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# **Autonomous groups between power and empowerment**

Irene Sinteur

VRIJE UNIVERSITEIT

AUTONOMOUS GROUPS BETWEEN POWER AND  
EMPOWERMENT

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor  
aan de Vrije Universiteit Amsterdam,  
op gezag van de rector magnificus  
prof.dr. V. Subramaniam,  
in het openbaar te verdedigen  
ten overstaan van de promotiecommissie  
van de Faculteit der Sociale wetenschappen  
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door

Irene Sinteur

geboren te Nairobi, Kenia

promotor:           prof.dr. P.A.A. van den Besselaar

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## Preface

When working with SOLV, one of the cases in this thesis, I felt that I was experiencing something extraordinary. The energy that surfaced in this company fully made up of self-steering teams, was contagious. But how did it work? I decided to use my Sociology master thesis to find the answer to this question.

That it had something to do with power was self-evident. So I started my thesis work with getting acquainted with the power literature. It was Teresa Mom who got me in touch with the work of Mauk Mulder. And this is where I really became inspired. His work helped me understanding the complex balance between steering and self-steering. After I had finished my master thesis in 2002, I was invited to give a seminar for sociology students on self-steering. Mauk Mulder, already in his eighties, was invited too. In my contacts with Mauk, he permanently encouraged me to continue my research. When a recruiter reflected that this was the subject I really spoke passionately about, I realized that it was my path to take. Several captivating conversations with Mauk revealed the questions I still wanted to be answered – in a PhD project.

In order to find a PhD supervisor I contacted Peter van den Besselaar who had already been my master thesis supervisor in 2002. He immediately agreed upon a follow-up on our cooperation, as he was also very much interested in issues of steering and self-steering, which do play an important role in the current debates about the way universities should be organized. The PhD project started late 2014, and I thank Peter van den Besselaar and Mauk Mulder for their inspiration and strong commitment. Unfortunately Mauk's health forced him to stop his involvement in April 2015. I am very grateful for the many conversations we had on the subject of power in which we found a mutual interest. Peter gave me a lot of autonomy in following my path. At the same time he guided me through the various research methods I was going to deploy and through the international literature. He also sharpened the argument of the various chapters, through his very detailed comments on the various versions of the chapters.

Now, after finishing this PhD project, my daily work is focused on empowering organization members and the instrument I developed provides me with a very useful insight in the role of power behind empowerment. Using what I have learned in practice confirms that for empowerment programs to succeed, one has to understand power. With this gained knowledge comes the insight that power is complex and therefore this PhD project, ending with this thesis, is as much a beginning of further research to which I remain committed.

As organic as this research project started and continued in the first years, as strenuous it became in the last year. And I would not have been able to fulfill this journey if I would not have had the support of my family and friends. I thank them all.

Several other people I owe great gratitude: all employees from NEXT, PART, SOLV and REFR for opening up to me about their company and themselves, and especially Stef Lagomatis, Jan Dirk Hogendoorn, Patrick de Jong, Marnix Dalebout and Marcel van den Hoff for providing me with detailed information and access to company members. Pieter Priems for genuinely listening and for thinking along with me how to continue the process. Liesbeth van der Feltz-Minkema and Antoinette Gelissen who were such a great support in providing a continuous and warm welcome in their families for my son, and for myself. And last, but not least, my son who, through his optimism and joy of life, every day keeps me on track of what really matters in life.



## Introduction

Within organizational theory and practice there is increasing interest in organizational concepts such as self-steering, self-leadership and empowerment (Laloux, 2014; Kolind and Bøtter, 2012; Kuiken 2010; Seibert et al., 2011; Maynard et al., 2012; Stewart et al., 2011), as alternatives for traditional management principles as hierarchical control, procedures and rules, which are believed to have reached their limits (Randolph, 1995). This has several aspects.

First of all, hierarchical control undermines motivation, commitment, initiative and responsibility of employees, and increases passivity and dependency (van Berkel, 1999). For example, it leads to employees doing what they were told by their manager, instead of more autonomously looking for the things to be done using their craftsmanship (Peters and Pouw, 2005). In addition, employees who are expected to follow rules and procedures, have the tendency to evade them or hide behind them. When making their own decisions, they are more involved with the consequences. In order to feel committed and motivated, employees need freedom (Mintzberg, 1991). Empowering organizational design concepts such as self-steering activate workers to become more proactive and effective within the context of the company's mission, goals and objectives (Cooney, 2004).

Secondly, self-steering provides organizations with an answer to ongoing changes in their external environment. This environment is increasingly becoming more complex and uncertain. Through minimal division of labor and maximal autonomy, organizations become more flexible and able to adjust to changing environments (Mintzberg, 1991; van Eijbergen, 1999; van Amelsvoort and Scholtes, 2003). However, in the internal organization the commitment of employees, especially highly educated professionals, is a relatively uncontrollable factor (Depickere, 1999). At the same time, commitment of these employees is increasingly important because of the advancing importance of knowledge, and with it, skilled labor, in our economy. Many organizations compete on the human production factor. They are challenged to bring out the best in their employees and attract and retain qualitative good staff. Adopting empowering design concepts such as self-steering improves job satisfaction and with it necessary commitment of professionals.

