendency for managers to be less committed to the organization when their degree of authority decreases.

---

[144] This regression coefficient is significant ath the 0.05-level.
[145] This regression coefficient is significant at the 0.01-level.

7.4   Temporary Summary

So far, the multiple regression analysis has served to point out some tendencies that will be brought into further analysis. First of all, 'support from manager' seems to be a crucial variable in both the team and the hierarchical management case in terms of explaining variance on job satisfaction and organizational commitment. The connection for 'support from manager' is, however, stronger in the team management case than it is in the hierarchical management case for both the subjective outcome variables. 'Professional loyalty' is the next variable that is connected to 'job satisfaction' in both cases. But also this variable has a significantly stronger effect on 'job satisfaction' in the team management case than in the hierarchical management case. Conversely, 'professional loyalty' does not connect to 'organizational commitment' in the team management case, but it does in the hierarchical management case. In the hierarchical management case 'legitimacy of decisions' also affects 'job satisfaction', and in the team management case 'participation in decision-making' influence 'organizational commitment' which is not the situation in the hierarchical management case.

In order to answer how management type affects subjective outcomes for both managers and employees I have segregated managers from employees in each case in order to determine whether managers, who are closer to the conducted management, report other effects than employees, who are farther away from the conducted management. In the team management case, 'sex', 'goals', and 'support from manager' have a strong effect on 'job satisfaction' for managers. But it is only 'support form manager' that has a strong effect on organizational commitment for managers in this case. For employees, 'professional loyalty', 'support from manager', and 'participation in decision-making' all have relatively strong effect on job satisfaction in the team management case. Furthermore, 'support from manager' and 'professional loyalty' also affect 'organizational commitment' for employees. In other words, through regression analysis an important nuance in data is demonstrated: the influences of independent variables on 'job satisfaction' and 'organizational commitment' are different for managers and employees. For one thing, and perhaps this is the most obvious point, this variation is of a technical nature since the strengths of the independent variables and their level of significance are reported to vary. But then, and perhaps this is of even of more substantial interest, these variations of effects also open up a discussion regarding the possibility that they may be attributed to their different constitution. However, it is more

relevant to discuss this in chapter 8, when I will interpret the results of the regression analysis is interpreted at a more analytical and substantial level.

In the hierarchical management case it is 'support from manager', 'legitimacy of decisions', and 'professional loyalty that have a relatively strong effect on 'job satisfaction'. When it comes to the dependent variable of 'organizational commitment' for managers, it is evident that 'support from manager' for the first time does not have influence on the variation of commitment. However, 'decentralization of authority', 'professional loyalty', and 'goals' have a very strong and significant effect on 'organizational commitment', and for employees it is clear that 'professional loyalty' and 'support from manager' affect 'job satisfaction'. When it comes to 'organizational commitment', 'permanent position' also has a strong negative effect, but the effect of 'legitimacy of decisions' is not present as it was for job satisfaction. The effect on 'job satisfaction' for managers and employees is weaker in the hierarchical management case than it was in the team management case on. When it comes to 'organizational commitment' the situation is reversed, as it is the variables in the hierarchical management case that have the strongest effect.

So far, I have demonstrated that the independent variables affect job satisfaction and commitment differently in and within the two cases when distinguishing managers from employees, which opens up the possibility that the way the connections may be constituted differently for managers and for employees. But it is possible to push the analysis one step further to reach a more detailed answer to the research question.

7.5   Did Team Management Make a Difference?

I have now have pointed out various connections between the independent variables and the subjective outcome dimension in each management case separately. Ultimately, what remains is to test directly how the characteristic of team management affects the subjective dimensions. In order to draw up a conclusion on the significance of team management on subjective outcome dimensions, I will now merge the two data sets and construct a dummy variable based on the formal management model that the hospitals employ.[146] The dummy variable will be constructed by giving respondents that work in the team management hospital the value 1, and respondents that work in the hierarchical management hospitals the value 0. The table below gives a descriptive overview of the distribution on the new variables.

---

[146] This merging of the two data sets furthermore means that all the composite variables I have constructed in each of the two data sets have to be constructed again in the new merged data set. Going through a further process of variable construction with a complete account of correlation matrices and comments would be too circumstantial to do in text once more. When the new variables are going to be constructed in the merged data set is in this chapter it will be done based on the same procedure as in chapter 5, but it would not be accounted for in the same detailed manner.

Table 7.5.1: Descriptive Statistics of the Variables in the Merged Data Set

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Q4 Age	251	23	65	42,69	9,450	,043	,154
Q5 Sex	272	0	2	1,34	,491	,480	,148
Recoded Q14 PERMANENT POSITION	272	1	2	1,88	,331	-2,280	,148
Q15 Manager of decision-making processes	272	0	3	2,30	,700	-,551	,148
PROFESSIONAL LOYALTY (37a, 37b, 37c)	272	1	5	3,93	,766	-,510	,148
PARTICIPATION IN DECISION-MAKING (16, 16a, 16b, 17)	272	0	5	2,91	1,161	,012	,148
LEGITIMACY OF DECISIONS (19, 20, 20a)	272	0	5	3,58	,709	-,567	,148
GOALS (35 Recoded, 36, 36a)	258	0	4	2,81	1,027	-,465	,152
SUPPORT FROM MANAGER (40, 40a, 40b, 40c, 40d)	272	1	5	3,61	,894	-,481	,148
DECENTRALIZATION OF AUTHORITY (21, 21a, 21b)	272	1	5	2,05	,906	,956	,148
JOB SATISFACTION (34, 34a, 34b, 34d)	272	1	5	3,60	,748	-,459	,148
ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)	272	0	5	3,60	,857	-,622	,148
TEAM MANAGEMENT	272	0	1	,52	,501	-,074	,148
Valid N (listwise)	240						

The information in the table indicates that most variables in the merged data set are normally distributed. Although, skewness for 'permanent position' is reported to be -2.28, which is below the lower limit I relied on in chapter 5. However, since this is a background variable, which makes the requirement for normal distribution less important, and the variable is therefore kept in the model for further analysis. The results from the multiple regression analyses are presented in the table below.

Table 7.5.2: Job Satisfaction and Team Management Dummy

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	-,105	,365		-,288	,773	
Q4 Age	,004	,004	,051	1,080	,281	,788
Q5 Sex	,049	,070	,031	,703	,483	,901
Recoded Q14 PERMANENT POSITION	,042	,110	,017	,383	,702	,840
Q15 Manager of decision-making processes	,081	,056	,076	1,462	,145	,657
PROFESSIONAL LOYALTY	*,356*	,051	,371	7,059	,000	,636
PARTICIPATION IN DECISION MAKING	,013	,036	,021	,373	,709	,560
LEGITIMACY OF DECISIONS	,045	,062	,041	,729	,467	,563
GOALS	,015	,038	,021	,402	,688	,665
SUPPORT FROM MANAGER	*,373*	,050	,436	7,433	,000	,509
DECENTRALIZATION OF AUTHORITY	,034	,041	,040	,844	,399	,771
TEAM MANAGEMENT	*,282*	,080	,188	3,551	,000	,625

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34d)
R Square: 0.60
Missing Cases are excluded listwise

From the table above in which job satisfaction is regressed on the independent variables including the new 'team management' dummy variable in the merged data set, it is evident that 'support from manager' is still the variable that affects 'job satisfaction' the most strongly. It is interesting that 'support from manager' is constantly throughout the analysis the variable that affects the subjective outcome variables the most strongly.[147] This variable is not constructed on the basis of an established scale from the literature, but it is induced on the account of interviews in which informants said that their membership in a management team was what made them more satisfied with their job. Therefore, this variable was then constructed to link the formal management model to the dependent variable. 'Professional loyalty' again has a strong effect on job satisfaction, which means that as 'professional loyalty' increases by one unit, this results in an increase of 0.36 units in 'job satisfaction'.[148] The dummy, 'team management', has a relatively strong effect on 'job satisfaction' as the regression coefficient is reported to be 0.28[149]. This signifies that working in the hospital that uses team management increases the job satisfaction by 0.28 units. This is in line with the assumptions made on the basis of the instrumental perspective on team management, which regards it as a means to improve the job satisfaction of individuals working in the organization. The model explains 60% of the variance on job satisfaction; this is a rather high figure of explained variance which could be explained by the relatively high number of independent variables in the model. Now it will be interesting to revise how 'team management' affects 'organizational commitment' of both managers and employees.

---

[147] The regression coefficient is significan at the 0.01-level.
[148] The regression coefficient is significan at the 0.05-level.
[149] This regression coefficient is significan at the 0.01-level.

Table 7.5.3: Organizational Commitment and Team Management Dummy

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	1,052	,531		1,982	,049	
Q4 Age	,011	,005	,121	2,047	,042	,788
Q5 Sex	-,013	,101	-,007	-,127	,899	,901
Recoded Q14 PERMANENT POSITION	-,294	,161	-,105	-1,831	,068	,840
Q15 Manager of decision-making processes	,004	,081	,003	,051	,959	,657
PROFESSIONAL LOYALTY	,177	,074	,159	2,403	,017	,636
PARTICIPATION IN DECISION MAKING	,116	,053	,155	2,200	,029	,560
LEGITIMACY OF DECISIONS	,110	,090	,086	1,221	,223	,563
GOALS	-,059	,055	-,069	-1,072	,285	,665
SUPPORT FROM MANAGER	,369	,073	,373	5,049	,000	,509
DECENTRALIZATION OF AUTHORITY	-3,42E-005	,059	,000	-,001	1,000	,771
TEAM MANAGEMENT	,096	,116	,055	,828	,409	,625

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
R Square: 0.368
Missing Cases are excluded listwise

When it comes to organizational commitment, it is first of all clear, due to the low value of the regression coefficient, that the way the management is organized does not affect the 'organizational commitment' of managers and employees. However, this regression coefficient is not significant at the 0.10-level, so this lack of connection cannot be generalized. Again, it is 'support from managers' that has the strongest effect on 'organizational commitment'[150]. The more support the employees and managers experience from their manager, the more committed they feel to the organization. Then, 'professional loyalty', 'participation in decision-making', and 'legitimacy of decisions' have a relatively weak effect on 'organizational commitment'.[151] 'Permanent position' has a rather strong negative effect on commitment, which means that if the value of 'permanent position' is increased from not having a permanent position to having one, then the commitment to the organization will decrease.[152] Another interesting thing in the above table is the strength of the regression coefficient of 'decentralization of authority', which is extremely weak and not significant at the 0.10-level. The model accounts for 36.8 % of the variance on 'organizational commitment'. In order to follow up on the structure of the multiple regression analysis of each management case, and to fully answer the research question which calls attention to how team management affects subjective outcome dimensions for both managers and employees, the next step is to conduct regressions in which both of these groups are kept apart.

---

[150] This regression coefficient is significant on 0.01-level.
[151] The regression coefficicent of 'professional loyalty' and 'participation in decision-making' is significant on 0.05-level, the regression coefficient of 'quality of decisions' is not significant on 0.01- or 0.05-level.
[152] The regression coefficient of 'permanent position' is significant on 0.10-level.

164

7.5.1   Job Satisfaction: Managers vs. Employees

I start out by regressing job satisfaction on the independent variables and the new dummy variable: team management.

Table 7.5.4: Job Satisfaction and Team Management Dummy for Managers

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	-,537	,616		-,872	,387	
Q4 Age	,007	,006	,075	1,051	,298	,878
Q5 Sex	,149	,103	,102	1,446	,153	,898
Recoded Q14 PERMANENT POSITION	,197	,236	,058	,835	,407	,930
Q15 Manager of decision-making processes	-,017	,078	-,018	-,220	,826	,650
PARTICIPATION IN DECISION-MAKING	-,044	,067	-,063	-,663	,510	,507
GOALS	-,009	,058	-,012	-,151	,881	,692
LEGITIMACY OF DECISIONS	-,005	,100	-,005	-,048	,962	,518
SUPPORT FROM MANAGER	*,545*	,077	,644	7,067	,000	,543
DECENTRALIZATION OF AUTHORITY	,044	,060	,056	,730	,468	,775
PROFESSIONAL LOYALTY	*,326*	,096	,300	3,410	,001	,582
TEAM MANAGEMENT	*,316*	,118	,233	2,670	,010	,594

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34d)
R Square: 0.729
Missing cases are excluded listwise

From the table above it is evident that also for managers, 'support from manager' is the variable with the strongest effect on 'job satisfaction'.[153] The higher the support from managers is the more satisfied managers are in their job. Next, for managers, 'professional loyalty' has a relatively strong influence on 'job satisfaction', as the strength of the regression coefficient is reported to be 0.33.[154] Team management also affects job satisfaction relatively strongly; the strength of the regression coefficient is reported to be 0.32[155]. The table additionally demonstrates that 'sex' and 'permanent position' have a relatively weak positive effect on 'job satisfaction'.[156] The model accounts for 72.9% of the variation on 'job satisfaction'. In the table below, the results for employees are displayed.

---

[153] Regression coefficient is significant at the 0.01-level.
[154] The regression coefficient is significant at the 0.01-level.
[155] This regression coefficient is significant at the 0.01-level.
[156] But these regression coefficients are not significant at the 0.10-level.

Table 7.5.5: Job Satisfaction and Team Management Dummy for Employees

	B	Std. Error	t	Sig.	Tolerance
(Constant)	-,194	,480	-,405	,686	
Q4 Age	,006	,005	1,349	,179	,760
Q5 Sex	-,004	,090	-,048	,962	,852
Recoded Q14 PERMANENT POSITION	-,042	,129	-,327	,744	,806
Q15 Manager of decision-making processes	*,129*	,073	1,763	,080	,648
PARTICIPATION IN DECISION-MAKING	*,107*	,054	1,989	,048	,645
GOALS	,040	,048	,830	,408	,790
LEGITIMACY OF DECISIONS	,094	,077	1,220	,224	,605
SUPPORT FROM MANAGER	*,258*	,065	3,949	,000	,459
DECENTRALIZATION OF AUTHORITY	,015	,054	,276	,783	,723
PROFESSIONAL LOYALTY	*,385*	,061	6,343	,000	,628
TEAM MANAGEMENT	*,304*	,101	3,012	,003	,621

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34d)
R Square: 0.585
Missing cases are excluded listwise

For employees it is evident that other independent variables may also explain 'job satisfaction' unlike what was the case for managers. First of all, 'professional loyalty' has with a regression coefficient of 0.38 and thus a very strong influence on 'job satisfaction'.[157] 'Team management' also affects job satisfaction strongly.[158] This means that working in the hospital that uses team management increases the level of 'job satisfaction'. Next, 'support from manager' affects 'job satisfaction' relatively strongly.[159] What is interesting is that 'manager of decision-making processes' has a weak effect on job satisfaction since the regression coefficient is reported to be 0.129.[160] This means that the more the 'manager of decisions-making process' resembles a management team, the more satisfied the workers are in their job. This is interesting since previously in the team management case this variable affected 'job satisfaction' weakly for both managers and employees, whereas it was not connected to 'job satisfaction' in the hierarchical management case for either managers or employees. 'Participation in decision-making' is the last variable with a weak positive effect on 'job satisfaction'.[161] This means that there is a weak tendency for employees' participation in decision-making processes to result in higher 'job satisfaction'. It is, in other words, again evident that effects of the independent variables and job satisfaction differ from managers to employees. The model accounts for 58.5% of the variation of the employees on the dependent variable of job satisfaction. The next step is now to make the same analysis for organizational commitment.

---

[157] The regression coefficient is significant at the 0.01-level.
[158] The regression coefficient is significant at the 0.01-level.
[159] The regression coefficient is significant at the 0.01-level.
[160] The regression coefficient is significant at the 0.10-level.
[161] The regression coefficient is significant at the 0.10-level.

7.5.2 Organizational Commitment: Managers vs. Employees

Table 7.5.6: Organizational Commitment and Team Management Dummy for Managers

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	,686	1,158		,593	,556	
Q4 Age	,002	,012	,018	,168	,867	,878
Q5 Sex	,132	,194	,074	,684	,497	,898
Recoded Q14 PERMANENT POSITION	,117	,444	,028	,262	,794	,930
Q15 Manager of decision-making processes	,023	,147	,020	,157	,875	,650
PARTICIPATION IN DECISION-MAKING	,082	,126	,094	,652	,517	,507
GOALS	-,170	,109	-,190	-1,550	,126	,692
LEGITIMACY OF DECISIONS	,059	,188	,045	,315	,754	,518
SUPPORT FROM MANAGER	*,324*	,145	,310	2,235	,029	,543
DECENTRALIZATION OF AUTHORITY	-,147	,114	-,150	-1,293	,201	,775
PROFESSIONAL LOYALTY	*,389*	,180	,290	2,166	,034	,582
TEAM MANAGEMENT	,105	,222	,062	,471	,639	,594

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
R Square: 0.373
Missing Cases are excluded listwise

The table above displays organizational commitment regressed on the independent variables and the dummy team management vs. hierarchical management for managers. For managers 'professional loyalty' affects 'organizational commitment' strongly,[162] the more positive the work environment is among managers, the more committed they are to their organizations. 'Support from manager' has a regression coefficient of 0.32,[163] which is a rather strong connection. However, 'team management', together with 'sex', 'permanent position', 'goals', and 'decentralization of authority', all have very weak influences on 'organizational commitment'. None of these weak connections are significant at the 0.10-level. 37.3% of 'organizational commitment' is accounted for by the variables in this model.

---

[162] The regression coefficient is significant at the 0.05-level.
[163] The regression coefficient is significant at the 0.05-level.

Table 7.5.7: Organizational Commitment and Team Management Dummy for Employees

	B	Std. Error	Beta	t	Sig.	Tolerance
(Constant)	,992	,659		1,506	,134	
Q4 Age	,014	,006	,155	2,133	,034	,760
Q5 Sex	-,093	,123	-,052	-,756	,451	,852
Recoded Q14 PERMANENT POSITION	*-,394*	,177	-,157	-2,227	,027	,806
Q15 Manager of decision-making processes	,016	,100	,012	,157	,876	,648
PARTICIPATION IN DECISION-MAKING	,134	,074	,142	1,799	,074	,645
GOALS	-,037	,066	-,041	-,568	,571	,790
LEGITIMACY OF DECISIONS	,125	,105	,097	1,184	,238	,605
SUPPORT FROM MANAGER	*,396*	,090	,413	4,406	,000	,459
DECENTRALIZATION OF AUTHORITY	,056	,074	,056	,756	,451	,723
PROFESSIONAL LOYALTY	*,140*	,084	,134	1,671	,097	,628
TEAM MANAGEMENT	,099	,139	,058	,715	,476	,621

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
R Square: 0.372
Missing Cases are excluded listwise

For employees it is again 'support from manager' that affects organizational commitment strongly.[164] In addition, 'permanent position' influences organizational commitment strongly but negatively.[165] This was also a very strong tendency in regard to organizational commitment for both managers and employees in the team management case. Again, it means that if the value on 'permanent position' is increased, that is, if one goes from not having a permanent position to having a permanent position, then the value on 'organizational commitment' will decrease by 0.394. In other words, having a permanent position decreases one's commitment to the organization. 'Professional loyalty' influences organizational commitment weakly,[166] which means that employees who experience that the work environment is positive in their organizational unit are more committed to the organization in which they work. 'Participation in decision-making' affects 'organizational commitment' weakly,[167] and it means that the more involved employees are in decision-making processes the more committed they are to the organization. Lastly, also 'legitimacy of decisions' has a weak but not significant influence on commitment. 37.2% of the variation in 'organizational commitment' is accounted for by the variables in the model.

---

[164] The regression coefficient is significant at the 0.01-level.
[165] The regression coefficient is significant at the 0.05-level.
[166] The regression coefficient is significant at the 0.10-level.
[167] The regression coefficient is significant at the 0.10-level.

7.6 Concluding Remarks

In this chapter I have conducted the multiple regression analyses of the independent variables in each management case. The multiple regression analysis has revealed that there are stronger connections between the independent variables and the subjective outcome dimensions, job satisfaction and organizational commitment, in the team management case than in the hierarchical management case. It has also revealed that independent variables affected job satisfaction and organizational commitment differently within each case when managers and employees were separated. For example, the connections between the independent variables and the subjective outcome dimensions are stronger for managers than for employees in both management cases. Furthermore, in order to directly test how team management affects the job satisfaction and organizational commitment in the two data sets controlled for all the other independent variables, I have merged the two data sets representing each management case into one data set and constructed a (management) dummy variable distinguishing team management from hierarchical management property. The regression analysis on job satisfaction and organizational commitment reveals that team management has strong impact on job satisfaction whereas team management does not connect with organizational commitment. Next, the regression analysis in which managers and employees were run separately with the management dummy in the model revealed that team management had relatively strong effect on job satisfaction both for managers and employees. Yet, the connection between team management was slightly stronger for managers than for employees. As noted previously in this chapter, these differing strengths of regression coefficients do not give expression to a mere technical difference between managers and employees. This difference could be argued to give voice to a different constitution of connections between satisfaction and the management dummy for managers than for employees. In regard to organizational commitment it was evident that team management had a relatively weak effect for managers, whereas there was no impact on commitment for employees. What does this imply? How should we interpret these results according to the analytical framework worked out in chapter 2? The aim in the next chapter is to get more into to the substance of what the results of the multiple regression analyses imply.

8 Opening up the Box: On the Substance of the Impacts of Team Management

> "We can vent ourselves a bit when we are frustrated or furious without it having any consequences. You see, and you can not do that when you are sitting [managing] alone. Who should I do that with? I think it is good to have a team." Informant 3 evaluates how she experiences management in teams

In the quotation above the informant articulates aspects that are at the crux of the research question in this thesis: if and how does team management affect subjective outcome dimensions of managers and employees in mental departments? On the one hand, based on the multiple regression analyses in the previous chapter it is obvious that team management affects job satisfaction for both managers and employees strongly; in fact team management affects job satisfaction for managers slightly more strongly than for employees. But what does this mean at a more substantial level? On the other hand, what does it signify that team management proved not to directly affect the organizational commitment of either managers or employees significantly in prior multiple regression analyses?

The questions asked in the section above are vital in this chapter as the intention here is to give a more substantial interpretation of the outcomes of the statistical analyses in chapter 6 and 7. The key concern regards how the results of the statistical analysis should be interpreted on the basis of the analytical framework sketched up by drawing upon an instrumental perspective and an institutional perspective on team management. However, I also draw on the qualitative interviews to fortify the inferences I arrive at based upon analytical discussions of the outcomes of the statistical analyses. In this way, the qualitative interviews together with the analytical apparatus enable a robust interpretation of the quantitative data. I will first interpret the impacts on job satisfaction in the subsequent subchapter; while the impact on organizational commitment is elucidated in subchapter 8.2.

8.1 Instrumental Impacts of Team Management

"I do not think I would have had this job if I had been alone in management. I think that it would be too lonely. It is, and it can be a little lonely to hold a managerial position. But to have someone to manage together with, that I think is great fun." Informant 3/2006

This was the response of one of my key informants. She was very clear during her interview about not wanting to go back to the "old dual" management model of mental departments, and I therefore asked her about why she regarded team management as preferable to other management models. In regard to the research question and the analysis of the data material in the previous chapter, this citation is illustrative, as it points out the relevance of studying team management together with other management models in relation to subjective outcome dimensions such as job satisfaction. It furthermore calls attention to one of the most important findings in the analysis of the quantitative data in the last chapter, as the results in table 7.5.2 indicate: it *has* an influence on the job satisfaction of both managers and employees whether or not management is organized in teams. Also, there is a weak tendency towards a slightly stronger influence of team management on the job satisfaction of managers than of employees. In other words, team management increases the level of job satisfaction for managers to a greater extent than for employees.

According to how I have approached team management in this thesis so far, it is natural to draw upon the fruits of an instrumental and an institutional perspective on teams by applying formal and informal structures when explaining the influence of team management on job satisfaction of managers and employees. It is tempting to first approach the effect of team management on job satisfaction in light of the instrumental perspective's acknowledgement of formal structure since team management is a formalized management structure in the mental departments at one of the hospitals under scrutiny. This was also the background for the construction of the dummy variable (team management) that demonstrated in the previous chapter that team management has an influence on the job satisfaction of managers and employees. Formal structure as leverage of individuals' behavior in organizations is a well-known assumption for organizational scholars (cf. 2001; Scott 2003). To apply an instrumental perspective in the case of team management affecting job satisfaction in mental wards indicates that the organization of management in teams was introduced with the

intention of improving goal achievement, including job satisfaction, in the (mental) departments of UNN.[168] When team management was introduced, it was initiated as a means to overcome major organizational challenges like huge budget deficits and to improve the overall organizational performance of the hospital. Many of the problems at the hospital were explained by calling attention how the hierarchical dual management system failed to allow for a balance between economic and medical consideration in decision-making at department level (cf. Eriksen 1999).

One of my informants, who had worked in both a traditional dual management model and at the time of the interview was working in a management team, described the difference in this manner:

> "An advantage in the team model is that one to a greater extent calls attention to goals and professional issues. What are we, what are we going to be, and what kind of responsibility do we have for the development of the services we provide? This I think has become a more common responsibility in the team. It was kind of like this in the dual management model — one felt that one had the responsibility — but we did not spend any time on these issues together. Not in the same way" Informant 3/2006.

On the one hand, this citation illustrates how a formal management structure in the hospital department results in the formation of a basis for a certain manner for managers to work and conduct management. On the other hand, the enthusiasm this manager accentuates in this and the former citation directs attention to the link between form of management and job satisfaction of managers. Due to the barely stronger connection between managers' satisfaction in the regression analysis in chapter 7, it is reasonable to assume that the effect of organizing management in teams is particularly vital the for managers' degree of satisfaction with their job. This is based on the fact that managers are de facto closer to the actual practice of the formal management structure since they are the performer of this specific form of management and therefore directly involved in the course and conduct of management as opposed to employees. Because of this, form of management has a stronger effect on managers' satisfaction than it does for employees who are more distant from the course and conduct of management. Based on the emphasis which the instrumental perspective places on formal structure, I assert that the relatively strong connection between team management and

---

[168] The process resulting in the implementation of team management in The Regional Hospital of Tromsø (RiTø) in 1989 is described in subchapter 1.4. At the time when team management was formally introduced at the hospital, UNN was named The Regional Hospital of Tromsø (RiTø). The name was changed in 2001, a year ahead of the hospital reform in January 2002, which finally transferred the ownership of the hospitals from the counties to the stategovernment.

managers' satisfaction can be explained by three striking points expressed through the formal structure of team management: 1) involvement and participation, 2) empowerment, and 3) accountability.

Furthermore, it is an essential argument that the distinct characteristics of these three points are much more profoundly expressed in a team management model and therefore affect managers' well-being at work more positively than in a hierarchical management model in which one manager makes decisions and holds the managerial responsibility. The citation below illustrates the *first* point of involvement and participation:

> "Accordingly, we are an interdisciplinary, compounded management team with four members from four distinct professional groups: Office manager, head psychologist, chief physician and head nurse. One of us holds the team manager position for which one has to apply… [W]e have meetings once a week for one and a half hour… And we try to have half-time meetings maybe four times a year. We have offices in the same corridor, which is very practical… We drop by each other, like 'oops here is a case, what are we going to about it?' I think that it [the team] is a place where we can adjust our course together." Informant 3/2006

Team management as the formal way of organizing management first of all implies that several people are *involved* and *participate* in the course and conduct of management. This may be particularly evident in how decision-making processes take place in a management team. It furthermore creates a basis for middle management that is essentially different from being middle manager by oneself, as an informant in the hierarchical management case puts it when asked about whether they have personnel around them with whom they counsel:

> "Yes, they have the 'old' unit nursing officers… After the introduction of unitary management, the line between the unit nursing officers and the senior nursing officers was removed, and they [unit nursing officers] were incorporated into each of their departments with the deputy superintendent [department manager] as their closest superior… And now they [unit nursing officers] are going to be called something else than unit nursing officers, consultant or administrative consultant, something like that. Because that is what they are doing, they have different tasks, slightly different job descriptions in each department according to how the deputy superintendents want to use them… They are their [department managers'] assistants." Informant 18/2006

This implies the importance of formal structural design as means to plot the course for how management should be performed in organizations to enhance outcome, which is at the crux of an instrumental approach to organizations and management. Involvement and participation as characteristics are therefore a result of a rationally based intention to structure management in this way to make it more efficient. These two distinguishing features of the formal design of team management are evident both in how the management is practiced in the mental

173

department and they are also described in definitions of teams employed by researchers and practitioners who describe and generalize the phenomenon as distinct from other ways of organizing management[169]. That decision-making processes based on involvement and participation of several managers result in more satisfied managers is embedded in the two other points expressed in the formal structure of management teams as well.

The *second* point, which is closely related to the point regarding participation, refers to how team management results in a greater degree of empowerment of people, which I argue is beneficial for managers' well-being at their job:

> "My role [in the management team] is to pursue personnel policy. It is to work as closely as possible with the personnel in regard to shift planning, which I in turn hand over to the secretary… daily running of the department regarding the economy, the intake of all patients here, how long are they staying, why are they here, etc… But then, we have a lot of discussions together [in the management team] concerning the running of the department, what we agree on and how we are going to strategize, and what we are prioritizing at this point of time." Informant 5/2006

With the quotation above attention is directed to how each team management member on an equal basis is empowered by having their specific role to provide for in management, but at the same time how the team management members have to seek approval for priorities by commonly discussing them with the team. In these discussions, priorities and decisions regarding the different aspects of management are balanced in proportion to overall departmental goals and running of the department in general. In this manner, there is more transparency in the different aspects that the management of a mental ward implies, since team members are empowered in their separate roles on the team. However, this is also because they are jointly empowered in the team in the sense that team members have to balance their point of views with the opinions of other team members regarding how decisions for their field are in accordance with overall departmental goals.

---

[169] See chapter two in the thesis for illustration of this point.

Ultimately, management teams signify a common *accountability* regarding decisions that may be advantageous for the managers and managerial decisions. In the interviews several of the team management members point out how this accountability assure them that decisions are made on a solid basis and thus are collectively binding, since they have been thoroughly discussed with the management group members:

> "You know, we agree on something, which we believe in, which we stand for. We can back each other up if it 'storms', or that we know that this is something that we have discussed thoroughly. And we have talked over the different aspects, because we are three different professionals who are slightly different, or rather different, both background and seniority... In many ways we complement each other, and it is obvious that that gives us a professional confidence. What we have decided, that is what we are going for." Informant 5/2006

In this manner, the team member alludes to how the participation of several professionals in decision-making processes gives the team members confidence in the quality and legitimacy of decisions, and that this is particularly important in regard to disputed decisions. In a way, managers describe how important it is with support from managers in decision-making, which ensures well founded decisions. A further factor that should substantiate the importance of support from managers more generally is the constant strength of the 'support from manager' throughout the regression analyses in chapter 7. This clearly indicates the importance of having support from managers in relation to being satisfied in the job. To further substantiate this it is worth mentioning that the impact of support from manager was all the time stronger for managers in analyses of the team management case than in the hierarchical management case as is apparent in table 7.3.3 and 7.3.5. In any case, since all team members are directly involved in decision-making, they are made collectively accountable for decisions, as one informant describes below:

> "… [W]e are accountable for sure, because, we have taken part in the process. And, even though I can say that the psychologist is the formal manager [i.e. the team manager] then, but if we get our fingers smacked because we have reached some mistaken decisions then I think it would not be a good feeling for me in my stomach either. Not at all, even though it is she that is the upper formal professional manager of the unit… I think this in a way, and it may seem paradoxical, but I believe this gives us sort of a professional freedom: when I know that I have the team management backing me up, this I have discussed with the other ones." Informant 5/2006

The management teams in mental departments are framed on the basis of some predetermined structures: each management team has a team manager who holds the unitary management responsibility and has the right to veto, and it is only the physician on the team that can have the medical responsibility, but aside from this the management teams may vary in terms of distribution of roles. Informants notwithstanding all the time directed attention to how they

175

felt responsible for all decisions, because the decisions were mostly jointly discussed in the teams, even some of the medical ones. Obviously, critics of my emphasis on the importance of a formal team structure ensuring for participation, empowerment, and accountability would claim that there are hybrids of teams in the sense that there are different "degrees" of team management, and hence, that management teams signify different "degrees" of participation, empowerment, and accountability. It may be that these conditions in some teams facilitate the maintenance of a traditional distribution of roles, and that each team member does not make decisions on the basis of common discussions but that they rather reach decisions within their managerial field on their own. My impression, however, after having discussed this with people working in the somatic wards at UNN and after having conducted interviews at mental departments, is that the extent to which team management is a linguistic term concealing a conduct of management according to traditional conduct of management[170] is greater in somatic departments than in mental departments. In mental departments there is a longer tradition for interdisciplinary cooperation around patient treatment (cf. Lichtenstein, Alexander et al. 2004), since mental illnesses to a greater extent call for treatment from a variety of professionals. Based on my analysis of the data in this thesis, I argue that this is recognizable in the way they perform team management. This does not mean that there is no variation in how team management is performed in mental departments, but rather that the basis for teamwork to a greater extent is present in mental wards. Next, I will discuss team managements' influence on the job satisfaction of employees.

---

[170] This refers to a traditional division of labor in which the deputy superintendent in the team exclusively spend time on medical issues, and the nurse is concerned with personnel and economy, and they do not prioritize to spending time on reaching decisions jointly.

8.1.1 Symbolic Impacts of Team Management

For employees, the connection between team management and job satisfaction is slightly weaker than for managers. The citation below may allude to why the satisfaction of the employees is more weakly connected to the formalised arrangement of management:

> "But after this team management started, they will have the same information and the same understanding [the team management members], my experience is that the grassroots miss the contact with the head nurse; that is, and the head nurse has become more peripheral. […, B]efore one could go to the head nurse to say that 'I do not think that the physician has followed up that matter', and one could talk it all over, [but now] that becomes disloyalty, because one can not go to one of them [member of management team] because they are a collective unit." Informant 23/2007

In this manner the informant illustrates the assumption composed prior to analysis that there is distance between managers and employees, which has been demonstrated in the data material, and that this may manifest itself in lower degree of satisfaction for employees than for managers.

When it comes to explaining why team management does not result in the same degree of increase in satisfaction for employees, the assumptions of the instrumental perspective do not suffice, since this perspective stresses the dense coupling between formal structures in organizations and outcomes in terms of behavior or attitudes. In order to explain this analytically it could be useful to draw upon institutional theory. Institutional theory gives analytical priority to informal and symbolic structures when explaining how attitudes and individual behavior in organizations are formed.[171] According to Selznick (1948:25) the contradiction between formal and informal structure appears: "[f]rom the fact that rational action systems are inescapably imbedded in an institutional matrix [.]". This draws attention to how organizational members bring their specific characteristics into the organization and within the organization they develop other commitments that restrict their ability to act rationally. Furthermore, the strength of informal structures is recognized through the processes of *institutionalization* in which organizations take on a distinct character (cf. Scott 2003:69). Institutionalization refers to a morally neutral process in which an organization over time develops defensive ideologies, institutional values, and the existence of internal conflicts expressing group interests (Selznick 1957, 1984:15). In this manner, the management teams

---

[171] This means that institutional theory does not reject the existence of formal structure in organizations, but these formal structures can: "[n]ever succeed in conquering the non-rational dimensions of organizational behavior." (Selznick 1948:25).

and the groups of employees are regarded as a distinct collection of individuals since they share certain values and norms in such a way that informal constraining structures are formed. The latter citation of informant 23/2007 and previous citations of informant 3/2006 are also an expression of this point as they both indicate that managers in the management team have developed a certain management group culture. The team management team members allude to how they have organized their collaboration regarding management and how this is affects their well-being at work, whereas employees experience that they have "lost" their professional representative (head nurse) to the management group:

> "They [management team] are one group. So from the shop floor it feels like they have become estranged. And I think especially that the milieu-personnel have noticed it, because the head nurse had the role as sort of a fender between [chief physician and shop floor], but still she was on their side [milieu-personnel] ..." Informant 23/2007.

However, the slightly lower degree of satisfaction for employees does not necessarily have to result in the confounded conclusion that team management does not have a positive impact on the satisfaction of employees. As explicated previously in this and the previous one, team management still has a positive influence on the job satisfaction of employees, yet the effect is not as strong as it reported to be for managers. I draw upon the work of March and Olsen, argue that decisions may be made based on how organizational structures manage the four streams of which most decisions are composed (Cohen, March et al. 1979). The four relatively independent streams in decisions-making processes, which the garbage can model brings into focus, are: *problems*, *solutions*, *participants*, and *choice opportunities*. To a greater degree than what is assumed in instrumentally oriented models, and more in accordance with how decisions are actually made in organizations, the order of these four streams is argued to fluctuate in decision-making processes. Cohen, March et al. (1979:27) emphasize how the streams of problems, choice opportunities, solutions, and participants were channelled by organizational structure and social structure. Furthermore, the organizational structure of these components may to a great degree may influence both how decision-making processes take place and the outcome of decision-making processes. In this manner the garbage can approach provides a basis for interpreting the clear and positive connection between management teams and satisfaction of employees. Structuring management in teams continuously sets principles in regard to involvement from several participants with various professional backgrounds, which not only affects team management members, but also such a structuring of management constitutes a basis for the conduct of management, which affects employees as well. Even if the employees themselves do not

directly participate in the team management and its decision-making processes, management teams may ensure the participation and representation of several groups, which may have a vital symbolic effect on the subordinates being managed by these teams. Even though I have not paid attention to specific decisions in particular and their content, since this has not been the main task in this study, the analysis of the quantitative data in previous chapters clearly indicates that the structuring of management expressed through the dummy variable team management had a positive effect on job satisfaction. Thus, team management affects outcome, as job satisfaction was one of the subjective outcome dimensions under scrutiny.

Furthermore, the regression analysis of job satisfaction of employees on the independent variables in the model in subchapter 7.5.1 in table 7.5.5 indicated that the closer decisions are to being managed by a management team, the more satisfied the employees are with their job. In other words, involvement through the participation of several professionals, which ensures the empowerment of a wider group of professionals and gives more distribution of accountability, does not only have an effect on the managers. But it also affects the employees. To structure management in teams not only creates a foundation for the conduct of management with reference to decision-making processes and their streams of problems, solutions, participants, and choice opportunities, but, and maybe this is just as important in regard to the grassroots in the organization, it could be argued that it also has symbolic value. Employees take notice of the organizing of management in teams, and how different functional groups in the unit are represented in that management group. This signalizes that in mental departments it is not only patient treatment that requires interdisciplinary collaboration between psychologists, nurses, and physicians in teams. But also in order to conduct management of the department, it is vital with multiplicity in management to ensure for all important aspects of the conduct are being considered. As an informant puts it when reflecting on this topic:

"That we have a management team with the various perspectives based on the professional groups, i.e. nurses, psychologists, and physicians etc; it makes the seminars with them very clarifying since they are there. It can be as simple as what we are going to prioritize in 2006, a little adjustment of the direction if you see. We have worked for a long time at x[172] with treatment teams which the department management team has supported, and it is god that several voices are heard. In this manner, I think it is the same in the department management teams, accordingly, that they have more ideas [based on that they are multidisciplinary compounded] which makes them more qualified to reach better decisions. And that the different perspectives [through professional representation in management teams] are expressed in the management teams, it makes it is not as closed as it was in the "dual" management. It is more open. But I also think it is more demanding than the dual management." Informant 11/2006

In this way the informant expresses how she takes notice of how the management is structured with respect to that it means that several participants are involved in management and how she believes that this might be advantageous for the basis on which decisions are made. In this manner team management conveys a symbolic meaning to the employees. Ultimately, the informant alludes to how team management can be a challenging way of conducting management since the roles in the team have to be worked out and people have to know each other well. This informant on several occasions in the interview verbalized how demanding she thought team management could be based on difficulties she had experienced in the interdisciplinary patient teams.

Still, even though team management affects job satisfaction for both managers and employees, there is an unexplained variance on job satisfaction of 40%, which indicates that there are other explanatory variables that account for this variation on job satisfaction. Owing to the vast number of studies that are more oriented towards individuals and their traits when explaining the degree to which workers are satisfied in their jobs, the unexplained variance might be argued to be explained by the biased approach to job satisfaction in this thesis. This means that some of the unexplained variance could probably be found by adding perspective like the need-satisfaction, value, or dispositional approach to job satisfaction. This would be natural if my aim was to make a more thorough investigation of job satisfaction per se. I will now interpret the relationship between team management and organizational commitment.