Thirdly, self-steering matches recent developments in contemporary society (Bakker and Hardjono, 2013). Individuals have gained more autonomy within their environment (individualization). And through increased education levels, they have become better equipped to make their own choices. As a result, organizational relations have become less hierarchical and more equal and manners have become more informal. Authority and respect are no longer

provided automatically based on someone's formal position, but need to be earned. And employees will search for information to ascertain the validity of considerations. Another secular trend is computerization (Ibid.). The emergence of interactivity through new media, information and communication makes the world smaller. Networks of individuals and organizations arise and communication patterns become increasingly horizontal. Possessing knowledge and information is no longer crucial, but applying this information is, in order to generate new knowledge and information. This also leads to a shift in the division of labor; the number of functions decreases, the demarcation of functions fades and tasks are more often performed within teams (Bakker and Hardjono, 2013).

These developments urge organizations to experiment with organizational forms that allow members more autonomy and responsibility. In the popular management literature well-being, happiness, and less rules and control are related to motivation and productivity (Semler, 1993, 1999, 2003; Laloux, 2014; Kolind and Bøtter, 2012; Kuiken 2010). Indeed, more and more organizations adopt empowering management concepts such as self-steering. However, consensus about a shared definition is lacking. In 2001 approximately 70% of organizations were found to have adopted some form of empowerment (Maynard et al., 2012). Benders et al. (2010) tried to determine how many organizations in The Netherlands and Flanders work with self-steering teams. Because of limited data and lack of consensus about the definition and operationalization in different surveys, they were not able to mention a percentage. They conclude that a large minority of organizations in The Netherlands and Flanders make use of self-steering teams and that the use of self-steering teams remains stable. Dutch data of later periods is lacking, but for Belgium and Flanders Vereyken et al. (2017) showed a decline between 2007 and 2010 and stabilization afterwards.

Also in the scholarly literature, self-steering has been addressed, but at the same time also there the concept is not clearly defined. This is partly because it relates to different theoretical traditions. It has clear links to the early (already in the 1960s) research on autonomous work groups (Hackman and Oldham, 1975; Cooney, 2004), to discussions about self-leadership and self-management (Manz and Sims, 1991; Manz, 1992), and to research on empowerment (Thomas and Velthouse, 1990; Spreitzer 1995, 1996). In the more recent period, most attention has probably been on empowerment, which is generally understood as psychological empowerment: a psychological state of 'feeling empowered' (Spreitzer, 1995), and the task of management is to create the conditions for those feelings. Extensive literature provides evidence that psychological empowerment is positively associated with desired behavior and attitudes, and with performance.

In the literature, quite some antecedents of psychological empowerment are mentioned, many referring to managerial behavior. Others refer to organizational change leading to a distribution of authority and responsibility from upper management to employees (Maynard et al., 2012): structural empowerment (Seibert et al., 2004). Distribution of authority and responsibility enlarges the factual control individuals and groups have on their work, psychological empowerment gives them the perception that they are in control of their work. However, different authors understand the concept of structural empowerment in diverging ways, and managerial behavior and structural conditions are not distinguished. Therefore the first question we address in this thesis is (1) *what are the different aspects of structural empowerment?*

Much of the literature on empowerment neglects the issue of distribution of authority and responsibility, and focuses only on management strategies to stimulate psychological empowerment such as supportive leadership, participation and coaching. Nevertheless, as we will see in the cases studied here, the stories organizations tell do strongly suggest that autonomy is large and decision making is decentralized, in order to gain the advantages of psychological empowerment – but without necessarily wanting to share power. Organizations want to profile themselves as modern, they are inclined to suggest that they adopt modern management techniques and also explicitly communicate this to the world. Research has shown that informationally linking an organization with modern management techniques indeed creates this imago, even if in reality organizations have not implemented these techniques (Staw and Epstein, 2000).

But the question is then whether one can have the one (psychological empowerment) without the other (structural empowerment)? Can strong and pervasive stories create an illusion of structural empowerment that may effectively create the psychological state without the structural properties of empowerment? Or, as has been argued, is failing to meet created expectations of structural empowerment and power distribution an important reason for empowerment programs to fail (Hardy and Leiba-O'Sullivan, 1998; Harley, 1999). This is the second question we address in this thesis: (2) *How do organization members perceive the power distances in the organization, under different conditions of structural empowerment and politics of pervasive empowerment stories? Do members believe the story also when the structural conditions contradict it?* In this way we contribute to fill the gap in knowledge on the relation between power and empowerment. Despite that 'power' is in the word empowerment, little attention has been paid to power in the extensive research on empowerment (Hardy and Leiba-O'Sullivan, 1998; Boje and Rosile, 2001).

After having clarified the concept of structural empowerment, and investigated the role of politics and structural empowerment in relation to power distance

perception, we address the third question of this thesis: (3) *What is the effect of structural empowerment, and the perception of the power distance, on psychological empowerment? And how do pervasive empowerment stories told by organizations influence this relation?* We do not only take into account structural power sources, but also power use related to individual differences. Although structural empowerment leads to decentralized power, the delegation of authority and responsibility is often constrained through the use of power by individuals.