---

[172] Informant refers to the unit in which she/he works, which is not relevant to the content of the quotation.

8.2   Non-Commitment in the Organization

In the case of the effect of team management on organizational commitment, the multivariate regression revealed that team management does not influence commitment. This was signified in the first table with organizational commitment and the team dummy variable in the previous chapter in table 7.5.3, which showed that the connection between team management and organizational commitment among all respondents was close to zero. When managers were separated there was indeed a weak influence of team management on organizational commitment, but this connection was not significant[173]. For employees there was no connection between team management and organizational commitment either. In many ways this is not a very surprising finding.

First of all, it is not new in organizational science that an instrumental or institutional approach, which calls attention to the formal and informal structures of form of organizational or management form, fails to identify a direct association with organizational commitment. Conversely, as I stressed in chapter 3, organizational commitment has commonly been approached through analytical lenses stressing worker characteristics, either through focusing on worker's personality, personal needs, or values (cf. Mowday, Porter et al. 1982; Glisson and Durick 1988; Meyer, Stanley et al. 2002). From early on until now, a vast number of scholars have proposed that these three categories of workers' characteristics are associated with their beliefs about the organization. The studies proposing this support the notion that such beliefs may account for more variation in commitment than do experiences in the job setting (cf. Glisson and Durick 1988:66).

Furthermore, not unlike other attitudinal outcome dimensions, organizational commitment has frequently been studied with regard to how it may affect other attitudinal and more behaviorally oriented dimensions such as e.g. turnover-intention, turnover, and performance (cf. Meyer, Stanley et al. 2002). Organizational commitment as a construct has been defined in three distinct ways: affective, continuance, and/or normative. Depending on which of these definitions one takes as a starting point in research, commitment has been approached by varying sets of antecedents and outcomes of commitment. In this thesis an affective definition of organizational commitment has been employed, and pursuant to previous research this

---

[173] The connection was not significant even on 0.10-level.

interpretation of commitment has been approached through personal characteristics and work experience (cf. Meyer, Stanley et al. 2002). In addition, however, as the major argument in the thesis regards team management and its influence on organizational commitment, features characterizing the organization's management have been vital in the study of organizational commitment. This also draws upon previous research as Glisson and Durick (1988:67) pointed to how little attention had been paid to organizational characteristics in explication on the extent to which individuals in an organization are committed. They directed attention to the fact that characteristics of job tasks such as role conflict had proved to affect commitment, but still, it had proved difficult to identify the best predictors of commitment in the job-task category.

Moreover, they pointed out that since so little attention had been paid to organizational characteristics as predictors of organizational commitment at that time; it was natural for them to focus on attributes of organizations. In particular, Glisson and Durick indicated organizational dependency (measured in terms of organizational age) and leadership as "underresearched" predictors of organizational commitment (ibid), and this was my point of departure for approaching commitment through managerial and organizational structures in this thesis. The results of their study, as opposed to the results in this study, demonstrated inter alia that there was a dominance of organizational characteristics in predicting commitment in such a way that beliefs regarding the organization were important to the development of organizational commitment. On the other hand, job characteristics dominated the prediction of job satisfaction, and in this manner supported the notion that job experiences are vital in the development of job satisfaction.

Previously, organizational commitment has been approached through lenses emphasizing personal characteristics of employees. Examples of this are tenure both in the organization and in one's current position, demographic characteristics such as age, sex, and education (cf. Steers 1977:49; Meyer, Stanley et al. 2002:32). As apparent from the previous chapter, the variables of age, sex, and whether or not the position is permanent have been involved in this analysis of team management's influence on organizational commitment as well. Permanent position for employees was the only variable that strongly affected commitment, whereas permanent position for managers did not affect commitment. I have also conducted regression analyses with education and tenure in both the organization and in the current position. The outcomes of these analyses clearly indicate that either tenure in organization or current

position, or education, affects organizational commitment for managers or employees.[174] In line with Glisson and Durricks' (1988) findings, it is the variables that intercept structural conditions, like organizational and managerial characteristics that affect organizational commitment for both managers and employees the most in my analyses as well. These are: support from manager[175], professional loyalty[176], and participation in decision-making for employees[177]. In regard to support from manager and its effect on managers' commitment it is evident that most of the variation this variable creates on organizational commitment is descended from managers in the team management case. Owing to the fact that table 7.3.3 displays that for managers in the team management case the strength of the impact of support from manager on organizational commitment is 0, 51, whereas the impact of the support variable for managers in the hierarchical management case is substantial weaker as it is reported to be 0,17 in table 7.3.5. The role of support from manager was also directed attention to in subchapter 8.1. The substantial stronger impact of support from manager on commitment in the team than in the hierarchical management case on commitment may reflect that managers who are members of teams perceive more support in their job than managers in a hierarchical model which clearly has an effect on their commitment to the organization. With reference to a management team this finding is in line with an instrumental approach to the impacts of team management in organizations. As argued in 8.1 in which team managements' impact on the satisfaction of managers were commented, this influence of support from manager on managers' commitment may be explicated by drawing upon the insight of instrumental theory. That it is important to experience support from managers in order to develop commitment to the organization one works in, or to be satisfied in one's job for that sake, is in many ways obvious. But to be concrete, I have earlier argued that by structuring management in formal teams another basis for the conduct of management is arranged for. Again, team management is distinguished by a greater degree of representation and participation, empowerment, and accountability amid managers than what a hierarchical

---

[174] These variables all have regression coefficients close to zero and these regression coefficients are not siginifcant at the 0.10-level.
[175] Support from manager has a regression coefficient of 0.396 for employees, and 0.37 for managers and for all units. The coefficient for all units and employees are significant at the 0.01-level and for managers at the 0.05-level.
[176] Professional loyalty has a regression coefficient for managers at 0.389, for employees at 0.140 and for all units at 0.177. Managers and all units are significant, at the 0.05-level, whereas employees are significant at the 0.10-level.
[177] Participation in decision-making has at the 0.10-level a regression coefficient of 0.134 for employees and for all units at the 0.05-level a regression coefficient of 0.116. Managers do, however, not affect organizational commitment strongly.

management model provides for. It is thus natural that this increases team management members' perception of support from other managers. As informant who was member of a management team put it when reflecting on this way of organizing management:

> "When I worked as a middle-manager southward we had these meetings for head nurses only. And when I think about it today, then I think, oh, dear how much unfortunate time we used on that kind of meetings… My nearest superior manager at that time was so distant then, and I was alone most of the time with decisions and most of the matters that I was going to decide on was so remote from my every day job that it was no sense in bothering the medical superintendent with it. Because, he would not understand where I was, what kind of staff conflict I was dealing with. We were speaking on a more general with each other, and we did not manage to come to the good professional discussions which we have here today… There a more opportunities now, precisely because you have more people you can address and take up matters with." Informant 5/2006.

This quote gives voice to a team management structure that actually encourages that the managers draw up on each other in decision-making processes, and that they in this matter make each other accountable, and beyond that they recognize this as a supportive mechanism in regard to their job. In this manner, commitment to the organization may be developed and influenced by the creation of a solid managerial basis in which members recognize each other as jointly empowered and accountable, and thus they feel that they have support from each other as managers. Introductorily in the thesis I discussed the intertwinement of structure and management in 1.3. With reference to the impact of support from manager by managers in the team management case on commitment it is indicated that team management is composed of both structure and management, since team management is materialized in both the structures of the organization but also in the way management is carried.

Secondly, even though scholars have stressed that organizational commitment and job satisfaction are independent constructs, it is well known that commitment and satisfaction are associated with each other (Mowday, Steers et al. 1979; Williams and Hazer 1986; Glisson and Durick 1988). It is rather intuitive that the commitment and satisfaction constructs exist independently of each other, since commitment is more global than satisfaction as it concerns an affective response to the organization as whole, whereas satisfaction regards one's job or certain facets of one's job[178]. In this manner, drawing up on Mowday, Steers et al. (1979:226), commitment refers to one's attachment to the employing organization, e.g. its goals and values, and satisfaction concerns the specific (task) environment in which an employee

---

[178] Although, this is an intuitive inerence it has been pointed out by former researchers (cf. Mowday, Steers et al. 1979:226).

performs her/his duties. Furthermore, that people share the values and goals of the organization in which they work is not synonymous with their being satisfied with their job, and the other way around: that people are satisfied in their job does not necessarily mean that they are committed to the organization in which they work. However, commitment has proved to be more stable over time and commitment attitudes have appeared to develop slowly but consistently over time as individuals think about the relationship between themselves and their employer (ibid).

According to Williams and Hazer (1986), Porter et al. as early as in 1974 and Steers (1977) suggested that satisfaction was correlated with commitment, and furthermore they implied that job satisfaction was an antecedent to commitment. Glisson and Durick (1988:61) have also called attention to the reported relationship between organizational commitment and job satisfaction. They furthermore point out that the causality of this relationship between organizational commitment and job satisfaction has involved disagreement, Porter et al. in 1974 demonstrated correlation between the constructs, others have proved that commitment is a precursor for satisfaction, and as already mentioned, Williams and Hazer (1986) found that satisfaction is a precursor of commitment. I found these alternating results intriguing in regard to how job satisfaction and organizational commitment related to each other with regard to one of them being an antecedent for the other, and as such, that one of them may be an intermediating variable to team management. I therefore started to examine the relationship between satisfaction and commitment more thoroughly to scrutinize whether or not my data material could contribute to this discussion.

In order to proceed with the interpretation of organizational commitment, I consequently ran multiple regression analyses with organizational commitment as the dependent variable. In addition to the independent variables included in the analyses in chapter 7.5 and 7.5.2, I also supplied job satisfaction into the regression analysis as an independent variable. The results revealed that while job satisfaction had a strong influence on organizational commitment, the impact of team management on organizational commitment was still redundant when job satisfaction was incorporated.[179] Job satisfaction was then regressed on the other independent

---

[179] The strength of the effect of job satisfaction on commitment with the effects of all the other independent variables including the dummy team management variables held constant were reported to be 0.49 for all respondents in the sample. For managers the regression coefficient was reported to 0.54 and for employees 0.5.

variables together with the addition of organizational commitment as an independent variable. The effects of organizational commitment on job satisfaction, with the other variables held constant, were weak[180] for both managers and employees, whereas the effect of team management on satisfaction was still present and equal to the strength of the connection before including organizational commitment. I then ran a correlation analysis, which indicated that the job satisfaction and organizational commitment correlated strongly and significantly.[181]

8.3 Concluding Remarks

In this chapter I have interpreted the results of the multivariate regression analyses. I did this by means of both the analytical tools offered by an instrumental and institutional perspective to team management respectively, and by drawing up on the qualitative interviews made at an earlier stage in the project process. Team management affects job satisfaction strongly both for managers and employees, yet the satisfaction of managers is slightly more strongly affected than the satisfaction of employees. This tendency was also evident in the qualitative material as the quotations indicate. Instrumental theory has been useful to explicate that managers are more satisfied due to the organization of management in teams. I have argued that instrumental theory allude to distinguishing formal structures of team management, such as participation, empowerment, and the distribution of accountability among team management members, which affect the managers' degree of satisfaction in a positive manner. When it comes to explicating the slightly lower degree of satisfaction of employees I turn to institutional theory. Based on institutional theory, attention is directed to how the employees perceive that even though they now have a professional representative in the management group, this representative belongs to the management team. The management group has developed their own group values and norms, which affect their well-being at work. Employees are estranged from the head nurse and they do not necessarily recognize the head nurse as a representative of them in the management team, as he/she has now switched sides and is a member of the management group, which shares a set of common goals and values.

The effect for managers was significant at the 0.5-level, whereas the effects of all units and employees were significant at the 0.01-level.

[180] For all units in the sample the regression coefficient was 0.27 for managers 0.17, and for emplyees 0.32. Again the effect for managers was significant at the 0.5-level, whereas for all units and employees it was significant at the 0.01-level.

[181] Pearson's r was reported to 0.59 ans it was significant on 0.01-level.

Still, even though the impact of team management was not as strong for employees as it was for managers, employees were strongly affected by team management. I argued that to structure management in teams, continuously sets principles in regard to involvement from several participants with various professional backgrounds, which does not only affects team management members, but such a structuring of management constitutes a basis for the conduct of management that affects employees too. Even if the employees themselves do not directly participate in the team management and its decision-making processes, management teams may ensure the participation and representation of several groups which may have a vital symbolic effect on subordinates being managed by these teams.

Organizational commitment was, however, not directly affected by team management, for either managers or employees. This is not a novel finding in organizational theory, since commitment has often been studied through analytical lenses calling attention to individual characteristics. In line with earlier research on commitment, I demonstrated that commitment and job satisfaction correlated strongly, but in this study too it proved difficult to point out the direction in this relationship.

9 Conclusion

The subject matter under analysis in this thesis has been team management in mental hospital departments. The overall research question addressed first, if team management makes a difference compared to a hierarchical management model in terms of affecting subjective outcome dimensions such as job satisfaction and organizational commitment of managers and employees, and second, if team management makes a difference how does it affect their satisfaction and commitment? The interest in this is the specific character of team management in relation to former management models applied in hospital organizations. Norwegian hospitals have a long-term tradition for practicing a dual management system in which medical and administrative decisions have belonged to separate managerial pillars on which blame has been placed for different managerial challenges faced in hospitals. Team management represents a break with the dual management system both along modernist and symbolic dimensions. Practitioners in mental hospital department conducting team management expressed an urge to study whether or not it made a difference if management was organized in teams. But a vital part of the background for the interest in team management in mental hospital departments was also the acknowledgement of how organizations in many ways are steered through both structures and management. In chapter 1 I explained to how the conduct of organizations by some is explained by structures and by others by management, and that structures and management rarely are studied together in regard to organizational outcomes. A central argument in this study has accordingly been that team management needs to be studied by taking the managerial and structural aspects into consideration as team management is materialized both as structure and management in the organization under scrutiny. In regard to the choice of job satisfaction and organizational commitment as outcome variables of team management, I have argued that these aspects are important dimensions to assess per se. But beyond this, they are particularly interesting in the organizational context of Norwegian hospitals which constantly are aiming towards increasing efficiency first of all in terms producing more services at fewer costs, but also in regard to improve the working conditions for employees. This increase of efficiency on several levels has proved to be paradoxical in practice, especially for employees. As I described in 1.5, the constant attempts to produce more services and at same time balance the budgets have exhausted employees. In this study it has been analysed how the conduct of the management affects the well-being and loyalty of managers and employees towards the

organization, and in this manner they contribute to assessing efficiency by directing attention to how team management affects subjective outcome dimensions in the organization.

9.1   Team Management as Instrument and Symbol

In order to investigate if and how team management makes a difference on subjective outcome dimensions of managers and employees compared to a hierarchical management model, I approached team management through modernistic and constructivist lenses to come closer to core characteristics of team management.

To apply a modernist approach to the role of team management in organizations implies that team management is considered as a tangible means to enhance goal achievement and efficiency in an organization. For team management to function as such an instrument it is according to instrumental theory materialized in formal structures since these are the prime mechanisms given analytical priority within instrumental theory with reference to constraining individual behavior within organizations. The relevance of an instrumental approach to the study of team management in mental hospital departments relates precisely to this preference assigned to formal structure, since team management is established as the formal managerial structure in one of the hospitals under scrutiny in analysis. The formal structure ensures that also in the conduct of management it is important that the structures are composed of several professionals whose representation and participation reflects the interdisciplinary functional requirements in a given department. In addition to materialization in formal (and informal structures) team management has impact on subjective outcome dimensions through the fact that it involves the exercise of the social influence process of management and leadership. In other words, the instrumental impacts of team management are not only distributed through the formal team structures in the organization, but these instrumental impacts are also channelled by the irrevocable social interaction process between managers and employees. In this manner the impacts of team management are distributed through both structural and managerial channels. As advocated at an earlier stage in the study, structure and management both steer how organizations function and the way managers manage may augment the impact of formal structures and the other way around.

The further analytical questions pertained to if and how team management would affect job satisfaction and organizational commitment of managers and employees based on a modernist approach. Within instrumental theory it is innate to assume a tight coupling between structure

and individual behavior and attitudes, and according to this approach it was expected that team management based on its structural materialization would connect strongly to satisfaction and commitment. Furthermore, on the basis of the tight coupling between formal structures and outcome stressed in instrumental theory, I proposed that the proximity of managers to the formal management structures may result in a stronger connection between structure and their level of satisfaction and commitment than for employees. Since employees are more distant to the formal management structure than team management members, the connection between team management and satisfaction and commitment may be weaker for employees.

On the basis of the social constructivist and institutional approach to team management, attention is directed to symbolic aspects of the conduct of team management. The starting point for constructivist and institutional scholars is that organizations as other social phenomena are socially constructed arrangements. Organizations are regarded as socially constructed arrangements in which symbols and meaning are developed and interpreted. In order to capture how meaning and symbols are developed and interpreted in organizations informal structures are studied with a focus on how these together shape cultures, norms and values in organizations which restrain individuals from rational actions according to an instrumental logic. This process of developing cultures, norms, and values is referred to as the process of institutionalization in which an organization takes on a distinct character and organizational procedures become valued as ends in and of themselves.

With reference to team management this approach elicited that team management in addition to being expressed in formal structure also would be expressed in informal structures. Besides, institutional theory pinpointed that organizations operate within certain institutional environments from which they adopt organizational ideas, and that this blurs boundaries between organizations and their surrounding environments. Neo-Institutional theory directs attention to how the formal organizational structure adopts norms and values from their environments which contradicts organizational goal attainment. Analytically speaking, this implies that team management may be adopted in formal organizational structure not with the purpose of enhancing goal achievement but to cultivate organizational legitimacy in its local environments. If this is the case, it means that team management may be expressed in formal structures but because of inconsistency between this specific structure and the technical demands of the task at hand, the team structure is only of ceremonial character and it has

therefore no impact on how activities actually take place in practice. In this manner Neo-Institutional theory underlined the importance of studying how team management is carried out in practice to me, and in this way the importance of conducting qualitative interviews in addition to the collection of quantitative collection of data was further accentuated. Scandinavian New-Institutionalism has however directed attention to the weak points with regard to how formal structures are decoupled from organizational activities, and how this analytical assumption may be difficult to demonstrate empirically. This substantiates Scandinavian Institutional theory's emphasis on how new ideas are adopted, implemented, and evolve on the inside of organizations which further underlines the importance of studying how team management function in practice. Team management is according to this a general organizational idea which even though it is materialized in organizational structures, is something more than a tangible object which may occur in many different forms since team management has no definitive form. From this argument it follows that the general team management idea is "unpacked", translated, interpreted, and infused with meaning into action in the context of the organization. This suggests that team management may occur in different locally adopted versions according to how the mental hospital departments adjust team management.

According to institutional theory, each management group has an important role when it comes to infusing the practice of team management with meaning which may add symbolic values to this way of conducting management, and this brought me to the notion of symbolic impacts of team management. This is not primarily important with respect to the team management members since they as group may develop their own norms and values, but maybe even more important in regard to the subordinates of the teams who are more distant to the management group. In this sense it is the symbolic impacts of team management which to a greater extent may transfer to the subordinates, as the instrumental impacts were assumed to affect managers stronger than employees on the basis of their proximity to the practice of team management. Awareness of this in the management groups may result in that they express values that correspond with the values of the employees, or contrarily, if the team members are not aware of the impact of their symbolic role they may express values which contradict the values and norms of the subordinates. The outline of a social-constructivist institutional perspective accordingly resulted in a more *blurred* notion regarding the relationship between team management and the level of job satisfaction and organizational commitment than what the modernist approach did. On the one hand, I suggested that if team

management was infused with values, norms and symbolic meaning which applied to the different groups of staffs in the organization, then team management could connect strongly to satisfaction and commitment of managers and employees. On the other hand, on the basis of Neo-Institutional theory I proposed that even though team management may be expressed in the formal structure it does not necessarily mean that it affects how management is organized and works in practice. Founded on this, the proposition was that the connection between team management and level of satisfaction and commitment may be weak. Furthermore, I discussed how the management groups could develop their own distinct managerial team character which may contradict and/or coincide with the professional logics present on the shop floor represented in the varying professional groups that the employees belong to and may be constrained of. These possible symbolic impacts of team management made it more indecisive how team management would affect satisfaction and commitment, but it also implied that the symbolic impacts were particularly important in regard to affecting satisfaction and commitment of subordinates. It could signal to the employees on the grassroots that several professionals are represented and in this way made accountable in management which could mean that the connection between team management and the level of job satisfaction and commitment of employees are strong. At the same time, if employees understand a management team as a distinct managerial group whose values and norms end in decisions which contradict subordinates' point of views, the association between team management and satisfaction and commitment of employees could be weaker than for managers. To sum up, by drawing upon the insights of the paradigmatic traditions it is clear that team management may be expressed in both formal and informal structures, and it thus may play roles as both instrument and symbol in organizations.

9.2   A Comparative Design: Operationalizing Team Management

The research questions "if and how team management affects job satisfaction and organizational commitment of managers and employees compared to how hierarchical management affects these subjective outcome dimensions" clearly involved a comparative approach. This concern with comparative character of the research questions was based on the experience of initiators of this research project. They worked in mental hospital departments that conducted management of the departments in teams, but they also had experience from the classical dual management model, and expressed a concern with comparing these models. The team management model represents a fundamental break with the former dual management system which had a long history which had implications in regard to how

management was conducted and experienced by employees in hospitals. Besides, practitioners in the hospital that conducted team management in their departments constantly compared team management with former management models with which they had experience. They were under the impression that the formal team management model certainly had effects as to how management was exercised in practice and that this affected outcome beneficially. Review of team literature made it clear that teams were examined according to a modernist logic in that many studies of teams took as their starting point that teams are tangible objects implemented to cause beneficial outcomes in organizations. Examples on this are studies of top management teams. Vital aspects of teams and their roles may be left out of analysis by considering them as observable instruments accompanied with a certain mix of properties such as demography and processes which result in improved performance. In this manner, no further notice to if and how these teams may be materialized in organizational structures is made, and thus how they may play various roles in terms of affecting outcomes on different levels in organizations is precluded from analysis.

Teams may contrarily be addressed as a socially constructed phenomenon, which is materialized in informal organizational structures in addition to or even without appearing in formal structures. To be a member of a distinct team in an organization may, as evident in this analysis, add meaning and result in the development of cultural norms within the groups which are important all the time we are human beings. In this manner, interpretative and symbolic meaning develop within the teams, which not only affect the team management members internal to the group but may leave marks beyond the teams and get through to collections of professionals on other levels of the organization that are external to the management team. This directs attention to a further next weakness in the team literature, because on top of disregarding symbolic aspects of teams by treating the team concept solely on the basis of a modernistic paradigm, the team literature is introvert on two levels. First, with regard to analyses of the effects of lower level teams on subjective outcome dimensions, these are assessed on group level, and consequently it is merely the job satisfaction and commitment of the team members that are measured. This is a deficit in regard to management teams whose roles surpass the inner life of their group as management also

exerts a social influence on their subordinates[182]. Secondly, studies of teams tend only to assess teams and effects of teams on the basis of that it is the teams under study that shape the structural impacts on outcome although these structural effects may be created under other organizational labels. In this sense the team literature explains every level of outcome with reference to the team structures without critically reflecting on if and how these structures might as well be shaped under other organizational labels and likewise affect outcome. A modernist approach concerned with instrumental effects of team structures combined with an introvert group focus provide for an analytical synergy in that attention is kept away from other effects, and especially symbolic effects which may reach organizational groups external to the teams.

Accordingly, these deficits in the team literature intermingled with the tendency of practitioners to all along contrast team management to other management models that started the process with eliciting a comparative design of the study. Moreover, it brought about the importance of including subordinates external to inner team life as qualified study objects in the study. In order to develop a team management variable in which both formal and informal characteristics of team management were represented, a team management dummy variable was constructed. This dummy is a contextual variable which intercepts if and how team management is materialized instrumentally (formal structure) and symbolically (informal structure) and on this basis distinguishes team management from the hierarchical management model under scrutiny. In this manner it is possible to answer if and how team management makes a difference on subjective outcome dimensions of managers and employees compared to the impacts of hierarchical management. A set of other theoretically and empirically relevant independent variables are included as control variables in the regression model such as age, sex, permanent position, manager of decision-making processes, professional loyalty, participation in decision-making, legitimacy of decisions, goals, support from managers, and decentralization of authority. These variables control for other conditions which may have impact on the variation on job satisfaction and organizational commitment in the two mental hospital organizations. Nonetheless their control function in the regression models, any variation on these variables in regard to the subjective outcome dimension was interesting because this signalled variation between the two organizations in addition to the management

---

[182] The TMT literature is not that introvert as it assesses the effects of the TMT on objective outcomes on organizational level, but this literature is not so concernec with the effects on subjective outcome dimensions which have been under scrutiny in this analysis except for some studies of decision quality.

structure. This has to be seen in relation with the comparative design of the study. It takes as its starting point that these are two similar organizations with the same tasks operating within the same health context and in this way in the same institutional environment. The main thing that distinguishes them is the management structure, and thus it is relevant to investigate whether or not management structure makes a difference in relation to subjective outcome dimensions. In other words, if there were major differences on the control variables this would be interesting as such since it would break with the premise upon which the study is based, and it would add further information regarding the characterizing features of the two cases. To analyse the two management cases separately prior to the final regression analysis of the team dummy in the merged data set was therefore vital in order to check for any differences in the two cases. Major variation on control variables could give voice to error in the data material or that these organizations actually have other vital organizational dissimilarities which account for variation on the subjective outcome variables.

9.3 Results: Did Team Management Make a Difference?

The analysis of the final regression model in the merged data set revealed that team management clearly made a difference on job satisfaction controlled for the effects of the other variables in the regression models, but on organizational commitment team management did not make a difference. The job satisfaction of managers was more strongly affected than the satisfaction of employees, whereas there was no impact of team management on organizational commitment, although there was a weak still not significant influence for managers. Notwithstanding the impact or lack of impact of team management in the final regression analyses, other variables in the regression model also affected respectively job satisfaction and organizational commitment too and some control variables even stronger than what team management did. Support from manager for instance all along affected the subjective outcome dimensions strongly, and thus it is pertinent to look closer on the role of this variable in the analysis before interpreting the impact of team management on job satisfaction and organizational commitment.

With reference to job satisfaction for example, support from manager affected stronger than team management. This was in line with the findings in the analyses prior to the merger of the data sets as well, since all along in both of management cases support from manager affected satisfaction strongly. The influence of support from manager was nevertheless on the whole stronger in the team management case than in the hierarchical management case, but also

when it was distinguished between managers and employees. The impact of support from manager was stronger in both groups in the team management case than in the hierarchical management case. Moreover, support from manager all the time also affected organizational commitment strongly in both the team and the hierarchical management case. The influence of support from manager among managers' commitment in the hierarchical management case was however much weaker than for managers in the team management case. Alternatively, it was weaker for employees in the team management case than for employees in the hierarchical management case. When support from manager impacts stronger on managers' satisfaction and commitment in the team management case than it did in the hierarchical management case, this may give voice to the importance of the instrumental effects of team management on support from manager on the basis that several managers participate in and thus share managerial accountability and thus they feel more supported in management than managers in the hierarchical management case. Support from manager was an inductive variable constructed on the basis of a need for a direct link between employees' perceptions of management in their department and the subjective dimensions. When it turns out that this variable persistently affects the subjective outcome variables strongly, this de facto accentuates the importance of management and managerial support in regard to peoples' satisfaction and commitment in organizations. I will now summarize how the main findings in the analysis were interpreted on the basis of the analytical frameworks drawn from the paradigmatic traditions, but will also address how the qualitative interviews were used to further assess the findings.

9.3.1 How Managers Build Strength in Teams

Team management did make a difference on the job satisfaction of both managers and employees. Still, the impact on managers' satisfaction was slightly stronger than for the satisfaction of employees. In line with the emphasis on formal structure as means to achieve goals in instrumentally inspired theories, I explained how team management may appear as a means to increase the job satisfaction of managers since a vital aim when introducing teams on department management level in the hospitals was to overcome huge budget overruns and improve overall organizational performance including job satisfaction. Accordingly, team management is the prevailing formal management structure in all departments at UNN. The argument was that when it came to ensure involvement and participation, empowerment, and accountability through formalization of team management, this would be an evidently better equipped organizational tool than other management models. The actual definition of team

management accentuates how teams are marked by representation and participation of several professionals who are empowered and mutually accountable for goal achievement.

First of all, team management as one informant put it signified that they were an interdisciplinary compounded management group who sits in the same corridor and the group holds meetings every week in order to together make decisions to conduct the department management. To formalize a managerial team structure is a way to constitute a fundamentally different basis for the conduct of management compared to a hierarchical management model in terms of ensuring a greater degree of representation and participation of several professional viewpoints in management. Second, I also argued that to formalize team management means that several managers are empowered, which I asserted was beneficial for the well-being of managers on the basis that empowerment in organizations by most is regarded as a benefit per se. Interview data supported this as some managers talked about their role in the team and how they had to seek for approval from the other team members on their main concerns by common discussions in the management group concerning which point of view the management team should choose. To mutually empower professionals in the teams so that they have to balance their opinions according to overall department goals result in that more viewpoints are discussed and taken into consideration in decision-making, and this seems to be conclusive in regard to increasing managers' well-being in their job. Third, in addition to dispersing empowerment in a group, team management also prepares for dispersion of accountability. Informants pointed out that the team process of decision-making in which several professionals were represented, empowered, as well as accountable made them more confident regarding the quality and legitimacy of decisions, and on this basis the responsibility their managerial membership implied was turned in to a positive experience for them. Participation, empowerment, and accountability are distinguished as characteristics of team management, but as the data analysis has indicated, empirically they may be more closely related. This is evident in this study as the informants express all these characteristics when addressing how team management function. Because, in regard to the management teams under study informants give expression to the whole package of these characteristics when they direct attention to how the teams function. The three characteristics may separately influence on the satisfaction of managers, but when all these are present in a management team it seems that they have a synergetic impact on satisfaction. On the same time as several managers participate and are empowered in management they are made accountable for managerial decisions, and most informants alluded to all of these aspects when they described

the functioning of the management groups and how they themselves experienced this way of conducting management. This analysis indicated that team management actually makes a difference on managers' job satisfaction in terms of establishing representation and participation, empowerment, and accountability in management. But beyond this, it signals the meaning of the discussion concerning the relationship between structure and management in the introductory chapter 1.3. The analysis pointed out the importance of formal structure as vital to form a basis for the conduct of management. And furthermore, by formalizing team management it is provided for a fundamental different starting point for the conduct of management than what a hierarchical management model, which evidently makes a difference in regard to managers and employees level of satisfaction.

With reference to organizational commitment there are no connection between team management and managers' commitment. Although, there was a weak influence of team management on managers commitment but this impact was not significant. I explicated the lack of connection between team management and managers' commitment on the basis of the vast number of contributions which had approached organizational commitment through assessing individual traits' of the workers in organizations. Properties like personality, needs, and/or values of workers are in many studies regarded as the main explanatory factor pertaining to account for the variation on organizational commitment which they demonstrate empirically. Pursuant to previous research I approached commitment by assessing some individual level characteristics such as sex, age, and whether or not the respondents were in a permanent position. These variables were vital as control variables, but none of these proved to affect the commitment of managers significantly. In addition I ran regressions in which education and tenure were included in the model, but these variables did not influence on commitment. The main analytical focus related to the role of team management's effect on commitment. Drawing upon on Glisson and Durick (1988), attention was directed at organizational characteristics in order to account for variation on commitment. In particular they argued that too little attention had been paid to leadership as an antecedent to commitment, and it was on the basis of these arguments that I found it interesting to test whether or not team management made a difference in terms of affecting organizational commitment. But as the analyses revealed it was other structural control variables that impacted on managers' commitment, as support from manager and professional loyalty were the variables that strongly affected on the level of commitment of managers.

In chapter 8.2 I particularly commented on the effect of support from manager, since this variable on the whole had a strong impact on both satisfaction and commitment in both the separate cases and in the final merged data set throughout the analysis. But for managers the impact of support from manager on commitment was significantly stronger in the team than in the hierarchical management case. In other words, most of the variation support from manager creates on managers' commitment in the merged data set may be traced to the team management managers' perception of support from manager. By drawing upon instrumental theory's emphasis of formal structure, I argued that a formalized team management structure creates a fundamentally different basis for the conduct of management, which obviously has an impact on subjective outcome variables. With reference to support from manager, this variable has proved as vital in regard to both the dependent variable under scrutiny in this analysis, and especially in the team management case in regard to the level of commitment of managers. The way team management is formalized and function at UNN has proved to be a way to ensure for representation and participation, empowerment, and dispersion of accountability in management. Along all these dimensions that are materialized in the formal team management structure it is arranged for managers who somehow develop and experience greater support in their conduct of management than what is the case in a hierarchical management structure. This argument is maintained in the interview material. Within these management groups decisions are discussed jointly, and besides how this makes the managers accountable they recognize this also as a supportive mechanism in regard to their affective beliefs regarding the organization they work in. Managers' commitment to the organization may be developed as a result of the frameworks that a formalized team management structure creates in terms of participation, empowerment, and accountability.

9.3.2 Employees' Reluctant Commitment in Team Management

Based on a garbage can perspective on how decisions are made in organizations I furthermore discussed why team management controlled for the effect of the other variables in the regression model also impacted strongly on the satisfaction of employees. I directed attention to how decision-making processes in organizations may be regarded as composed of four streams: problems, solutions, participants, and choice opportunities. This is more n line with how decision-making in organizations happen in real life. The central assumption on which the garbage can model rests is that the order of these four streams alters. But the way these streams are channelled through organizational structures may influence on how decision-making processes take place and on what the outcome of decision-making processes will be.

Not unlike the arguments in the section above regarding how team management materializes in formal structures, the garbage can model highlights how a team management structure defines some standards for how management is to be conducted. For example, several participants are included in management which does not only affect managers directly involved in the conduct of management but it affects employees too since it symbolizes that representatives of several professionals are considered as vital in the course and conduct of management. This notion was strengthened by the strong impact of manager of decision-making process in table 7.5.5, which indicates that the closer decisions are to be managed by a management team, the more satisfied employees are in their job. Employees observe how management is conducted in teams in which maybe a professional representing their professional group participates. In this manner, it is signalled that it is required for interdisciplinary competence so that all important professional aspects of management are taken into consideration to conduct management in mental hospital departments.

Nonetheless, even though the connection between team management and subordinates' level of job satisfaction was strong, it was weaker than the connection was for managers. On the basis of a constructive institutional perspective on teams I pointed to how the management teams may be arenas for the construction of symbols and meanings which may contrast the existing range of symbols and meanings on the ground floor. One of the informants I quoted pointed out how the management groups were perceived as a collective on the ground floor of the organization. Earlier the staff could go to the head nurse if they wanted to address an issue, but one informant described how this option now seemed to have been eliminated since the loyalty of the head nurse now is in the management team. This clearly accentuated how informal structures have developed in the teams and on the ground floor of the organization. We know for example that nurses and physicians are limited from pure rational action in their jobs on the basis of how these professional groups constitute social arrangements in which meaning and norms are developed and in this manner a 'logic of appropriateness' regarding how to act and think is created. When the managers enter into a multidisciplinary management group this forms a new social configuration in which new common meaning and norms may be developed, just as the management informants in this study describe it. In this manner the management group may become a new arena, from which managers actions and thinking are guided. This group is a social collective which gives meaning to its members beyond the technical managerial tasks that they are set to solve. But as the qualitative interviews convey, the meaning and symbols that the management groups hold may

contradict the values and norms that professionals on the ground floor share. In regard to management in Norwegian hospitals which has been a disputed issue for decades, the findings in this thesis indicate that team management may be a beneficial way to conduct management since it affects the well-being of both managers and employees which is a quality in itself. This clearly means that other mental hospital departments may try team management as a way of performing management. There is however a need for further research on this topic since I have not investigated the impact of team management on objective outcome dimensions. In connection to this it is worth mentioning that there are conducted a great deal of research on how job satisfaction impact on objective performance which reveals that the level of satisfaction of employees on the grassroots affect the outcome which they produce.

In regard to the influence of team management on employees' level of commitment, it was revealed that team management did not affect commitment. In line with the lack of connections between team management and managers' level of commitment I explicated this with alluding to how commitment usually had been assessed on the basis of workers' individual characteristics. With regard to employees it is support from manager that to the greatest extent generates variation on commitment. But as I checked how support from manager affected employees' commitment in respectively the team and the hierarchical management case, it was evident that the impact of support from manager on commitment of employees was actually stronger in the hierarchical than in the team management case. Another control variable that influenced strongly on the commitment of employees was permanent position. This control variable had proved to be particularly important in regard to employees' commitment in the previous hierarchical management case, as it was in this case that the impact was strongest for employees in addition to that it was a significant effect. Even though the influence of permanent position on commitment was strong for employees in the team management case too, it was not significant. Ultimately, professional loyalty had a weak influence on organizational commitment of employees.

Even though there lacks an impact of team management on the organizational commitment of both employees and managers, I would hesitate to suggest that this means that approaches to commitment that stress organizational characteristics, should not be applied in future research of organizational commitment at all. This is drawn from the observation of the all along strong impact of support from manager on commitment, as this maintains that the support from management clearly is a variable that comprises an organizational property, when

201

accepting the argument that management is intertwined with organizational structure. At the same time, although job satisfaction and organizational commitment correlated strongly in the data in this thesis, this does not necessarily mean that these subjective outcome dimensions are explained by the same set of explanatory variables. First of all, the set of independent variables affected these subjective outcome dimensions differently. Secondly, they consequently affected job satisfaction stronger than organizational commitment. Thirdly, the models with job satisfaction as dependent variable had a higher explained variance than the one with organizational commitment as dependent variable. Finally, as mentioned at an early stage in the thesis, intuitively job satisfaction is more concerned with aspects of the job and its tasks, and in this sense more concrete and directly connected to structures close to the worker than what commitment is. This may imply that organizational commitment should be studied on the basis of purer psychological and managerial approaches than what is done in this thesis. On this basis, and despite the correlation between the subjective outcome dimensions in this thesis, job satisfaction and organizational commitment may be kept more separate in future research. In contrast to organizational commitment, the findings in this thesis indicate that organizational scientists with advantage should pay more attention to job satisfaction, and how organizational structures and management affect this dimension for organizational members at different organizational levels in their further research.

10 Reference List

Abbott, J. B., N. G. Boyd, et al. (2006): "Does Type of Team Matter? An Investigation of the Relationships between Job Characteristics and Outcomes within a Team-Based Environment." *The Journal of Social Psychology* 146(4): 24.

Adams, G. P. (1994): 'Enthralled With Modernity: The Historical Context of Knowledge and Theory Development in Public Administration', in J. D. White and G. P. Adams: *Research in Public Administration, Reflections on Theory and Practice*, SAGE Publications. 25-41.

Agho, A. O., C. W. Mueller, et al. (1993): "Determinants of Employee Job Satisfaction: An Empirical Test of a Causal Model." *Human relations* 46(8): 1007.

Alderfer, C. P. and K. K. Smith (1982): "Studying Intergroup Relations Embedded in Organizations." *Administrative Science Quarterly* 27(1): 35-63.

Allen, N., J. and J. Meyer, P. (1990): "The Measurement and Antecedents of affective, continuance and normative Commitment to the Organization." *Journal of Occupational Psychology* 63: 1-18.

Amason, A. C. (1996): "Distinguishing the Effects of Functional and Dysfunctional Conflict on Strategic Decision Making: Resolving a Paradox for Top Management Teams." *Academy of Management Journal* 39(1)

Andersen, B. M. (2008): Hva med pasienter og personell? Aftenposten, Oslo.

Bateman, T. B. and S. Strasser (1984): "A Longitudinal Analysis of the Antecedents of Organizational Commitment." *Academy of Management Journal* 27(1): 95-112.

Beam, R. A. (2006): "Professional Issues - Organizational Goals and Priorities and the Job Satisfaction of U S Journalists." *Journalism & Mass Communication Quarterly* 83(1): 17.