If decentralization of decision-making, authority and responsibility is possible, the remaining question is whether it is sustainable. As is well known, organizations in crisis situations tend to (re)centralize power (Mulder, 1984; Boin and 't Hart, 2003; Drabek and McEntire, 2003), so one would expect that self-steering and empowerment are typically organizational forms for periods of prosperity, and that they are abandoned in periods of crisis. However, when power has been distributed, this may be less easy – and probably also not needed. This leads to the last question in this dissertation: (4) *How do self-steering organizations behave under crisis?*

In order to answer these questions, we study three companies which are knowledge intensive organizations. In order to be able to compare the three cases we selected companies in the same economic sector: providing business services in the fields of IT and finance. The organizations are characterized by highly educated and skilled members, who work in economically and technologically highly dynamic constellations, and need to be able to respond to those fast changing environments. The high level of education of the organization members provides them with the competences needed for decision-making at the individual and group level, and enables them to take on authority and responsibility. For answering questions 1, 2, and 3, we compare the organizations. In order to investigate the behavior under conditions of crisis, we conducted a longitudinal case study of one of the cases.

The rest of this thesis is organized in the following way: Chapter 1 discusses the relevant theories on organizational design, empowerment, and power. This theory is used to define a research model. We also formulate the detailed research questions, based on the four general questions formulated above. Chapter 2 describes the data and methods. We use interviews, the web (LinkedIn), observations, documents and a questionnaire consisting of standardized instruments. Chapter 3 is a comparative case study of three organizations with different levels of structural empowerment and with politics based on strong and pervasive empowerment stories. The comparison shows (i) what the characteristics of structural empowerment are, and (ii) what the perception of power differences is in relation to structural empowerment and to organizational politics. In chapter 4, we study the effect of structural empowerment and

empowerment stories on psychological empowerment, taking into account personal characteristics of managers and employees. Using structural equation modeling for two of the three cases, we analyze how different levels of delegation of authority and responsibility (structural empowerment) lead to different levels of psychological empowerment. We also show what power dimensions and personal characteristics play a role. In chapter 5, we study the sustainability of structural empowerment in a longitudinal case study. The establishment of an organization fully made up of self-steering teams, its dissolution, and what this meant for its members and their careers over a ten years' period, show the meaning and impact of self-steering in the longer term. In chapter 6, we summarize the findings, the theoretical and practical implications, and draw conclusions.

Chapter 3, 4 and 5 are written in a journal article form, which implies that there is an unavoidable overlap in the theoretical and methodological sections, which also draw strongly on chapters 1 and 2. The same holds for the concluding chapter, which also shows some overlap with the conclusions in chapters 3, 4, and 5.

## Chapter 1: Theoretical framework

Recently the concept of autonomous self-steering teams has regained popularity in management discourse and in the public debate. Much attention is paid to the ‘capital strength of happiness’, or how less rules and less control create more productivity and happiness.<sup>1</sup> The Semler & Company (Semco) case is often mentioned, wherein which Ricardo Semler introduced self-steering. He claimed that he wanted to make his employees happy and through this he made a fortune. He wrote several international bestsellers (Semler, 1993, 1999, 2003), had a visiting professorship at Harvard Business School, was named ‘Latin American businessman of the year’ twice and ‘global leader of tomorrow’ by Time magazine. Frederic Laloux with his bestseller *Reinventing Organizations* (2014), in which he propagates empowered self-managing organizations, Lars Kolind and Jacob Bøtter with their book *Unboss* (2012), Ben Kuiken (2010) with *The last manager*, all show the continuing popularity of new organization paradigms based on self-steering. Self-steering is extensively discussed in the popular management literature, but also a topic in the scholarly literature.

### 1.1 Literature overview

#### *Empowering design concepts*

In the scholarly literature, the discussion about autonomous groups and self-steering is not new. Already in the 1960s experiments were done with autonomous groups, e.g. in the Swedish automobile industry. These experiments should be interpreted in the context of changing industrial relations, where demands for industrial democracy became an issue, combined with a tight labor market. The autonomy in these experiments was limited to the operational independence of the work group: internal self-regulation of the group and the autonomous self-control of work tasks. Autonomous work groups were not involved in organizational decision making, management and control (Cooney, 2004).

Since then a lot of research has been done on how employees experience their work and how this can be influenced by work design. At the group level, the sociotechnical systems approach that originated from the Tavistock Institute of Human Relations, focused on the introduction and impact of autonomous work groups. At the level of the individual, the focus was on the redesign of jobs in order to improve employee motivation (for a review see Vough and Parker, 2008). Researchers tried to find out how to design enriched jobs in order to influence psychological states of employees which in turn would lead to improved

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<sup>1</sup> The *capital strength of happiness* is the title of a Dutch documentary about Semler broadcasted by VPRO Tegenlicht.