Beckhard, R. (1972): "Organizational Issues in the Team Delivery of Comprehensive Health Care." *The Milbank Memorial Fund Quarterly* 50(3): 287-316.

Benders, J. and M. van Bijsterveld (2000): "Leaning on Lean: the Reception of a Management Fashion in Germany." *New Technology, Work and Employment* 15(1): 15.

Berg-Schlosser, D. and G. De Meur (2009): 'Comparative Research Design. Case and Variable Selection', in B. Rihoux and C. C. Ragin: *Configurational comparative Methods. Qualitative comparative Analysis (QCA) and related Techniques*. Los Angeles, Sage. 19-32.

Berg, O. (2005): *Fra politikk til økonomikk. Den norske helsepolitikks utvikling det siste sekel*, Den Norske Lægeforening- Tidsskriftets Skriftserie.

Berglund, F. (2004): "Metode/Kommentar - Indekskonstruksjon: Kun et spørsmål om teknikk? En empirisk gjennomgang." *Tidsskrift for samfunnsforskning*

Blake, R. R. and J. S. Mouton (1971): *The Managerial grid: key orientations for achieving production through people*. Houston, Tex., Gulf publishing company.

Bohrnstedt, G. W., D. Knoke, et al. (2002): *Statistics for Social Data Analysis*, Thomson Wadsworth. 4rd.

Brief, A. P. and L. Roberson (1989): "Job Attitude Organization: An Explanatory Study." *Journal of Applied Social Psychology* 19(9): 717-727.

Brief, A. P. and H. Weiss (2002): "Affect in the Workplace." *Annual Review of Psychology* 53: 30.

Brunsson, N. (2002): *The Organization of Hypocrisy: Talk, Decisions and Actions in Organizations*. Chichester, Wiley.

Bryman, A. (1986): *Leadership and organizations*. London, Routledge & Kegan Paul.

Bryman, A. (1996): 'Leadership in Organizations', in S. R. Clegg, C. Hardy and W. R. Nord: *Handbook of Organization Studies*, SAGE Publications.

Burrell, G. and G. Morgan (1994): *Sociological Paradigms and Organisational Analysis* Ashgate Publishing Limited.

Byrkjeflot, H. (1999): "Kan demokrati og ledelse forenes?" *Nytt Norsk Tidsskrift* 16(3): 190-203.

Caldwell, D. F. and C. A. O'Reilly (1981): "The Commitment and Job Tenure of New Employees: Some Evidence of Postdecisional Justification " *Administrative Science Quarterly* 26(4): 597-616.

Carlström, E. and J. Berlin (2004): *Boken om Team. En kunskapsöversikt om team och teamarbete innom hälso- og sjukvården*. Stockholm, Landstingsförbundet.

Carter, P. and N. Jackson (1993): 'Modernism, Postmodernism and Motivation, or Why Expectancy Theory Failed to Come Up to Expectation', in J. Hassard and M. Parker: *Postmodernism and Organizations*, SAGE Publications.

Christensen, T., P. Lægreid, et al. (2007): *Organization theory and the public sector instrument, culture and myth*. London, Routledge.

Cohen, A. (2007): "Commitment before and after: An Evaluation and Reconceptualization of Organizational Commitment." *Human Resource Management Review* 17(3)

Cohen, M. D., J. G. March, et al. (1979): 'People, Problems, Solutions and the Ambiguity of Relevance', in J. G. March and J. P. Olsen: *Ambiguity and Choice in Organizations*. Bergen, Universitetsforlaget. 24-37.

Cohen, S. G. and D. E. Bailey (1997): "What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite." *Journal of Management* 23(3): 52.

Cohen, S. G. and G. E. Ledford, Jr. (1994): "The Effectiveness of Self-Managing Teams: A Quasi-Experiment." *Human Relations* 47(1): 13.

Colbjørnsen, T. (2003): *Fleksibilitet og forutsigbarhet: arbeid og organisasjoner i endring*. Oslo, Universitetsforlaget.

Colbjørnsen, T. (2004): *Ledere og lederskap AFFs lederundersøkelser*. Bergen, Fagbokforlaget. 3rd edition.

Cole, M. S. and H. Bruch (2006): "Organizational Identity Strength, Identification, and Commitment and their Relationships to Turnover Intention: does Organizational Hierarchy Matter?" *Journal of Organizational Behavior* 27(5): 22.

Conger, J. A. (1999): "Charismatic and Transformational Leadership in Organizations: an Insider's Perspective on these Developing Streams of Research." *Leadership Quarterly* 10(2): 145-179.

Cooper-Hakim, A. and C. Viswesvaran (2005): "The Construct of Work Commitment: Testing an Integrative Framework." *Psychological bulletin* 131(2): 18.

Cordery, J. L., W. S. Mueller, et al. (1991): "Attitudinal and Behavioral Effects of Autonomous Group Working: A Longitudinal Field Study." *Academy of Management Journal* 34(2): 464.

Deeter-Schmeltz, D. R. and K. N. Kennedy (2003): "Patient Care Teams and Customer Satisfaction: the Role of Team Cohesion." *Journal of Services Marketing* 17(7): 666-684.

DeVanna, M. A. and N. Tichy (1990): "Creating the Competitive Organization of the 21st Century: The Boundaryless Corporation." *Human resource management* 29(4): 455-472.

Dooley, R. S. and G. E. Fryxell (1999): "Attaining Decision Quality and Commitment from Dissent: The Moderating Effects of Loyalty and Competence in Strategic Decision-Making Teams." *Academy of Management journal* 42(4): 14.

Egeberg, M. (1989): *Institusjonspolitikk og forvaltningsutvikling: bidrag til en anvendt statsvitenskap*. [Oslo], TANO.

Egeberg, M. (2003): 'How Bureaucratic Structure matters: An Organizational Perspective', in B. G. Peters and J. Pierre: *Handbook of Public Administration*. London, SAGE Publication.

Eisenhardt, K. M. and C. B. Schoonhoven (1990): "Organizational Growth: Linking Founding Team, Strategy, Environment, and Growth among U.S. Semiconductor Ventures, 1978-1988." *Administrative Science Quarterly* 35(3): 504-529.

Elloy, D. F. (2005): "The Influence of Superleader Behaviors on Organization Commitment, Job Satisfaction and Organization Self-Esteem in a Self-Managed Work Team." *Leadership and Organizational Development Journal* 26(2): 120-127.

Emery, F. and E. Thorsrud (1976): *Democracy at work: The report of the Norwegian industrial democracy program*, Martinus Nijhoff Social Sciences Division.

Eriksen, E. O. (1999): *Kommunikativ ledelse: om verdier og styring i offentlig sektor*. Bergen-Sandviken, Fagbokforlaget.

Fiedler, F. E. (1978): "The contingency model and the dynamics of the leadership process." *In L. Berkowitz (Ed.), Advances in experimental social psychology* 11

Fincham, R. and P. S. Rhodes (2005): *Principles of organizational behaviour*. Oxford, Oxford University Press. 4th edition.

Finkelstein, S. and D. C. Hambrick (1990): "Top-Management-Team Tenure and Organizational Outcomes: The Moderating Role of Managerial Discretion." *Administrative Science Quarterly* 35(3): 484-503.

Finn, R. (2008): "The Language of Teamwork: Reproducing Professional Divisions in the Operating Theatre." *Human Relations* 61(1): 103-130.

Fygle, S. (2002): *Marmor og menneskeskjebner: Rønvik sykehus i det 20. århundre*. Bodø, Nordlandssykehuset Bodø psykiatri.

George, A. L. and A. Bennett (2005): *Case Studies and Theory Development in the Social Sciences*. Cambridge, Mass., MIT Press.

Glisson, C. and M. Durick (1988): "Predictors of Job Satisfaction and Organizational Commitment in Human Service Organizations." *Administrative Science Quarterly* 33(1:61-81)

Glouberman, S. and H. Mintzberg (2001): "Managing the Care of Health and the Cure of Diseases - Part I: Differentiation." *Health Care Management Review* 26(1): 56.

Glouberman, S. and H. Mintzberg (2001): "Managing the Care of Health and the Cure of Diseases - Part II: Integration." *Health Care Management Review* 26(1): 70-84.

Griffin, M. A., M. G. Patterson, et al. (2001): "Job Satisfaction and Teamwork: The Role of Supervisor Support." *Journal of Organizational Behavior* 22(5): 14.

Hackman, J. R. (1990): *Groups that work (and those that don't) creating Conditions for Effective Teamwork*. San Francisco, Calif., Jossey-Bass.

Hackman, R. and G. R. Oldham (1975): "Development of the Job Diagnostic Survey." *Journal of Applied Psychology* 60(2): 159-170.

Haleblian, J. and S. Finkelstein (1993): "Top Management Team Size, CEO Dominance, and Firm Performance: The Moderating Roles of Environment Turbulence and Discretion." *The Academy of Management Journal* 36(4): 844-863.

Hambrick, D. C. and P. A. Mason (1984): "Upper Echelons: The Organization as a Reflection of its Top Managers " *The Academy of Management Review* 9(2): 193-206.

Harrison, D. A., D. A. Newman, et al. (2006): "How Important Are Job Attitudes? Meta-Analytic Comparisons of Integrative Behavioral Outcomes and Time Sequences." *Academy of Management journal* 49(2): 22.

Hatch, M. J. and A. L. Cunliffe (2006): *Organization theory: modern, symbolic, and postmodern perspectives*. Oxford, Oxford University Press. 2nd edition.

Hayton, J. C., D. G. Allen, et al. (2004): "Factor Retention Decisions in Exploratory Factor Analysis: a Tutorial on Parallel Analysis." *Organizational Research Methods* 7(2): 191-205.

Hellevik, O. (1999): *Forskningsmetode i sosiologi og statsvitenskap*. Oslo, Universitetsforl. 6. utg.

Herbst, P. G. (1971): 'Utviklingen av sosio-teknisk analyse', in P. G. Herbst: *Demokratiseringsprosessen i arbeidslivet - sosio-tekniske studier*. Oslo, Universitetsforlaget.

Hersey, P. and K. H. Blanchard (1977): *Management of organizational behavior: utilizing human resources*. Englewood Cliffs, New Jersey, Prentice-Hall. 3.ed.

Hillestad, T. (2008): 'Ledelsesutfordringer og dilemmaer i team', in R. Assmann: *Teamorganisering veien til mer fleksible organisasjoner*. Oslo, Fagbokforlaget.

Hofstede, G. and G. J. Hofstede (2005): *Cultures and Organizations Software of the Mind*. New York, McGraw-Hill. 2nd edition.

House, R., Rousseau, D., Thomas-Hunt, M. (1995): "The Meso Paradigm. A Framework for the Integration of Micro and Macro Organizational Behavior." *Research in Organizational Behavior* 17: 71-114.

Iaffaldano, M. T. and P. M. Muchinsky (1985): "Job Satisfaction and Job Performance: A Meta-Analysis." *Psychological Bulletin* 97(2): 251-273.

Ingram, H. and T. Desombre (1999): "Teamwork: comparing academic and practitioners’ perceptions." *Team Performance Management* 5(1): 16.

Jacobsen, D. I. (2002): *Hvordan gjennomføre en undersøkelse? Innføring i samfunnsvitenskapelig metode*, Høyskoleforlaget AS - Norwegian Academic Press. 2. utgave.

Jacobsen, D. I. and J. Thorsvik (2002): *Hvordan organisasjoner fungerer: innføring i organisasjon og ledelse*. Bergen, Fagbokforl. 2. utg.

Jensen, R. and G. Szulanski (2004): "Stickiness and the Adaptation of Organizational Practices in Cross-Border Knowledge Transfers." *Journal of International Business Studies* 35(6): 508-523.

Kalleberg, A. L. (1977): "Work Values and Job Rewards: a Theory of Job Satisfaction." *American Sociological Review* 42(1): 124-143.

Kaluzny, A. D. and S. M. Shortell (2006): *Health Care Management Organization Design and Behavior*. Clifton Park, N.Y., Thomson Delmar Learning. 5th edition.

Katzenbach, J. R. and D. K. Smith (1998): *The wisdom of teams: creating the high-performance organization*. London, McGraw-Hill.

Kerlinger, F. N. and H. B. Lee (2000): *Foundations of behavioral research*. Forth Worth, Tex., Harcourt Brace Jovanovich College Publ. 4th.

Khaleque, A. and M. A. Rahman (1987): "Perceived Importance of Job Facets and Overall Job Satisfaction of Industrial Workers." *Human Relations* 40(7): 401-416.

Kim, S. (2002): "Participative Management and Job Satisfaction: Lessons for Management Leadership." *Public Administration Review* 62(2): 231-241.

King, G. (1986): "How not to lie with Statistics: Avoiding Common Mistakes in Quantitative Political Science." *American Journal of Political Science* 30(3): 666-687.

Kirkman, B. L. and B. Rosen (1999): "Beyond Self-Management: Antecedents and Consequences of Team Empowerment." *Academy of Management Journal* 41(1): 58-74.

Kline, P. (1994): *An Easy Guide to Factor Analysis*. London, Routledge Taylor and Francis Group.

Knoke, D., G. W. Borhnstedt, et al. (2002): *Statistics for Social Data Analysis*, Thomson Wadsworth. 4th edition.

Kor, Y. Y. (2003): "Experience-Based Top Management Team Competence and Sustained Growth." *Organization Science* 14(6): 707-719.

Korsgaard, A. M., D. M. Schweiger, et al. (1995): "Building Commitment, Attachment, and Trust in Strategic-Decision-Making Teams: The Role of Procedurale Justice." *Academy of Management Journal* 38(1): 60-84.

Kvale, S. 1997,(2008): *Det kvalitative forskningsintervju*. Oslo, Ad notam Gyldendal. 11th edition.

Lemieux-Charles, L. and et al. (2002): "The Effects of Quality Improvement Practices on Team Effectiveness: a Mediational Model." *Journal of Organizational Behavior* 23(5): 533-553.

Lemieux-Charles, L. and W. McGuire (2006): "What Do We Know about Health Care Team Effectiveness? A Review of the Literature." *Medical Care Research and Review* 63(3): 263-300.

Levin, M. and M. Rolfsen (2004): *Arbeid i team. Læring og utvikling i team*. Bergen, Fagbokforl.

Lichtenstein, R., J. A. Alexander, et al. (2004): "Status Differences in Cross-functional Teams: Effects on Individual Member Participation, Job Satisfaction, and Intent to Quit." *Journal of Health & Social Behavior* 45(3): 14.

Locke, E. A. (1976): 'The Nature and Causes of Job Satisfaction', in M. D. Dunnette: *Handbook of Industrial and Organizational Psychology*. New York, McGraw-Hill.

Lægreid, P. and J. P. Olsen (1978): *Byråkrati og beslutninger en studie av norske departement*. Bergen, Universitetsforlaget.

Lægreid, P., S. Opedal, et al. (2005): "The Norwegian Hospital Reform: Balancing Political Control and Enterprise Autonomy." *Journal of Health Politics, Policy and Law* 30(6): 1027-1064.

Lægreid, P., P. G. Roness, et al. (2007): *Organization theory and the public sector instrument, culture and myth*. Oxon, Routledge.

Macy, B. A., M. F. Peterson, et al. (1989): "A Test of Participation Theory in a Work Re-design Field Setting: Degree of Participation and Comparison Site Contrasts." *Human Relations* 42(12): 1095-1165.

March, J. G. and J. P. Olsen (1989): *Rediscovering institutions: the organizational basis of politics*. New York, Free Press.

March, J. G. and R. I. Sutton (1997): "Organizational Performance as a Dependent Variable." *Organization Science* 8(6): 10.

Marks, M. A., J. E. Mathieu, et al. (2001): "A Temporally Based Framework and Taxonomy of Team Processes." *The Academy of Management Review* 26(3): 21.

Mathieu, J., M. T. Maynard, et al. (2008): "Team Effectiveness 1997-2007: A Review of Recent Advancements and a Glimpse into the Future." *Journal of management* 34(3): 67.

Meyer, J., P. and N. Allen, J. (1991): "A three-Component Conceptualization of Organizational Commitment." *Human Resources Management Review* 1(1): 61.

Meyer, J., D. Stanley, et al. (2002): "Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences." *Journal of Vocational Behavior* 61(1): 33.

Meyer, J. P. and N. J. Allen (1997): *Commitment in the workplace. Theory, research, and application*. Thousand Oaks, Calif., Sage.

Meyer, J. W. and B. Rowan (1977): "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *The American Journal of Sociology* 83(2): 340-363.

Midtbø, T. (2007): *Regresjonsanalyse for samfunnsvitere med eksempler i SPSS*. Oslo, Universitetsforl.

Mintzberg, H. (1983): *Power in and around Organizations*, Englewood Cliffs, NJ: Prentice-Hall.

Mintzberg, H. (1983): *Structure in Fives: Designing Effective Organizations*. Englewood Cliffs, N.J., Prentice-Hall.

Mohrman, S. A., S. G. Cohen, et al. (1995): *Designing Team-based Organizations: new Forms for Knowledge Work*. San Francisco, Jossey-Bass.

Mowday, R. T., L. W. Porter, et al. (1979): "The Measurement of Organizational Commitment." *Journal of Vocational Behavior* 14: 224-247.

Mowday, R. T., L. W. Porter, et al. (1982): *Employee-organization Linkages the Psychology of Commitment, Absenteeism, and Turnover*. New York, Academic Press.

Mowday, R. T., R. M. Steers, et al. (1979): "The Measurement of Organizational Commitment." *Journal of Vocational Behavior* 14: 224-247.

Mulder, M. (1971): 'Maktutjevning gjennom medbestemmelse', in P. G. Herbst: *Demokratiseringsprosessen i arbeidslivet - sosio-tekniske studier*. Oslo, Universitetsforlaget.

Murray, A. I. (1989): "Top Management Group Heterogeneity and Firm Performance." *Strategic Management Journal* 10(Summer)

Nagi, S. Z. (1975): "Teamwork in Health Care in the U.S.: A Sociological Perspective." *The Milbank Memorial Fund Quarterly* 53(1): 75-91.

Nerland, S. M. (2005): *Hva er datainnsamlingsutfordringene ved intervju- og spørreskjemaundersøkelser om organisasjoner, og hvordan bør de håndteres?* . Oslo, Health Management Research Program Norway.

Nilsen, E. A. (2007): Oversettelsens mikroprosesser om å forstå møtet mellom en global idé og lokal praksis som dekontekstualisering, kontekstualisering og nettverksbygging. Tromsø, Universitetet i Tromsø.

NOU (1996-1997): Åpenhet og helhet. Om psykiske lidelser og tjenestetilbudene Sosial- og Helsedepartementet

NOU (1997): Pasienten først! Sosial- og Helsedepartementet, utredningsserie: 2.

Nygaard, K.-H. (2007): "Sykepleiernes lederskap i et førtiårs-perspektiv." *Sykepleielederen* 3: 9-50.

Opie, A. (1997): "Effective Team Work in Health Care: A Review of Issues Discussed in Recent Research Literature." *Health Care Analysis* 5(1): 62-73.

Ortmann, G. (1995): *Formen der Produktion Organisation und Rekursivität*. Wiesbaden, Westdeutscher Verlag.

Osterman, P. (2000): "Work Reorganization in an Era of Restructuring: Trends in Diffusion and Effects on Employee Welfare." *Industrial & Labor Relations Review* 53(2): 179-196.

Pfeffer, J. (1981): "Management as Symbolic Action: The Creation and Maintenance of Organizational Paradigms." *Journal of Organizational Behavior* 3(1): 1-52.

Pfeffer, J. (1983): "Organizational Demography." *Research in Organizational Behavior* 5: 299-357.

Pineda, R. C. and L. D. Lerner (2006): "Goal attainment, satisfaction and learning from teamwork." *Team Performance Management* 12(5): 182-191.

Pitcher, P. and A. D. Smith (2001): "Top Management Team Heterogeneity: Personality, Power and Proxies." *Organization Science* 12(1): 1-18.

Poon, J. M. L. (2002): "Effects of Performance appraisal Politics on Job Satisfaction and Turnover Intention." *Personnel Review* 33(3): 322-334.

Power, J. and D. Waddell (2004): "The Link between self-managed Work Teams and learning Organisations using Performance Indicators." *The Learning Organization: An International Journal* 11(3): 244-259.