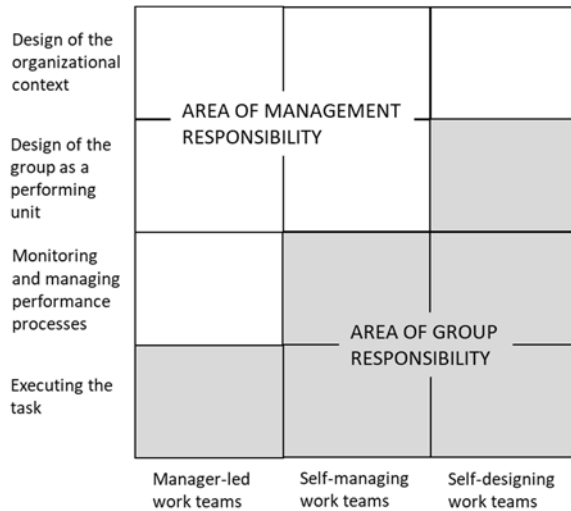
motivation and productivity; and autonomy proved to be one of the critical job characteristics (Hackman and Oldham, 1975).

In the 1980s, the focus of research was on how people manage and are leading themselves: employee self-management and self-leadership. Both are grounded in self-regulation approaches in which individuals and groups perceive and compare the current situation with standards that are set, and then change their behavior in order to reduce any discrepancies from the standards (Stewart et al., 2011; Neck and Houghton, 2006). Manz (1992) distinguished self-leadership from self-management by defining self-leadership as a self-influence process based on a set of strategies that address *what* is to be done (e.g., standards and objectives) and *why* (e.g., strategic analysis) as well as *how* it is to be done. Self-management on the other hand is restricted to *how* work is performed to help meet standards and objectives that are typically externally set. At the group level the distinction between self-managing and self-leading teams concerns the amount of authority over work processes and regulation of the team's behavior (Stewart et al., 2011). In that perspective, self-management and self-leadership can be seen as part of a continuum of work team empowerment (Manz, 1992; Stewart et al., 2011) (Figure 1.1). A similar distinction was already introduced by Hackman in 1987, when discussing authority and responsibility (Figure 1.2).

Figure 1.1: Continuum of work team empowerment (Manz, 1992; Stewart et al., 2011)

EXTERNALLY MANAGED TEAMS	PARTICIPATIVE TEAMS (E.G. QUALITY CIRCLES)	SELF MANAGED TEAMS	SELF LEADING TEAMS
Not influence over What, How, and Why of work Dependent only on extrinsic incentives		Influence over How of work  Mainly dependent on extrinsic incentives	Influence over What, How and Why of work  Dependent on intrinsic and extrinsic incentives

Figure 1.2: Authority of three illustrative types of work groups (Hackman, 1987)



Self-management focusses on effective behavior of workers through extrinsic motivation, e.g. using external rewards (Manz, 1992; Neck and Houghton, 2006; Stewart et al., 2011). Because self-management tends to address what should be done, rather than what an individual is intrinsically motivated to do, the application of self-managing teams was challenged as being more an illusion of employee self-influence than a reality. As alternative, the concept of self-leadership was introduced, which relies on extrinsic as well as intrinsic motivation (Manz and Sims, 1991; Manz, 1992; Neck and Houghton, 2006; Stewart et al., 2011). Intrinsic motivation is achieved through strategies aimed at *effective behavior and action*, e.g. by allowing workers to set their own performance goals or observing and gathering information about specific behaviors that they have targeted for change. Intrinsic motivation is also created in strategies aimed at *effective thinking and feeling*, e.g. allowing workers to redesign where and how they do their work, or purposively focusing thinking on the naturally (intrinsic) rewarding features of the work (Manz and Sims, 1991; Neck and Houghton, 2006). Although it is said that self-management and self-leadership are meant to ‘help ourselves to become more effective’, it is clear that external leaders play a crucial role in increasing extrinsic motivation as well as in developing self-leadership strategies, where the main aim of the manager is to improve the performance of staff (Manz and Sims, 1991; Cooney, 2004). This is confirmed by Cohen et al. (1997) who found that leadership behavior is a crucial factor: satisfaction and performance increase when external leaders encourage self-management, whether employees are in self-managing or in traditional teams.



In the 1990s, the discussion on autonomous groups became associated with the empowerment movement. Not industrial democracy, but merely management strategies were at stake, as empowerment in this approach is not a distribution of power, but a managerial strategy to stimulate workers to become more proactive and effective within the context of the company's mission, goals and objectives (Cooney, 2004; Bartunek and Spreitzer, 2006). Extensive literature on the outcomes of *psychological* empowerment provide evidence that it is positively associated with e.g. job satisfaction (Spreitzer et al. 1997; Kirkman and Rosen, 1999; Koberg et al., 1999; Liden et al., 2000; Carless, 2004; Harris et al., 2009; Seibert et al., 2011; Maynard et al., 2012), organizational commitment (Kirkman and Rosen, 1999; Kraimer et al., 1999; Liden et al., 2000; Seibert et al., 2011; Maynard et al., 2012), team proactivity (Kirkman and Rosen, 1999), and level of customer service (Kirkman and Rosen, 1999; Wallace et al., 2011), innovative behaviors (Spreitzer, 1995; Pieterse et al., 2010) and negatively associated with strain (Spreitzer et al., 1997; Seibert et al., 2011; Maynard et al., 2012) and turnover (Avey et al., 2008; Harris et al., 2009; Seibert et al., 2011; Maynard et al., 2012). Psychological empowerment is often also positively associated with performance (Spreitzer et al., 1997; Koberg et al., 1999; Liden et al., 2000; Chen et al., 2007; Seibert et al., 2011; Maynard et al., 2012).