Power, P., E. Iacoponi, et al. (2007): "The Lambeth Early Onset Crisis Assessment Team Study: general practitioner education and access to an early detection team in first-episode psychosis." *The British journal of psychiatry. Supplement*(SUPP/51): s133-s139.

Priem, R. L. (1990): "Top Management Team Group Factors, Consensus, and the Firm Performance." *Strategic Management Journal* 11

Proenca, E. J. (2007): "Team Dynamics and Team Empowerment in Health Care Organizations." *Health Care Management Review* 32(4): 9.

Ragin, C. C. and H. S. Becker (1992): *What is a Case? Exploring the Foundations of Social Inquiry*. Cambridge, Cambridge University Press.

Reichers, A. E. (1985): "A Review and Reconceptualization of Organizational Commitment." *Academy of Management Review* 10(3): 465-476.

Rihoux, B. and C. C. Ragin (2009): *Configurational comparative Methods. Qualitative comparative Analysis (QCA) and related Techniques*. Los Angeles, Sage.

Riketta, M. (2008): "The Causal Relation between Job Attitudes and Performance: A Meta-Analysis of Panel Studies." *Journal of Applied Psychology* 93(2): 9.

Ringdal, K. (2001): *Enhet og mangfold: samfunnsvitenskapelig forskning og kvantitativ metode*. Bergen, Fagbokforl.

Ringdal, K. (2007): *Enhet og mangfold: samfunnsvitenskapelig forskning og kvantitativ metode*. Bergen, Fagbokforl. 2nd edition.

Risum, E. (2008): Jeg er ny sykepleier, men er jeg akt utbrent? Aftenposten Oslo.

RiTø (1990): Prøvesykehusprosjektet sluttrapport: Regionsykehuset i Tromsø - Et sykehus i utvikling Report of Tromsø Regional hospital (RiTø)

Roness, P. G. (1995): "Avskjerming, utfylling, konkurrering og sameining. Noen tankar om strategiar for handtering av teorimangfaldet knytta til organisasjonsendringar." *Tidsskrift for samfunnsforskning* 36(2)

Rubin, I. M. and R. Beckhard (1972): "Factors Influencing the Effectiveness of Health Teams." *The Milbank Memorial Fund Quarterly* 50(3): 317-335.

Røvik, K. A. (1998): *Moderne organisasjoner: trender i organisasjonstenkningen ved tusenårsskiftet*. Bergen-Sandviken, Fagbokforlaget.

Røvik, K. A. (2000): 'Bill.Mrk. Translatørkompetanse søkes!' in H. Gammelsæter: *Innovasjonspolitikk, kunnskapsfly og regional utvikling*

Røvik, K. A. (2007): *Trender og translasjoner. Ideer som former det 21. århundrets organisasjon*. Oslo, Universitetsforlaget.

Salancik, G. R. and J. Pfeffer (1978): "A Social Information Processing Approach to Job Attitudes and Task Design." *Administrative Science Quarterly* 23(2): 224-253.

Schofield, R. F. and M. Amodeo (1999): "Interdisciplinary Teams in Health Care and Human Services Settings: Are they effective?" *Health and Social Work* 24(3): 210-214.

Schönfelder, W. (2008): Mellom linjene i psykisk helsevern og psykisk helsearbeid om samarbeid mellom organisasjoner og profesjoner. Tromsø, Institutt for sosiologi, Det samfunnsvitenskapelige fakultet.

Scott, R. W. (2001): *Institutions and Organizations*. Thousand Oaks, Calif., Sage Publications. 2nd edition.

Scott, R. W. (2003): *Organizations: Rational, Natural, and Open Systems*. Upper Saddle River, N.J., Prentice Hall: Pearson Education International. 5th edition.

Selznick, P. (1948): "Foundations of the Theory of Organization." *American Sociological Review* 13(1): 25-35.

Selznick, P. (1957, 1984): *Leadership in Administration: a Sociological Interpretation*. New York, Harper & Row.

Selznick, P. (1966): *TVA and the Grass Roots: a Study in the Sociology of Formal Organization*. New York, N.Y., Harper & Row.

Selznick, P. (1984): *Leadership in Administration a Sociological Interpretation*. Berkeley, Calif., University of California Press, Paperback Edition.

Shaw, M. E. (1981): *Group dynamics: the psychology of small group behavior*. New York, McGraw-Hill. 3rd edition.

Skog, O.-J. (2004): *Å forklare sosiale fenomener en regresjonsbasert tilnærming*. Oslo, Gyldendal akademisk. 2. [revidert og utvidet] utg.

Smith, K. G., K. A. Smith, et al. (1994): "Top Management Team Demography and Process: The Role of Social Integration and Communication." *Administrative Science Quarterly* 39(3): 412.

Spector, P. E. (1997): *Job satisfaction Application, Assessment, Cause and Consequences*. Thousand Oaks, Calif., Sage.

Spesialisthelsetjenesteloven (1999): Lov om spesialistehelsetjenesten m.m., Helse- og Omsorgsdepartementet. LOV-1999-07-02-61

Spreitzer, G. M., M. A. Kizilos, et al. (1997): "A Dimensional Analysis of the Relationship between Psychological Empowerment and Effectiveness, Satisfaction, and Strain." *Journal of management* 23(5): 26.

Steers, R. M. (1977): "Antecedents and Outcomes of Organizational Commitment." *Administrative Science Quarterly* 22(1): 46-56.

Stogdill, R. M. and B. M. Bass (1981): *Stogdill's handbook of leadership: a survey of theory and research*. New York, Free Press. Rev. and expanded.

Szulanski, G. (1996): "Exploring Internal Stickiness: Impediments to the Transfer of Best Practice Within the Firm." *Strategic management journal* 17: 18.

Szulanski, G. and R. J. Jensen (2006): "Presumptive Adaptation and the Effectiveness of Knowledge Transfer." *Strategic Management Journal* 27(10): 22.

Tacq, J. (1997): *Multivariate analysis techniques in social science research: from problem to analysis*. London, Sage Publications.

Temkin-Greener, H. (1983): "Interprofessional Perspectives on Teamwork in Health Care: A Case Study." *The Milbank Memorial Fund Quarterly* 61(4): 641-658.

Thorsrud, E. (1971): 'Strategi for forskning og sosial forandring i arbeidslivet', in P. G. Herbst: *Demokratiseringsprosessen i arbeidslivet - sosio-tekniske studier*. Oslo, Universitetsforlaget.

Tromsø, R. i. (1990): *Prøvesykehusprosjektet: sluttrapport: Regionsykehuset i Tromsø: et sykehus i utvikling*. Tromsø, Regionsykehuset i Tromsø.

Wagner, J. A. (1994): "Participation's Effects on Performance and Satisfaction: a Reconsideration of Research Evidence." *Academy of Management Review* 19(2): 312-330.

Weisman, C. S., D. L. Gordon, et al. (1993): "The Effects of Unit Self-Management on Hospital Nurses' Work Process, Work Satisfaction, and Retention." *Medical Care* 31(5): 381-393.

Wells, R., K. Jinnett, et al. (2006): "Team Leadership and Patient Outcomes in US Psychiatric Treatment Settings." *Social Science & Medicine* 62(8): 13.

Wharton, A. S., T. Rotolo, et al. (2000): "Social Context at Work: A Multilevel Analysis of Job Satisfaction." *Sociological Forum* 15(1): 26.

Wiersema, M. F. and K. A. Bantel (1992): "Top Management Team Demography and Corporate Strategic Change." *Academy of Management journal* 35(1): 91-121.

Wiersema, M. F. and K. A. Bantel (1993): "Top Management Team Turnover as an Adaptation Mechanism: The Role of the Environment." *Strategic management journal* 14(7): 485.

Williams, L. J. and J. T. Hazer (1986): "Antecdents and Concequences of Satisfaction and Commitment in Turnover Models: A Reanalysis of Using Latent Variable Structural Equation Methodsq." *Journal of Applied Psychology* 71(2): 219-231.

Yukl, G. A. (2002): *Leadership in organizations*. Upper Saddle River, N.J., Prentice Hall. 5th edition.

Zbaraki, M. J. (1998): "The Rhetoric and Reality of Total Quality Management." *Administrative Science Quarterly* 43(3): 602-636.

Aardal, B. (2003): *Velgere i villrede... : en analyse av stortingsvalget 2001*. Oslo, Damm.

11 Appendix

11.1 Pre-Interview Information Letter

REQUEST FOR PARTICIPATION IN THE RESEARCH PROJECT: "INTERDISCIPLINARY MANAGEMENT IN PSYCHIATRIC DEPARTMENTS"

While completing my degree in political science in which organization and management have a strong position in Norway, I worked as an assistant in a mental hospital department at UNN. This aroused my interest regarding how hospital departments are organized and managed. In January 2005 I started on a Ph.D. at the Department of Political Science at the University of Tromsø based on an initiative from the Department for Specialist Psychiatry at the University Hospital of North Norway in Tromsø (UNN). The project is funded by the North-Norwegian Research Center (NNPF) and the Department for Special Psychiatry, UNN.

The purpose of this research project is to arrive at new knowledge regarding how team management in professional organizations, i.e. hospitals, especially mental hospitals, function. Accordingly, I will study the condition under which team management function. How does team management impact on decision-making, organizational commitment, and job satisfaction? The main research question therefore concerns: how does team management affect the satisfaction and commitment of managers and employees in mental departments?

Primarily, I kindly ask for your permission to conduct interviews with managers and employees at Department of General Psychiatry in order to get background information regarding how management is organized and practiced there. Subsequently, I would be extremely thankful if all employees and managers at the General Psychiatry Department would fill out a questionnaire which will be handed out within the spring of 2007. The data will be treated confidentially and it will not be possible to trace the data back to private individuals. If you would like more information regarding the project, I would happy to meet with you in order to ensure that you get the essential information you request. For questions, please contact me by phone or e-mail.

Yours sincerely,
Kjersti Eeg Skudal
Ph.D. student

Department of Political Science, University of Tromsø
Phone: 776 44594
kskudal@sv.uit.no

11.2 Interview Guide

This interview guide is developed to ensure that the topics I study are covered in all interviews. In this manner I make sure that the interviews have the same focus. The questions are open and request detailed answers so that the informants themselves may shape the answers which will ensure that their viewpoints are represented

Information for informants prior to the interview:

- Explain to the informants that the interview has a thematic focus.

  (1) To seek information concerning the management model that is practiced in the departments/units

  (2) To find out how does the management model which is practiced in the departments/units impacts the interviewee (Key words: task achievement, problem solving, goal achievement, decision-making, commitment, planning, well-being, etc.)

- Why the interviews are conducted – purpose of research: to figure out whether organizing management in teams makes a difference to the managers and subordinates. I intend to study this by considering two different psychiatric hospitals that have different management models and by looking for effects of these two models.

- Role of informants and expectations: participation is voluntarily. You may at any time and without any explanation withdraw from the interviews, data are confidential and it is not possible to trace the data to an individual person.

- Advantages of interview participation for informants: an opportunity to state your viewpoints and reflections regarding management at your work place. I will make reports along the way; in this manner informants may get insights into some of the findings in the study.

- Mention the use of tape recorder during interviews. If informants do not agree verbally to the use of the tape recorder, it will not be used, and I will rather make written notes during the interview.

Questions for managers:

1) Can you describe how the management in your ward is organized and how it works?

2) Do you have information about the background for conducting management this way?

3) Have you worked in hospital wards in which other management types have been practiced? If yes, do you see any disadvantages in the former management model or the one practiced now?

4) Can you describe your role in the management teams?

5) How often do you meet with other members of you management team and management teams from other units?

6) Can you describe how you make managerial decisions in your department? (cooperation between professions)

7) Are you satisfied with your job? What factors do you see as important to your degree of satisfaction/dissatisfaction with your job? Would you for example suggest to your friends to apply for a job in this organization/department? Would you choose this job again? Does your job coincide with the expectations you had of it?

8) Do you think that the way the management is organized (interdisciplinary team management) has any significance for you?

9) If you were to change jobs, how would your prefer the management to be organized in your new job?

10) Do you feel accountable in regard to the managerial decisions made in your department?

11) Do you plan to go back to clinical work?

Concluding questions:

12) Are there any subjects, beyond the ones we have debated, that you feel I have missed, and that you would like to mention? What subjects are those?

13) Do you have any questions? If there are any matters that you want, say, to add or something that you come up with after this interview, please feel free to contact me one of the next few days.

Questions for employees/subordinates:

1) How would you describe the way the management at your department is organized? How does it function in practice?

2) What do you think about the management at your department? How does it impact you in terms of learning, satisfaction, etc.?

3) Would you recommend a friend to apply for a job at your organization/department?

4) Would you choose this job again? Does your job match the expectations you had for it?

5) Are you satisfied with your job? What factors impact on your degree of satisfaction/dissatisfaction with your job?

6) How does the management (team) impact on your working day in terms of decisions, quality on decisions, learning, loyalty, conflicts, etc.?

7) If you were going to change jobs, how would you prefer the management to be organized and functioning at your new job? What is important in regard to management?

Questions (only relevant for managers at NLSH)

1) Can you describe how the management in your ward is organized and how it works?

2) What is your role as manager?

3) How long has the management been conducted in this manner?

4) How often does the division manager meet with the department managers and the unit managers? How often do they meet with the staff?

5) How often do you have contact with them beyond regular meetings?

6) What are the issues at these meetings? (professional/administrative aspects)

7) How do you as a manager make decisions? For instance, do you discuss them with other colleagues or other managers?

8) Would you choose this job again or recommend a colleague to apply for a job in your organization or department?

9) Do you feel loyal to the organization in which you work? What about your profession?

10) With whom do you have most of your professional discussions? Other managers or employees at the ward?

11) Would you like to go back to clinical work?

12) If you could decide alone, how would you organize the management of your unit?

11.3 Questionnaire

Mental Hospitals with Different Organization and Management – Does it Make a Difference to You?

Would you like to participate in an exciting research project?
The last hospital reform was implemented on January 1, 2002. A result of this reform is more variation regarding how hospitals shape their organization and management. In this project we will therefore look more closely at two mental hospitals which have different forms of organization and management types. We would like to investigate whether the organization and management in mental hospital departments makes a difference in terms of the job satisfaction and commitment of managers and employees. You could help us by filling out the questionnaire attached in the link below. It takes about 15-20 minutes to complete the questionnaire. The project is financed by the North-Norwegian Research Center and the Department of Special Psychiatry at the University hospital of North Norway (UNN). The research is conducted by the Ph.D. student Kjersti Eeg Skudal at the Department of Political Science, University of Tromsø.

Guarantee for confidential treatment of data
All data will be treated in such a manner that it not will be possible to trace them back to the person submitting them. The data will also be transferred to an electronic data base by another unit at the University, which means that the undersigned will not be able trace data back to people submitting it. In this inquiry it is only the summarized data that are of interest. *We therefore guarantee that the people who respond to the questionnaire will not be recognized in the reports and articles that will be produced on the basis of these data.*

Orientation for filling out the questionnaire
Even though some questions may seem similar to other questions, <u>we kindly ask you to answer all questions</u>, because each question and answers could provide meaningful information for us.

Yours sincerely:	**Kjersti Eeg Skudal**	Ph.D. student
Supervisors:	**Rudi Kirkhaug**	Associate Professor, Dr. Philos, UiTø
	Mary Nivison	Chief Psychologist, Dr. Philos., UNN

OVERVIEW OF DEPARTMENTS AND UNITS AT NORDLAND HOSPITAL

1) The General District Clinics for adults:
The General Psychiatry Department:
North 1
South 1

The Department for Emergency Psychiatry:
North 4
South 4

The Department for Old-Age Psychiatry:
Old-Age Ward

The Department for Rehabilitation:
Unit for intoxication-related problems
Rehab 3 (Safety psychiatry)
Rehab 4

Salten Psychiatric Center:
General Psychiatry Department:
General Psychiatry Unit 1 (B)
General Psychiatry Unit 2 (D)

Department of Emergency Psychiatry:
Emergency A

Introductory questions
2) At which hospital are you employed?
1. UNN
2. Nordland Hospital, in one of the departments or units mentioned in the outline above
3. Nordland Hospital, but not in one of the departments or units mentioned in the outline above

Personal- and organizational data:
4) How old are you? _____ years old.

5) Sex:
1. Female
2. Male

6) What profession/occupation do you have? (Mark only one)
1. Nurse
2. Physician/psychiatrist
3. Psychologist
4. Licensed practical nurse
5. Milieu therapist/staff
6. Activator
7. Ergonomist
8. Physiotherapist
9. Social Educator

10. Social worker
11. Assistant
12. Other, please specify:

7) Do have any specialization within your profession?
1. Yes
2. No

8) Do you hold a managerial position?
1. Yes, I am the manager of a department/ward/unit
2. Yes, I am a member of a management team at one department/ward/unit
3. Yes, I am the head of a management team at one department/ward/unit
4. No, I am not a manager

9) If you answered yes to the previous question, regarding whether or not respondent has a managerial position, how many subordinates do you have?
1. 20-49
2. 50-99
3. 100-149
4. 150 or more

10) If you answered yes to question no. 8, how long have you been in your current position?
_____ years _____months

11) How long have you been working in this hospital in total?
_____ years _____months

12) Approximately, what has your employment fraction been in the last 5 months, in percentage? (For assistants: one day shift/evening shift per month is about 5%. One night shift per month is about 6.5%).
1. 10-19%
2. 20-39%
3. 40-59%
4. 60-79%
5.80-100%

13) What kind of shifts (night, day, or afternoon) have you been working the last 5 months?"
1. Usually, night shifts
2. Usually, day/afternoon shifts

14) Do you have a permanent position?
1. Yes
2. No

Decision system
15) Who usually manages decision-making processes on your workplace?
1. One manager
2. A manager consulting with staff or administrative personnel
3. A management team with a head manager

Mark the alternative that is most appropriate (1=never, 5=always)

16) How often do you as a manager/employee (regardless of position) participate in decision-making regarding the hiring of new personnel?
1. Never
2. Rarely
3. Occasionally
4. Often
5. Always

16a) How often do you as a manager/employee participate in decision-making regarding new methods of treatment?
1. Never
2. Rarely
3. Occasionally
4. Often
5. Always

16b) How often do you as a manager/employee participate in decision-making regarding change in operating goals?
1. Never
2. Rarely
3. Occasionally
4. Often
5. Always

1= to a very large extent, 5= to a very small extent

17) In general, are multiple professional groups involved in decision-making processes at your department?
1. To a very large extent
2.
3.
4.
5. To a very little extent

In the next questions we want to know what you think about the quality of decisions in regard to certain subjects

1= to a very large extent, 5= to a very small degree
19) How do you think the decisions made at your department matches the goals of the department?
1. To a very large extent
2.
3.
4.
5. To a very small extent

20) Are the decisions regarding treatment of patients at your department of high quality?
1. To a very large extent
2.
3.
4.

5. To a very small extent

20a) Are the decisions regarding economy at your department of high quality?
1. To a very large extent
2.
3.
4.
5. To a very small extent

In the next questions we want you to consider the statements and place yourself on the following scale
1=completely disagree - 5=completely agree
21) Even the simplest things I want to do have to be approved by a manager
1. Completely disagree
2.
3.
4.
5. Completely agree

21a) A person that want to make his/her own decisions will soon be prevented from so doing so
1. Completely disagree
2.
3.
4.
5. Completely agree

21b) Every decision I make has to be approved by my closest manager/superior
1. Completely disagree
2.
3.
4.
5. Completely agree

22) How often do you participate in regular meetings each week?
1. 0-2 times
2. 3-5 times
3. 6-8 times
4. 9-11 times
5. 12 times or more

23) How often during a month do you participate in meetings with only people of your particular professional background?
1. Never
2. 1-2 times
3. 3-4 times
4. 5-6 times
5. 7 times or more

1= to a very large extent, 5= to a very small extent
24) To what extent do you perceive that the meetings you attend are useful for your workday?
1. To a very large extent
2.
3.
4.