Outcomes of self-leadership are similar to those of empowerment as Stewart et al. (2011) show in their multi-level review. At the individual level, studies consistently show that increased self-leadership corresponds with improved work performance and with better affective responses as job satisfaction, career success, reduced stress and anxiety, reduced absenteeism (Stewart et al., 2011) and increased self-efficacy<sup>2</sup> (Prussia et al., 1998; Stewart et al., 2011). Findings at the group level are not as consistent. Relationships between group level self-leadership and both affective and performance outcomes appear to be moderated by contextual factors, such as group member composition and, particularly important, external leadership (Stewart et al., 2011).

Literature on work design shows that characteristics such as autonomy, task variety, task identity, task significance and task feedback are found to be positively related to job satisfaction (Loher et al., 1985; Fried and Ferris, 1987; Humphrey et al., 2007), internal work motivation and job performance, and negatively related to absenteeism (Fried and Ferris, 1987; Humphrey et al., 2007) and turnover (McEvoy and Cascio, 1985). However, Wegman et al. (2018) showed in their meta-analysis (covering 1975 to 2011) that workers over time

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<sup>2</sup> Self-efficacy is the competence dimension of psychological empowerment, which we will see later.

perceive greater levels of skill variety and autonomy (not of task significance, task identity and feedback), but they do not find their jobs more satisfying.

Besides behavioral and motivational effects such as job satisfaction and commitment, there is another reason for organizations to aim for self-steering. According to Staw and Epstein (2000), organizations structure themselves not so much to execute their tasks more efficiently, but to gain legitimacy and cultural support. Because popular management techniques are generally as much a reflection of cultural values as a technological solution, their adoption mainly reflects an alignment of corporate and societal values. Staw and Epstein (2000) found that organizational performance is significantly influenced by a firm's external reputation, and organizations gain external reputation when they are informationally linked with popular management techniques. Such organizations will be perceived as more innovative and as having higher-quality management, irrespective of the firm's economic performance. By merely adopting self-steering as an ideology, without actually implementing it, an organization can already improve its external reputation, which is important to attract new organization members as well as customers. So, in many cases organizations advertise that they aim for empowerment, but without actually sharing power with organization members in practice.

On the other hand, research also suggests that not meeting created expectations of sharing power is an important reason for empowerment programs to fail (Hardy and Leiba-O'Sullivan, 1998; Harley, 1999). If that is true, one needs to distinguish between management strategies that aim at empowerment as a label, from empowerment based on a changed distribution of power. The difference between these two forms of empowerment require a deeper discussion of empowerment as well as of power.

### ***Empowerment***

Despite empowerment has been heavily discussed, its meaning remains unclear, as it is used in the context of management strategies, in the context of psychological states, and in the context of organizational design and distribution of power and decision-making. We discuss the various concepts that can be found in the literature to end up with a more systematic approach.

The term power has different meanings: authority, capacity, but also energy. Different meanings of power give rise to different concepts of empowerment. Originally the focus was on authority, on sharing power (Kanter, 1993). When it was adopted by management literature, it was adapted to management discourse and the focus was on the latter meaning: empowering as giving energy in order to get work done and increase productivity, whereas neglecting the other (Thomas

and Velthouse, 1990; Bartunek and Spreitzer, 2006). *Psychological empowerment* dominates in the empowerment debate. Thomas and Velthouse (1990) were the first to give a clear definition of psychological empowerment, which was followed by many researchers (for example Spreitzer 1995, 1996; Gagné et al., 1997; Kirkman and Rosen, 1999; Koberg et al., 1999; Kraimer et al., 1999; Liden et al., 2000; Siegall and Gardner, 2000; Gómez and Rosen, 2001; Chen and Klimoski, 2003; Carless, 2004; Laschinger et al., 2004; Hon and Rensvold, 2006; Wang and Lee, 2009; Chen et al., 2007; Avey et al. 2008; Harris et al., 2009; Pieterse et al., 2010; Wallace et al., 2011; Seibert et al., 2011; Maynard et al., 2012). In their definition, psychological empowerment is an intrinsic motivation reflecting a sense of control in relation to one's work and an active orientation to one's work role. It is manifested in four cognitions (Thomas and Velthouse, 1990):

- Meaning: the alignment between the demands of the work role, and one's own beliefs, values and standards.
- Competence: belief in one's capability to successfully perform work activities.
- Self-determination: a sense of choice concerning the initiation or regulation of one's actions.
- Impact: the belief that one can influence strategic, administrative, or operational activities and outcomes in one's work unit.

Psychological empowerment deals with the perception people have of themselves in relation to their work environment (Spreitzer, 1995). It refers to cognitions and to personality traits which affect motivation that drives individual behavior. It is not about transferring power to employees, but about employees' cognitive states of feeling empowered. The key is here that individuals or groups need to believe that they are able and allowed to perform their work autonomously, and as such, psychological empowerment can be defined as condition for motivational processes (Conger and Kanungo, 1988). In short, psychological empowered individuals or groups are motivated to perform because they believe they have the autonomy and capability to do meaningful work that can impact their organization (Chen et al., 2007). The focus of psychological empowerment research is on the set of conditions that make employees or groups believe that they have control over their work (Maynard et al., 2012).

Overall consensus exists on the definition of psychological empowerment that originates from Thomas and Velthouse (1990), and on the operationalization of psychological empowerment using the 12 item scale of Spreitzer (1995) (Gagné et al., 1997; Kirkman and Rosen, 1999; Koberg et al., 1999; Kraimer et al., 1999; Liden et al., 2000; Siegall and Gardner, 2000; Gómez and Rosen, 2001; Chen and Klimoski, 2003; Carless, 2004; Laschinger et al., 2004; Hon and Rensvold, 2006; Wang and Lee, 2009; Chen et al., 2007; Avey et al., 2008; Spreitzer, 2008; Harris

et al., 2009; Pieterse et al., 2010; Wallace et al., 2011), although differences can be found too. For example, Parker and Price (1994) define (psychological) empowerment as the belief that one has control over decision making and operationalize it as the say managers and workers have over specific topics (e.g. planning, hiring and pay). Menon (2001) defines (psychological) empowerment is a cognitive state characterized by perceptions of control, competence, and goal internalization. Kirkman and Rosen (1999) define psychological empowerment at the group level, using the four dimensions of Thomas and Velthouse (1990), but define *impact* differently, as “the extent to which outcomes of the group’s work have significant consequences for other organization members or external clients”. Defined in this way, it is not a psychological state, but is very similar to the concept of group task significance, one of the organizational design concepts (see below).

Next to psychological empowerment, several authors have discussed the concept of *structural empowerment*, which refers to the other two meanings of power: *authority* and *capacity* (Thomas and Velthouse, 1990). In their meta-analysis, Seibert and colleagues position structural empowerment among the individual and contextual antecedents of psychological empowerment, and show the diverging perspectives in the literature (Seibert et al., 2011). For example, what counts as contextual antecedents of empowerment for the one author (Spreitzer, 1996; Kirkman and Rosen, 1999), counts for others as indicators of empowerment (Harley, 1999; Seibert et al., 2011). Again others do not (yet) distinguish structural empowerment from psychological empowerment (Conger and Kanungo, 1988). Finally, those that see structural empowerment as antecedent of psychological empowerment have diverging views of what counts as structural empowerment. Seibert et al. (2011) define structural empowerment as “delegation of authority and responsibility”, but at the same time include high-performance managerial practices, decentralization, as well as participative decision making. Here, structural characteristics and managerial practices are mixed, which is also done by Spreitzer when introducing a new concept ‘social-structural empowerment’ (Spreitzer, 2008), and by Wallace et al. (2011), who conclude that structural empowerment can be measured in terms of empowering leadership climate. Kirkman and Rosen (1999), who consider job and organizational characteristics as antecedents for psychological empowerment, count “enhancing team members’ senses of personal control” as an element of structural empowerment. Laschinger et al. (2004), focus on “employees’ perception of empowering conditions in the workplace”, conditions being opportunity, information, support, resources, and both “formal power” (arising from flexibility, recognition, discretion, and visibility within the job) and “informal power” (arising from peer networking, sponsor support, political alliances, and

subordinate relationships). However, also these perceptions are often influenced by managerial behavior stimulating employees and groups to believe that they have control over their work (Maynard et al., 2012).

This overview shows that managerial behavior as an antecedent for psychological empowerment is not clearly distinguished in the literature from structural antecedents. Due to the ambiguity in the definition of empowerment, its use is often symbolic, satisfying the needs and expectations of those who use the concept. For employees it promises a re-balance of power, for management it promises a workforce committed to the profitability and success of the organization (Lincoln et al., 2002). As most scholarly empowerment literature takes the managerial perspective, it diverts attention away from material and social conditions to individual psychological states. This positions empowerment within managerial discretion and may even reify managerial power (O'Connor, 2001).

In this study, the distinction between a real (objective) and a perceived (subjective) transfer of power from managers to organization members is a leading perspective, and we focus on material and social conditions that enable the real transfer of authority. We find the definition of Seibert et al. (2004) helpful as it restricts structural empowerment to what we see as its core: the delegation of authority and responsibility to employees, more specifically to the lowest level in an organization where a competent decision can be made. This leaves out all those aspects that are related to managerial strategies and behavior, which are often aimed at influencing perceptions, and thus supporting psychological empowerment, without actually sharing power, and therefore not supporting structural empowerment. Delegation of authority and responsibility needs also to be distinguished from participation practices which we consider part of managerial behavior. As Mulder and Wilke (1970) showed, participation in decision making does not result in an equal power distribution. When equality in relevant knowledge, in abilities, in motivational strength, etc., is not realized before starting a participation process, power differences will not decrease but may even increase still further. This because the participation process will provide the more-powerful persons with additional opportunities for deploying their larger power, which may increase their effective influence over the less-powerful (Mulder and Wilke, 1970).