5. To a very small extent
25) How often do you discuss professional questions with employees with another professional background than yourself?
1. Never
2. Rarely
3. Occasionally
4. Often
5. Always
26) Have formal instructions been worked out regarding the power of your position?
1. Yes
2. No
3. I do not know

1= to a very large extent, 5= to a very small extent
27) Is it clear to you what you are going to do during a workday?
1. To a very large extent
2.
3.
4.
5. To a very small extent

1= very few, 5= many
28) Do you get guidance from managers in regard to the performance of daily work?
1. Very little
2.
3.
4.
5. Much

1= to a very large extent, 5= to a very small extent

29) Is it clear to you in which situations you may make decisions in your job?
1. To a very large extent
2.
3.
4.
5. To a very small extent

The term occupation/profession here refers to physician, psychologist, nurse, assistant, etc.
Consider the following statements and mark the alternative that you find the most appropriate

1=completely disagree - 5=completely agree
31) I feel loyal to my occupation/professional group
1. Completely disagree
2.
3.
4.
5. Completely agree
31a) I am proud to tell others that I belong to this occupation/professional group
1. Completely disagree

2.

3.

4.

5. Completely agree

31b) In general, I care about how my occupation/professional group is perceived by others

1. Completely disagree

2.

3.

4.

5. Completely agree

31c) I want to promote issues that concern my occupation/professional group

1. Completely disagree

2.

3.

4.

5. Completely agree

Consider the following statements and mark the alternative that you find the most appropriate
1=completely disagree - 5=completely agree

32) I want to spend the rest of my career in this organization

1. Completely disagree

2.

3.

4.

5. Completely agree

32a) I like to discuss my workplace/the organization in which I work with people outside the hospital (friends, acquaintances, etc.)

1. Completely disagree

2.

3.

4.

5. Completely agree

32b) I would like to work with promoting matters that concern the organization in which I work

1. Completely disagree

2.

3.

4.

5. Completely agree

32c) It is meaningful for me to work at this hospital

1. Completely disagree

2.

3.

4.

5. Completely agree

32d) I am proud to belong to this hospital

1. Completely disagree

2.

3.

4.
5. Completely agree
32e) I intend to continue in my present position
1. Completely disagree
2.
3.
4.
5. Completely agree

Consider the following statements and mark the alternative that you find the most appropriate
1=completely disagree - 5=completely agree

33) My organization arranges for me to continuously learn new things
1. Completely disagree
2.
3.
4.
5. Completely agree
33a) The tasks in my job are challenging
1. Completely disagree
2.
3.
4.
5. Completely agree
33b) I learn more about my profession by working here
1. Completely disagree
2.
3.
4.
5. Completely agree
33c) All in all, I feel that I develop professionally in my job
1. Completely disagree
2.
3.
4.
5. Completely agree
33d) I think the professional working environment in my work place is stimulating
1. Completely disagree
2.
3.
4.
5. Completely agree
33e) I develop the most professionally while at courses
1. Completely disagree
2.
3.
4.
5. Completely agree
33f) I develop the most professionally while cooperating with people from my own professional group

1. Completely disagree
2.
3.
4.
5. Completely agree
33g) I develop the most professionally while cooperating with people from other professional groups
1. Completely disagree
2.
3.
4.
5. Completely agree
33h) I develop the most professionally while working with patients
1. Completely disagree
2.
3.
4.
5. Completely agree

1= to a very large extent, 5= to a very small extent

34) Are you satisfied with the tasks you have now?
1. To a very large extent
2.
3.
4.
5. To a very small extent
34a) Do you get recognition for the work you do?
1. To a very large extent
2.
3.
4.
5. To a very small extent
34b) Is the social environment (in your work place) satisfactory?
1. To a very large extent
2.
3.
4.
5. To a very small extent
34c) Do you think you have too little responsibility in proportion to your competence?
1. To a very large extent
2.
3.
4.
5. To a very small extent
34d) All in all, are you satisfied with you job?
1. To a very large extent
2.
3.
4.

5. To a very small extent

35) Do you know if the unit in which you work sets operating goals?
1. Yes
2. No
3. I do not know

1= to a very large extent, 5= to a very small extent

36) Do you know the content of the operating goals in your unit?
1. To a very large extent
2.
3.
4.
5. To a very little extent
36a) Have the operating goals of the unit been attained?
1. To a very large extent
2.
3.
4.
5. To a very small extent

Consider the following statements and mark the alternative that you find the most appropriate
1=completely disagree - 5=completely agree

37) Employees in my unit defend each other against criticism from outsiders
1. Completely disagree
2.
3.
4.
5. Completely agree
37a) Employees in my unit get along well
1. Completely disagree
2.
3.
4.
5. Completely agree
37b) Employees in my unit stand up for each other
1. Completely disagree
2.
3.
4.
5. Completely agree
37c) It is encouraging to work together with my co-workers
1. Completely disagree
2.
3.
4.
5. Completely agree

Mark the alternative that you find the most appropriate

38) How do you perceive that the management in your unit functions?
1. One manager at each level with an associated staff
2. One manager at each level in line
3. An interdisciplinary management team with a team head/department manager or unit manager
4. An interdisciplinary management team at each level
5) Dual management
6) I do not know

1= to a very large extent, 5= to a very small extent

39) In your opinion does the organization of your ward make interdisciplinary cooperation possible?
1. To a very large extent
2.
3.
4.
5. To a very little extent
39a) To what extent do you think that your nearest superior/manager/management team really works in/as a team?
1. To a very large extent
2.
3.
4.
5. To a very small extent

1= to a very large extent, 5= to a very small extent

40) Do you think that your nearest superior/manager/management team is beneficial to your job satisfaction?
1. To a very large extent
2.
3.
4.
5. To a very small extent
40a) Is your closest superior/manager/management team beneficial to your professional development?
1. To a very large extent
2.
3.
4.
5. To a very small extent
40b) When you pose questions to your closest superior/manager/management team, do you generally get useful answers?
1. To a very large extent
2.
3.
4.

5. To a very small extent

40c) Does your closest superior/manager/management team have sufficient knowledge regarding your work day?

1. To a very large extent

2.

3.

4.

5. To a very small extent

40d) To what extent are you satisfied with your closest superior/manager/management team's way of managing the unit?

1. To a very large extent

2.

3.

4.

5. To a very small extent

11.4 Distribution of Items: Mean, Standard Deviation, and Skewness

Table 11.4.1: Distribution of the Items in the Team Management Case[183]

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q2 Hospital	1,00	,000	.	.	.	.
Q5 Sex	1,36	,497	,404	,204	-1,404	,406
Q6 Occupation	4,99	4,163	,663	,204	-1,142	,406
Q7 Recoded Specialized Education	1,63	,485	-,538	,205	-1,736	,407
Q8 Managerial position	3,40	1,048	-1,536	,204	1,278	,406
Q9 Number of subordinates	1,62	1,277	1,109	,388	-,159	,759
Q12 Position in percent	4,78	,708	-3,944	,204	18,128	,406
Q13 Type of duties	1,74	,569	-2,079	,204	3,218	,406
Q14 Recoded Permanent Position	1,83	,377	-1,774	,204	1,163	,406
Q15 Manager of decision-making processes	2,64	,647	-1,736	,204	2,343	,406
Q16 Participation:hiring of new personnel	2,28	1,508	,622	,204	-1,177	,406
Q16a Participation: new methods of treatment	2,84	1,302	-,126	,204	-,983	,406
Q16b Participation: change of operating goals	2,83	1,459	,077	,204	-1,155	,406
Q17 Involvement of professional groups in decision-making processes	3,40	1,325	-,593	,204	-,524	,406
Q19 Correspondence between decisions and goals	3,52	,875	-,574	,204	1,212	,406
Q20 Quality of decisions: treatment of patients	3,65	,894	-1,138	,204	2,781	,406
Q20a Quality of decisions: economy	3,35	1,036	-,835	,204	,935	,406
Q21 Approavel from manager	1,99	1,086	1,102	,204	,813	,406
Q21a Prevented from reaching own decisions	2,31	1,128	,750	,204	,010	,406
Q21b Approavel of every decision from nearest manager	2,05	1,142	1,010	,204	,277	,406
Q22 Participation on regular meetings	2,12	1,192	,842	,204	-,345	,406
Q23 Participation on meetings: only same profession	1,76	1,082	1,732	,204	2,545	,406
Q24 Usefulness of meetings	3,64	1,110	-1,054	,204	,906	,406
Q25 Professional discussion with different trained personnel	3,91	,824	-1,396	,204	4,049	,406
Q26 Recoded: Formal job description	1,93	,892	,140	,204	-1,738	,406
Q27 Clarity of daily tasks	4,14	,858	-1,103	,204	1,605	,406
Q28 Guidance by superior in daily work	2,56	1,130	,029	,204	-,854	,406

---

[183] The number of N on each question is 141, except for on question 9:"*How many subordinates do you have?*" which is a question only managers could answer, this question therefore only has a total number of N on 37.

Q29 Clarity when to reach decisions in work	3,99	1,021	-1,401	,204	2,381	,406
Q31 Loyalty towards occupation	4,09	1,068	-1,434	,204	2,370	,406
Q31a Proud of belonging to professional group	4,13	1,116	-1,458	,204	2,106	,406
Q31b Caring about other's perception of profession	4,02	1,149	-1,502	,204	2,196	,406
Q31c Promotion of occupational concerns	3,85	1,102	-1,001	,204	1,150	,406
Q32 Rest of career in organization	2,74	1,302	,146	,204	-,878	,406
Q32a Discussing organization with people outside	2,80	1,084	,131	,204	-,573	,406
Q32b Promoting matters concerning organization	3,50	1,100	-,385	,204	-,449	,406
Q32c Meaningfulness of working in hospital	4,12	,952	-1,352	,204	2,190	,406
Q32d Proud of belonging to hospital	3,83	1,062	-,851	,204	,326	,406
Q32e Continuation in present position	3,62	1,334	-,655	,204	-,672	,406
Q33 Adjustment to learn new things	3,72	1,136	-,816	,204	,054	,406
Q33a Challenging tasks	4,03	1,069	-1,126	,204	,712	,406
Q33b New knowledge through work	3,96	1,085	-1,052	,204	,579	,406
Q33c Perceived professional development	3,96	1,048	-,896	,204	,249	,406
Q33d Professional environment encouraging	3,65	1,116	-,763	,204	,143	,406
Q33e Professional development: course	2,97	1,000	-,160	,204	-,341	,406
Q33f Professional development: cooperation same professional group	3,05	1,065	-,316	,204	-,423	,406
Q33g Professional development:: cooperation other professional group	3,50	,931	-,448	,204	,106	,406
Q33h Professional development: :working with patients	3,91	,948	-1,243	,204	3,091	,406
Q34 Satisfaction with tasks	3,59	1,008	-,756	,204	,392	,406
Q34a Recognition of work	3,61	1,132	-,741	,204	-,046	,406
Q34b Satisfaction with social environment	3,87	,987	-,764	,204	,211	,406
Recoded Accordance between responsibility and competence	3,49	1,119	,027	,204	-1,357	,406
Q34d Satisfaction with work	3,79	,962	-,878	,204	,663	,406
Q35 Knowledge about operating goals	1,49	,923	,806	,204	-,779	,406
Q36 Knowledge about content of operating goals	3,35	1,410	-,482	,204	-1,072	,406
Q36a Attainment of operating goals	3,01	1,105	-,658	,204	,085	,406
Q37 Defence from criticism from outsiders	3,63	,750	-,510	,204	,586	,406
Q37a Getting along of personnel	3,89	,892	-,891	,204	1,130	,406
Q37b Standing up for each other	3,82	,831	-,643	,204	,861	,406
Q37c Encouraging working with colleagues	3,97	,956	-1,387	,204	3,372	,406
Recoded: Functioning of management	2,66	,642	-1,687	,204	1,515	,406
Q39a Superior's degree of actual teamwork	3,54	1,018	-,623	,204	,162	,406
Q40 Superior's ensuring of your job satisfaction	3,53	1,053	-,458	,204	-,264	,406

Q40a Superior's ensuring of your professional development	3,43	1,090	-,377	,204	-,528	,406
Q40b Usefulness of manager's answers	3,73	1,068	-,833	,204	,145	,406
Q40c Managers knowledge about your work day	3,50	1,138	-,419	,204	-,661	,406
Q40d Satisfaction with manager/management team	3,56	1,098	-,665	,204	-,061	,406

Table 11.4.2: Distribution of Items in the Hierarchical Case[184]

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q2 Hospital	2,00	,000	.	.	.	.
Q5 Sex	1,32	,485	,571	,212	-1,154	,420
Q6 Occupation	3,70	3,720	1,321	,212	,308	,420
Q7 Recoded Specialized education	1,75	0,432	-1,192	,212	-,588	,422
Q8 Managerial position	3,26	1,256	-1,285	,212	,037	,420
Q9 Number of subordinates	1,25	,950	1,623	,414	3,159	,809
Q12 Position in percent	4,75	,788	-4,120	,212	19,803	,420
Q13 Type of duties	1,70	,641	-1,955	,212	2,334	,420
Q14 Recoded Permanent position	1,92	,267	-3,228	,212	8,551	,420
Q15 Manager of decision-making processes	1,93	,557	-,029	,212	,242	,420
Q16 Participation:hiring of new personnel	2,20	1,454	,700	,212	-,806	,420
Q16a Participation: new methods of treatment	3,18	1,333	-,526	,212	-,457	,420
Q16b Participation: change of operating goals	3,15	1,389	-,278	,212	-,863	,420
Q17 Involvement of professional groups in decision-making processes	3,41	1,233	-,757	,212	,154	,420
Q19 Correspondence between decisions and goals	3,73	,689	,117	,212	-,449	,420
Q20 Quality of decisions: treatment of patients	3,76	,724	-,332	,212	,074	,420
Q20a Quality of decisions: economy	3,48	,939	-1,047	,212	2,770	,420
Q21 Approavel from manager	1,81	,937	1,018	,212	,391	,420
Q21a Prevented from reaching own decisions	2,19	,993	,564	,212	-,265	,420
Q21b Approavel of every decision from nearest manager	1,92	1,042	1,024	,212	,385	,420
Q22 Participation on regular meetings	2,08	,903	,468	,212	-,268	,420
Q23 Participation on meetings: only same profession	1,60	,909	1,749	,212	3,190	,420
Q24 Usefulness of meetings	3,76	,867	-,887	,212	1,237	,420
Q25 Professional discussion with different trained personnel	3,98	,547	-,587	,212	2,476	,420
Q26 Recoded: Formal job description	2,44	,737	-,907	,212	-,584	,422
Q27 Clarity of daily tasks	4,25	,788	-,768	,212	-,097	,420
Q28 Guidance by superior in daily work	2,73	1,036	,010	,212	-,683	,420

[184] N is reported to be 131 on all items, except for on age on which the number of N is reported to 126.

Q29 Clarity when to reach decisions in work	4,18	,799	-,696	,212	-,075	,420
Q31 Loyalty towards occupation	3,98	1,167	-1,342	,212	1,607	,420
Q31a Proud of belonging to professional group	4,05	1,087	-1,441	,212	2,411	,420
Q31b Caring about other's perception of profession	3,92	1,117	-1,213	,212	1,281	,420
Q31c Promotion of occupational concerns	3,52	1,273	-,918	,212	,435	,420
Q32 Rest of career in organization	3,12	1,253	-,187	,212	-,812	,420
Q32a Discussing organization with people outside	2,48	1,126	,114	,212	-,524	,420
Q32b Promoting matters concerning organization	3,48	1,055	-,707	,212	,777	,420
Q32c Meaningfulness of working in hospital	4,08	,942	-1,221	,212	2,299	,420
Q32d Proud of belonging to hospital	3,76	1,014	-,902	,212	1,637	,420
Q32e Continuation in present position	3,72	1,211	-,733	,212	-,173	,420
Q33 Adjustment to learn new things	3,95	,947	-1,051	,212	2,040	,420
Q33a Challenging tasks	4,06	1,043	-1,279	,212	1,772	,420
Q33b New knowledge through work	4,09	,972	-1,308	,212	2,393	,420
Q33c Perceived professional development	3,98	1,034	-1,354	,212	2,608	,420
Q33d Professional environment encouraging	3,95	,960	-,915	,212	1,408	,420
Q33e Professional development: course	2,95	1,029	-,337	,212	,257	,420
Q33f Professional development: cooperation same professional group	2,89	1,198	-,255	,212	-,459	,420
Q33g Professional development: cooperation other professional group	3,55	,896	-,932	,212	2,469	,420
Q33h Professional development: working with patients	3,79	,950	-1,485	,212	4,217	,420
Q34 Satisfaction with tasks	3,69	,887	-,550	,212	,585	,420
Q34a Recognition of work	3,40	1,155	-,599	,212	-,374	,420
Q34b Satisfaction with social environment	3,92	1,008	-1,065	,212	1,398	,420
Q34c Accordance between responsibility and competence	3,47	1,15	-,126	,212	-,862	,422
Q34d Satisfaction with work	3,901	1,0066	-1,177	,212	2,142	,420
Q35 Recoded: Knowledge about operating goals	2,45	,655	-,790	,217	-,434	,431
Q36 Knowledge about content of operating goals	2,80	1,647	-,075	,212	-1,338	,420
Q36a Attainment of operating goals	2,65	1,381	-,431	,212	-,715	,420
Q37 Defence from criticism from outsiders	3,49	,980	-,666	,212	,661	,420
Q37a Getting along of personnel	3,94	,752	-,119	,212	-,683	,420
Q37b Standing up for each other	3,91	,827	-,490	,212	,246	,420
Q37c Encouraging working with colleagues	4,08	,829	-,556	,212	-,348	,420
Q38 Recoded: Functioning of management	1,65	,831	,747	,215	-1,141	,427
Q39 Room for interdisciplinary cooperation	3,79	1,043	-,650	,212	-,070	,420
Q39a Superior's degree of actual teamwork	3,42	1,271	-,766	,212	,404	,420
Q40 Superior's ensuring of your job satisfaction	3,61	1,092	-,576	,212	-,280	,420
Q40a Superior's ensuring of your professional development	3,63	,947	-,507	,212	,049	,420
Q40b Usefulness of manager's answers	3,99	,907	-,738	,212	,459	,420
Q40c Managers knowledge about your work day	3,61	1,035	-,556	,212	,409	,420
Q40d Satisfaction with manager/management team	3,54	1,097	-,854	,212	,690	,420
Valid N (listwise)						

11.5 Acceptance of Handling of Personal Data

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES

Kjersti Eeg Skudal
Institutt for statsvitenskap
Universitetet i Tromsø
Breivika
9037 TROMSØ

Vår dato: 15.07.2008   Vår ref :19259 / 2 / LT   Deres dato: Deres ref:

KVITTERING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 15.05.2008. Meldingen gjelder prosjektet:

19259	*Tverrfaglig ledelse i profesjonelle organisasjoner*
Behandlingsansvarlig	*Universitetet i Tromsø, ved institusjonens øverste leder*
Daglig ansvarlig	*Kjersti Eeg Skudal*

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.
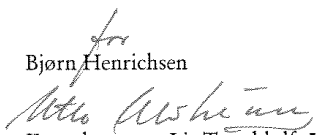
Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, eventuelle kommentarer samt personopplysningsloven/- helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/forsk_stud/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://www.nsd.uib.no/personvern/prosjektoversikt.jsp.

Personvernombudet vil ved prosjektets avslutning, 31.12.2008, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Bjørn Henrichsen   Lis Tenold

Kontaktperson:Lis Tenold tlf: 55 58 33 77
Vedlegg: Prosjektvurdering

Personvernombudet for forskning

Personvernombudet finner opplegget for gjennomføringen av prosjektet tilfredsstillende og finner at behandlingen kan hjemles i personopplysningsloven § 8 første ledd (samtykke).

Prosjektet omfatter en intervjuundersøkelse og en spørreskjemaundersøkelse.

Til spørreskjemaundersøkelsen gis det skriftlig informasjon om prosjektet og samtykke for deltakelse er ensbetydende med returnering av spørreskjema. Personvernombudet finner i utgangspunkt skrivet tilfredsstillende, men forutsetter at det tilføyes en setning om at innsamlede opplysninger vil bli anonymisert senest ved prosjektslutt 31.12.2008. Vi ber om kopi av revidert skriv ettersendes.

Spørreskjema besvares gjennom Questback. Spørreskjemaet utformes i Questbackformat og sendes ut som link i e-post til respondentene. Spørreskjema returneres over Internett på e-post. .