Structural empowerment is seen as an important antecedent of psychological empowerment. Several authors focus on organizational conditions (e.g. team designs, job characteristics, policies and procedures) for sharing power, decision making and formal control over resources (Mintzberg, 1991; Kanter, 1993; Mills and Ungson, 2003; Maynard et al., 2012). However, in most of this literature it remains unclear what organizational design characteristics result into structural

empowerment (Seibert et al., 2011; Maynard et al., 2012), and in most studies only a few design characteristics are taken into account. We approach it differently here, as we take work and organizational design as one dimension of structural empowerment: the way the organization is designed defines where authority and responsibility are located. The question then is which design concepts are beneficial for structural empowerment, and which do not play a role. But we distinguish two more dimensions of structural empowerment, which leaves us with three dimensions we discuss in some detail below:

- i. design concepts related to work, group and context of the group that enable or constrain the distribution of authority and responsibility.
- ii. the legal and ownership structure which determines the distribution of legal authority and responsibility within the organization, a much-neglected dimension; and
- iii. the amount of self-influence of groups, that is the amount of decision making power that resides within groups.

### ***Structural empowerment***

#### ***Design of organization, work and groups***

Based on previous research on workplace design to increase motivation of workers and group performance, we distinguish the following organizational design concepts that may contribute to structural empowerment: span of control, the number of people supervised by one manager (Spreitzer, 1996), shared goals, collective goals of group members (Spreitzer et al., 1999; Hackman, 1987; Campion et al., 1993), task feedback, knowledge of the results of work activities (Spreitzer, 1995; Spreitzer et al., 1999; Hackman, 1987; Campion et al., 1993), group task significance, the extent to which outcomes of the group's work have significant consequences for other organization members or external clients (Spreitzer et al., 1999; Hackman, 1987), group responsibility, the division of job regulation responsibilities between the group leader and the group members (Doorewaard et al., 2002), total compensation, an incentive system that rewards performance (Spreitzer et al., 1999; Hackman, 1987; Campion et al., 1993), group size (Hackman, 1987; Stewart, 2006), group stability, the continuity of group membership (Spreitzer et al., 1999), group task identity, the degree to which the group completes a whole and separate piece of work (Spreitzer et al., 1999; Hackman, 1987; Campion et al., 1993), group task variety, the chance for each member to perform a number of the group's tasks (Spreitzer et al., 1999; Hackman, 1987; Campion et al., 1993), task interdependency, the interaction and dependence between group members to accomplish the work (Spreitzer et al., 1999; Campion et al., 1993), group composition, the characteristics of individual group members (Spreitzer et al., 1999; Hackman, 1987; Campion et al., 1993;

Stewart, 2006), group coordination, task coordination within the group (Spreitzer et al., 1999; Stewart, 2006), outsider steering, external influence of work group performance (Stewart et al., 2011) and task autonomy, the degree of control or discretion a worker is able to exercise (Spreitzer et al., 1999; Hackman, 1987; Stewart, 2006; Breugh, 1985).

In our case-studies we will investigate which of these design concepts are de facto related to structural empowerment and which not. This has a theoretical aim, as we learn from that what factors may determine structural empowerment, but also a practical meaning as it may be useful for organizations that aim at introducing empowerment strategies such as self-steering.

#### Legal and ownership structure

A concept related to psychological empowerment is psychological ownership. Psychological ownership is a feeling of possession in the absence of any formal or legal claims of ownership. There is no formal recognition from others regarding psychological ownership, as it is the individual in which feelings of ownership are manifested and the boundaries associated with ownership are determined (Pierce et al., 2001; Dawkins et al., 2017). Research has shown that psychological ownership has similar effects as psychological empowerment. And for both counts that these psychological states can exist without being based on structural empowerment and structural ownership respectively. Nevertheless, whether psychological empowerment is different from psychological ownership still needs to be investigated (Dawkins et al., 2017).

Studies on formal employee ownership suggest that its implicit right to control creates responsibility, organizational commitment, identification with the goals and values of the organization, and the belief that there is a common interest (Pierce et al., 1991), which seems to be relevant for empowerment. In this study we do not go into psychological ownership, but do include the distribution of authority and responsibility through formal ownership regulation as element of structural empowerment. The role of legal and economic ownership for empowerment has been overall neglected. But for smaller and medium sized companies, we expect this to be rather important. That is why we include legal ownership, which is expected to have strong effects on the distribution of authority and responsibility.

#### Self-influence of groups

If structural empowerment is the distribution of authority and responsibility to employees, then structural empowerment is reflected in the decisions groups and individuals can make. We use the model of Manz on self-management and self-leadership (Manz, 1992; Stewart et al., 2011) to distinguish three categories of

decisions: what is to be done (e.g., standards and objectives), why (e.g., strategic analysis) and how it is to be done. So, we use from literature on self-leadership those notions that relate to the actual delegation of authority and responsibility and we leave out the management strategies like enhancing feelings of self-influence through participation and changing cognitions.