Questback AS er databehandler for prosjektet. Ombudet forutsetter at det foreligger avtale mellom Questback og prosjektleder for den behandling av data som finner sted, jf. personopplysningsloven § 15.

For intervjuundersøkelsen gis muntlig informasjon og samtykke for deltakelse er ensbetydende med aktiv deltakelse. Det forutsettes at den muntlige informasjon inneholder følgende:

- Navn på daglig ansvarlig
- Formålet med prosjektet
- At det er frivillig å delta og at man kan trekke seg når som helst uten å måtte begrunne det.
- At opplysningene oppbevares konfidensielt, og at forsker har taushetsplikt.
- At ingen vil bli gjenkjent i publikasjoner.
- At prosjektet er planlagt avsluttet i desember 2008.
- At opplysningene blir anonymisert ved prosjektslutt og lydbåndopptakene vil bli slettet..
- At prosjektet er tilrådd av Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste.

Det anbefales at informasjonen også gis skriftlig.

Datamaterialet anonymiseres ved prosjektslutt ved at verken direkte eller indirekte personidentifiserbare opplysninger fremgår, samt eventuell koblingsnøkkel (hos Qustback) og spørreskjema slettes. Prosjektslutt er satt til 31.12.2008. Lydbåndopptak slettes.

233

11.6 Correlation Matrixes for the new variables in the Team Management Case

Table 11.6.1: Correlation among New Variables in the Team Management Case

		Q4 Age	Q5 Sex	Q14 Recoded	Q15	PROFESS. LOYALTY	PARTICIP. DECISION MAKING	QUALITY OF DECISIONS	GOALS	SUPPORT FROM MANAGER	JOB SATISFACTION	ORG. COMMITMENT
Q4 Age	Pearson R	1										
	Sig.2-tailed											
Q5 Sex	Pearson R	-,300(**)	1									
	Sig.2-tailed	,001										
Q14 Recoded: Permanent Position	Pearson R	,377(**)	-,060	1								
	Sig.2-tailed	,000	,513									
Q15 Manager of decision-making processes	Pearson R	,283(**)	-,157	,238(**)	1							
	Sig.2-tailed	,002	,086	,009								
PROFESSIONAL LOYALTY	Pearson R	,223(*)	-,106	,134	,136	1						
	Sig.2-tailed	,015	,250	,145	,138							
PARTICIPATION IN DECISION MAKING	Pearson R	,175	,045	,315(**)	,133	,293(**)	1					
	Sig.2-tailed	,055	,629	,000	,147	,001						
QUALITY OF DECISIONS	Pearson R	-,034	-,058	,108	,060	,413(**)	,529(**)	1				
	Sig.2-tailed	,714	,528	,238	,519	,000	,000					
GOALS	Pearson R	,303(**)	-,195(*)	,327(**)	,120	,259(**)	,546(**)	,397(**)	1			
	Sig.2-tailed	,001	,032	,000	,192	,004	,000	,000				
SUPPORT FROM MANAGER	Pearson R	,148	-,087	,195(*)	,170	,620(**)	,376(**)	,554(**)	,387(**)	1		
	Sig.2-tailed	,106	,344	,032	,064	,000	,000	,000	,000			
JOB SATISFACTION	Pearson R	,256(**)	-,113	,221(*)	,235(**)	,737(**)	,324(**)	,437(**)	,332(**)	,737(**)	1	
	Sig.2-tailed	,005	,220	,015	,010	,000	,000	,000	,000	,000		
ORGANIZATIONAL COMMITMENT	Pearson R	,238(**)	-,137	,105	,203(*)	,444(**)	,384(**)	,445(**)	,304(**)	,580(**)	,646(**)	1
	Sig.2-tailed	,009	,135	,254	,026	,000	,000	,000	,001	,000	,000	
DECENTRALIZATION OF AUTHORITY	Pearson R	-,040	,084	-,170	-,136	-,328(**)	-,394(**)	-,371(**)	-,260(**)	-,278(**)	-,307(**)	-,200(*)
	Sig.2-tailed	,662	,359	,063	,140	,000	,000	,000	,004	,002	,001	,028

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
a Listwise N=120

Table 11.6.2: Correlation among New Variables in the hierarchical Management Case

		Q4 Age	Q5 Sex	Q14 Recoded Permanent Position	Q15 Manager decision-making processes	JOB SATISFACTION	GOALS	PROF. LOYALTY	SUPPORT FROM MANAGER	PARTICIPATION IN DECISION-MAKING	QUALITY OF DECISIONS	DECENTRALIZATION OF AUTHORITY
Q4 Age	Pearson R	1										
	Sig.2-tailed											
Q5 Sex	Pearson R	-,094	1									
	Sig.2-tailed	,306										
Q14 Recoded: Permanent Position	Pearson R	,167	,038	1								
	Sig.2-tailed	,068	,678									
Q15 Manager of decision-making processes	Pearson R	,104	-,094	,144	1							
	Sig.2-tailed	,259	,308	,117								
JOB SATISFACTION	Pearson R	,011	,032	-,031	,026	1						
	Sig.2-tailed	,907	,727	,733	,781							
GOALS	Pearson R	,174	,073	,021	,196(*)	,130	1					
	Sig.2-tailed	,058	,427	,820	,032	,158						
PROFESSIONAL LOYALTY	Pearson R	,029	,031	,101	,028	,440(**)	,127	1				
	Sig.2-tailed	,755	,738	,274	,761	,000	,168					
SUPPORT FROM MANAGER	Pearson R	,015	-,089	,010	,077	,619(**)	,133	,430(**)	1			
	Sig.2-tailed	,870	,336	,918	,402	,000	,147	,000				
PARTICIPATION IN DECISION-MAKING	Pearson R	,075	,123	,153	,152	,415(**)	,454(**)	,354(**)	,436(**)	1		
	Sig.2-tailed	,417	,181	,095	,099	,000	,000	,000	,000			
QUALITY OF DECISIONS	Pearson R	-,044	-,061	,101	,153	,438(**)	,370(**)	,135	,546(**)	,423(**)	1	
	Sig.2-tailed	,637	,505	,272	,096	,000	,000	,142	,000	,000		
DECENTRALIZATION OF AUTHORITY	Pearson R	,036	,098	-,075	-,153	-,175	-,009	-,263(**)	-,343(**)	-,316(**)	,284(**)	1
	Sig.2-tailed	,696	,288	,418	,095	,055	,921	,004	,000	,000	,002	
ORGANIZATIONAL COMMITMENT	Pearson R	,055	,013	-,094	-,062	,579(**)	,055	,338(**)	,489(**)	,312(**)	,324(**)	-,268(**)
	Sig.2-tailed	,548	,891	,305	,504	,000	,547	,000	,000	,001	,000	,003

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

a Listwise N=120

11.7 Additional Information: Non-Response Rate according to Subgroups on Background Variables

I have explained that the response rate was rather low in both the cases in the study, at UNN 29.5% and 26.5 % at NLSH, respectively. [185] The prime concern with these rather low response rates lies in whether the high level of non-response is systematic or random, because it could result in systematic imbalance in the samples (Ringdal 2007:198). It would for example be problematic if the non-response rate for managers in *one* case was higher than in the other case, since it, first of all, would indicate that managers in one of the cases were misrepresented compared with its population. Secondly, it could tangle the basis for comparison between the cases. This study rests on a most similar comparative design, which makes it particularly important that the samples do not differ substantially on the independent variables in the regression models, except for on team management. I shall therefore discuss the non-response rate in relation to certain background variables. The size of the gross populations in this study is, which I accounted for on page 97, unknown, and this makes the calculation of the response rate challenging. On the basis of information from managers at the hospitals and answers on the Questback inquiry concerning participation in the survey, I calculated the gross populations to be 477 at UNN, and 493 at NLSH, respectively. In the process of calculating the gross population information regarding the distribution on the background variables was lost, and it is thus difficult to discuss non-response rate on these variables with the gross population as a starting-point. When I now comment on the response rate in proportion to specific background variables, which will be included as control variables in the regression models, I will do it on the basis of the respondents to whom the questionnaire was send. I will comment on the variables sex, type of position (manager/subordinate), and permanent position.

The questionnaire was send to 625 at UNN and 694 at NLSH. The distribution on the sex variable in the population to who the questionnaire was send was 343 females and 281 males at UNN. 88 females and 52 males answered the questionnaire, and this gives a response rate at 25.6 % for females and 18.5 % for males.[186] At NLSH the questionnaire was send to a larger group of women than at UNN as it was send to 452 females, while it was send to 242 males. 43 males and 87 females answered the questionnaire. In percent, this means that 19.2

---

[185] Additional information requested by the commission.
[186] One respondent has not answered the question regarding sex.

236

% of the females and 17.7 % of the males answered the questionnaire at NLSH. As a starting point this indicates that more women than men work in the two psychiatric hospitals under study, and furthermore that more females work at NLSH than at UNN. The non-response rate for females is thus higher at NLSH (80.8 %) than at UNN (74.4 %). But this difference in non-response rate among females in the two cases does not constitute a problem in the sense that females at NLSH are misrepresented in the sample.

In regard to type of position (manager/subordinate) the questionnaire was send to 42 managers and 582 subordinates at UNN. 37 managers and 101 subordinates answered the questionnaire which gives a response rate of 88.1 % for managers and 17.3 % for subordinates, while 3 respondents did not answer this specific question. At NLSH, the survey was send to 34 managers and 660 subordinates, of whom 32 managers and 95 subordinates answered, while 4 respondents did not answer this question. This gives a response rate for managers on 94.1 % and 14.3 % for subordinates. In both samples the non-response is higher among subordinates than among managers. The group of subordinates is considerably larger than the manager group in both hospitals, first of all because there are more subordinate positions in the hospital than managerial positions. Furthermore, there is reason to assume that the e-mail lists in the subordinate group contain more errors than in the manager group, since the subordinate group contains more respondents working on time-limited contracts and not in full-time positions, and even some of them are so-called "on-call-assistants" in the departments which means that they work when the hospital department has an urgent need for them. Besides, respondents with these additional attributes are not in the target group of the survey as they have less insight in the practice and functioning of management in the departments, and the high non-response rate in this sub-group was expected prior to the emission of the questionnaire. According to interview information there is a higher turn-over in the subordinate group than in the manager group. It is in other words circumstances that make it harder to keep these e-mail lists updated. In addition, I had conducted more interviews with managers than with subordinates. It was also the managers I directly called to inform about the submission of the questionnaire, and in this manner the managers were to a greater degree "motivated" to answer the questionnaire than subordinates. All in all, this explains the high non-response rate among subordinates compared to the low non-response rate among managers in the two samples. The imbalance in the non-responses on this variable between the two hospitals in the study is however insignificant in terms of affecting the results of the regression analyses.

It is harder to account for the non-response rate on the categories of type of position (permanent/not permanent) because I lack information concerning the distribution on this variable in the two hospitals. In principle all the authorized positions in the departments at UNN and NLSH are permanent and this number is 528 at UNN and 490 at NLSH. But whether the employees who hold these positions have temporary contracts or permanent positions varies because it is, according to interview information, hard to recruit employees with sufficient professional education to psychiatric departments. The concern regarding whether the overweight of respondents with a permanent position in the data material is due to distortion in non-responses of employees who do not have a permanent positions remains unquantifiable. Problems with recruiting skilled employees result in that the authorized positions are assigned as temporary (contracts) to employees who lack the necessary formal skills to hold the position on a permanent basis. However, such positions usually become permanent when the employees have acquired the sufficient formal professional education. Furthermore, this made it difficult for the managers to quantify the number of subordinates who had a permanent position in their department. It is however worth mentioning that many of the employees who are on temporary contracts in the psychiatric hospital departments are often unskilled assistants who have employment fractions of less than 50 % each month. Thus, they are not in the target group of this study since they have scarce knowledge about the functioning of the department and the conduct of the management in the department. In this manner one may argue that employees on temporary contracts in the two hospitals are systematically left out of the data sets if they in addition to being temporarily employed are attributed to characteristics such as having minor employment fractions each month or being unskilled. Nevertheless, at UNN, 117 of the respondents report that their positions are permanent, whereas 24 report that their positions are not permanent. At NLSH, 121 of the respondents report that their positions are permanent, whereas 10 report that their positions are not permanent. The differences in terms of distribution on this variable *between* the data samples of the two cases are insignificant. The lack of knowledge concerning the original distribution on permanent position is however worth keeping in mind during analysis, particularly if this variable proves to play a key role in regard to account for the variation on either of the subjective outcome variables, job satisfaction and organizational commitment. To conclude, this discussion of non-response rate according to specific sub-groups on the background-variables indicates that there is no reason to expect that the non-response rate is unequally distributed. As tables 11.4.1 and 11.4.2 on page 228-231 in the Appendix illustrate,

the distribution on these variables in the data material is normally distributed. But if it turns out that the variable permanent position plays a vital role in accounting for variation on the subjective outcome variables, the lack of knowledge regarding specific sub-groups' non-response rate on permanent position may be problematic.

11.7.1   Correlation matrix of Merged Data Set with Team Management

The correlation matrix below contains the central independent variable team management in addition to all the other independent variables under the analysis in the dissertation, as well as the subjective outcome variables. In general, the correlation matrix illustrate that the correlations in which 'team management' occurs are not too high. Pearson R for 'team management' and 'manager of decision-making processes' is nonetheless 0.521 which indicates that these variables correlate strongly. 'Team management' is a variable that is constructed on the basis of the formal management structure that the hospitals conduct, which I throughout the thesis have argued infuses how the two hospital organizations give meaning to and practice management. 'Manager of decisions-making processes' is a variable constructed on the basis of how management is practiced informally. When these two variables correlate strongly it proves that formal and informal management structure is connected empirically. The strength of the correlation is however not so strong that it is problematic in the further regression analyses.

Table 11.7.1: Correlation among New Variables in the Merged Data Set – with the TEAM MANAGEMENT VARIABLE

		Q4 Age	Q5 Sex	Recoded Q14 PERMANENT POSITION	Q15 Manager of decision-making processes	PROFESSIONAL LOYALTY	PARTICIPATION IN DECISION-MAKING	LEGITIMACY OF DECISIONS	GOALS	SUPPORT FROM MANAGER	JOB SATISFACTION	ORGANIZATIONAL COMMITMENT	DECENTRALIZATION OF AUTHORITY
Q4 Age	Pearson R	1	-,204(**)	,300(**)	,070	,115	,131(*)	,016	,195(**)	,100	,113	,145(*)	-,013
	Sig.		,001	,000	,283	,075	,042	,810	,002	,122	,079	,025	,842
Q5 Sex	Pearson R	-,204(**)	1	-,028	-,078	-,071	,079	-,064	-,040	-,103	-,043	-,066	,093
	Sig.	,001		,661	,231	,274	,222	,327	,534	,112	,504	,311	,149
PERMANENT POSITION	Pearson R	,300(**)	-,028	1	,101	,096	,251(**)	,113	,155(*)	,129(*)	,114	,025	-,138(*)
	Sig.	,000	,661		,118	,139	,000	,080	,016	,046	,079	,695	,032
Manager – decision-making processes	Pearson R	,070	-,078	,101	1	,021	,096	,048	,213(**)	,083	,225(**)	,069	-,095
	Sig.	,283	,231	,118		,747	,140	,461	,001	,200	,000	,288	,143
PROFESSIONAL LOYALTY	Pearson R	,115	-,071	,096	,021	1	,314(**)	,353(**)	,122	,569(**)	,628(**)	,443(**)	-,333(**)
	Sig.	,075	,274	,139	,747		,000	,000	,060	,000	,000	,000	,000
PARTICIPATION IN DECISION-MAKING	Pearson R	,131(*)	,079	,251(**)	,096	,314(**)	1	,482(**)	,479(**)	,403(**)	,340(**)	,350(**)	-,359(**)
	Sig.	,042	,222	,000	,140	,000		,000	,000	,000	,000	,000	,000
QUALITY OF DECISIONS	Pearson R	,016	-,064	,113	,048	,353(**)	,482(**)	1	,361(**)	,567(**)	,414(**)	,389(**)	-,336(**)
	Sig.	,810	,327	,080	,461	,000	,000		,000	,000	,000	,000	,000
GOALS	Pearson R	,195(**)	-,040	,155(*)	,213(**)	,122	,479(**)	,361(**)	1	,252(**)	,253(**)	,166(**)	-,118
	Sig.	,002	,534	,016	,001	,060	,000	,000		,000	,000	,010	,067
SUPPORT FROM MANAGER	Pearson R	,100	-,103	,129(*)	,083	,569(**)	,403(**)	,567(**)	,252(**)	1	,669(**)	,552(**)	-,315(**)
	Sig.	,122	,112	,046	,200	,000	,000	,000	,000		,000	,000	,000
JOB SATISFACTION	Pearson R	,113	-,043	,114	,225(**)	,628(**)	,340(**)	,414(**)	,253(**)	,669(**)	1	,600(**)	-,242(**)
	Sig.	,079	,504	,079	,000	,000	,000	,000	,000	,000		,000	,000
ORGANIZATIONAL COMMITMENT	Pearson R	,145(*)	-,066	,025	,069	,443(**)	,350(**)	,389(**)	,166(**)	,552(**)	,600(**)	1	-,232(**)
	Sig.	,025	,311	,695	,288	,000	,000	,000	,010	,000	,000		,000
DECENTRALIZATION OF AUTHORITY	Pearson R	-,013	,093	-,138(*)	-,095	-,333(**)	-,359(**)	-,336(**)	-,118	-,315(**)	-,242(**)	-,232(**)	1
	Sig.	,842	,149	,032	,143	,000	,000	,000	,067	,000	,000	,000	
TEAM MANAGEMENT	Pearson R	-,185(**)	,061	-,134(*)	,521(**)	-,039	-,047	-,069	,157(*)	-,065	,176(**)	-,007	,052
	Sig.	,004	,344	,038	,000	,546	,464	,284	,015	,313	,006	,918	,421

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Listwise N=240

11.7.2 Team Management regressed on Subjective Outcome Variables

Prior to the multiple regression analysis of all the independent variables on the subjective outcome variables, it is necessary to run bivariate regression of the newly constructed variable 'team management' and the outcome variables. The bivariate regression is conducted to provide information regarding the relationship between the main variable under analysis in the study – 'team management' – and the dependent variables. Although bivariate regression may indicate a strong relationship between X and Y, this relationship may change totally in the multiple regression analysis. The results of the bivariate regression analyses are illustrated in the two next tables.

Table 2: Job Satisfaction regressed on Team Management

	B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	3,484	,065		53,825	,000
TEAM MANAGEMENT	*,229*	,090	,153	2,545	,011

a Dependent Variable: JOB SATISFACTION (34, 34a, 34b, 34d)
R Square: 0.023
Missing cases are excluded listwise, N=272

In the table above it is clear that 'team management' affects 'job satisfaction' strongly, as the regression coefficient is 0.229. This regression coefficient is significant at the 0.05-level. 'Team management' does however account for only 2.3 % of the variation on 'job satisfaction. In addition, I have regressed 'job satisfaction' on 'team management' exclusively for managers, and then exclusively for subordinates. For managers, there is a strong, although statistically speaking not significant, impact of 'team management' on 'job satisfaction' as the regression coefficient is 0.22 and the level of significance is reported to 0.11. But since this is close to 0.10-level I regard it as important in affecting 'job satisfaction' of managers. In regard to subordinates' 'job satisfaction', the regression coefficient is 0.24.[187] This is not in accordance with my proposition, since I assumed that managers' satisfaction would be more strongly impacted of 'team management' since they are directly involved in the conduct of team management.

---

[187] Regression coefficient is significant at the 0.05-level.

Table 3: Organizational Commitment regressed on Team Management

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	**Std. Error**	**Beta**		
(Constant)	3,632	,075		48,472	,000
TEAM MANAGEMENT	-,069	,104	-,040	-,662	,508

a Dependent Variable: ORGANIZATIONAL COMMITMENT (32, 32b, 32c, 32d, 32e)
R Square: 0.002
Missing cases are excluded listwise, N=272

In the table above it is illustrated that 'team management' does not significantly affect organizational commitment. 'Team management' does only account for 0.2 % of the variation on organizational commitment. Also here I have regressed 'organizational commitment' on 'team management' exclusively for managers and subordinates. 'Team management' does not significantly impact managers' commitment or subordinates' commitment.