### ***Power and empowerment***

Structural empowerment may be subject to or can even be the product of power. Power is used to (i) influence the outcome of decision-making processes, to (ii) control access to decision making, and (iii) shape people's perceptions, cognitions and preferences in such a way that they accept the situation as it is as natural, necessary and even optimal. The first two dimensions of this power concept become visible in conflict, whereas the latter prevents conflict from arising in the first place (Hardy and Leiba-O'Sullivan, 1998). These authors also distinguish a fourth dimension which draws attention to the limits of power. It acknowledges that power is everywhere, also in knowledge, and it can hardly be escaped nor controlled by anyone. Even if this is the case, when designing and constructing social systems, choices are made between systems in which power differences remain limited and systems that are characterized by very large power differences (Mulder, 1984). Power and power differences appear in every social system. "Even organizations that are designed based on equality, like political parties, create their power elites; this is the iron law of oligarchy of Michels" (Hofstede, 1984: 70). This may also be the case with organizations working with autonomous groups. However, power is a taboo, because power can be used to achieve desirable goals, but is more often associated with undesirable goals which invokes negative associations and threatening implications<sup>3</sup>. Power then is interpreted as something which is basically wrong (Mulder, 1984; Pfeffer, 1992; Kanter, 1979).

In contrast to psychological empowerment strategies, structural empowerment focuses on a real transition of authority and responsibility from upper management to employees (Maynard et al., 2012). However, existing organizational design and ownership often limit the transition of power in order to assure that decisions remain contributing to organizational objectives (Hardy and Leiba-O'Sullivan, 1998; Boje and Rosile, 2001). So, structural empowerment cannot be fully understood when the role of power is not taken into account. Several approaches to power are relevant in this context.

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<sup>3</sup> This has implications for the way power relations have to be studied, see chapter 2.



### (1) Relational approach

“Power is the potential ability to influence behavior, to change the course of events, to overcome resistance and to get people to do things that they would not otherwise do” (Pfeffer, 1992: 30). Power in this approach can be conceived as “a relation between two individuals or groups of individuals in which one can give direction to or determine the behavior of the other more than the reverse” (Mulder, 1984: 286). So, in this definition, power is a relation of inequality. “The more-powerful can, to a greater extent than the less-powerful, shape the social system to which they both belong” (Ibid.).

The difference in power – or the *power distance* (Mulder, 1984; Hofstede, 1984) – can vary from very little to very large, as power is a variable, measured through the perception of the less-powerful, of interpersonal power differences.

Power and influence are tightly connected. However, there is a subtle difference (Mulder, 1984; Pfeffer, 1992). Power is seen as the ability to influence, and influence as an expression of power. Exercising influence is impossible without using power. At the same time, it is hardly possible to possess power without influencing the behavior of others. Therefore, we consider them here synonymous.

### (2) Power sources approach

Power and power differences are based on various power sources, which in general are unevenly distributed. The following power sources can be distinguished (French and Raven, 1959; Mulder et al., 1983; Mulder, 1984):

- Sanction power: the less-powerful believes that the more-powerful has the ability to reward and/or punish him in material and non-material ways and he is therefore willing to follow the more-powerful.
- Legitimate power: the less-powerful is willing to follow the more-powerful because he believes he ought to, based on the formal position the more-powerful has within the organization.
- Expert power: the less-powerful believes that the more-powerful has a higher level of skill and/or more relevant information than he has and is therefore willing to follow him.
- Identification power: the less-powerful feels that he and the more-powerful are similar in important respects, and is therefore willing to follow him.

In contrast to French and Raven (1959), Mulder (1984) defines also a *non-power* relationship, which he labeled *reciprocal open consultation* (or open argumentation). In this relationship everyone, including the one who is otherwise more-powerful in the social system, is prepared to be persuaded by good

arguments of the others. However, reciprocal open consultation can in his view only exist if the other power sources are not too unevenly distributed. The use of reciprocal open consultation is dependent on the more-powerful (Mulder, 2004). Because power is not a zero-sum game<sup>4</sup>, transferring power to the lower levels does not mean that the power of the more-powerful declines. In other words, employees with some power remain dependent on more-powerful (Lincoln et al., 2002).

Power sources have structural and personal dimensions. *Legitimate power* is based on formal positions, so this power source is structural, and in fact the only power source that can be seen as strictly structural. In many social systems, legitimate power and sanction power strengthen each other (Mulder, 1984), because structural positions enable sanctions. *Sanction power* is therefore often largely structural, but not always, as e.g. people who are highly respected for their personal characteristics, have the ability to provide or withhold psychological approval, and this is conceived as a psychological sanction. This shows that sanction power can also be personal instead of structural. *Expert power* is likely to be seen as personal since the skill level is a personal characteristic. However, it may as easily become a structural power source, as the more-powerful may have important information based on his or her position. For example, managers, through attending meetings of the management team, have access to information not shared with others. Also members of specialized units or external advisors are attributed knowledge and information based on their structural position (Doorewaard, 1989). *Identification power* is personal when the less-powerful identify with personal characteristics of the more-powerful, but structural when the less-powerful identify with the position the more-powerful has. For example, fans can identify with sports heroes, and soldiers with their commander (Mulder, 1984). Because of this dual character of power sources, a distinction between structural or personal is not easy to make, except for legitimate power.

### (3) Motivational approach

According to Mulder (1984) power is an expression of a human motivation. Human beings feel satisfaction in disposing and exerting power. The position people hold in the social system determine their power behavior. Powerful persons have a tendency to keep and even increase their distance to the less-powerful. On the other hand, people with less power will try to reduce the distance to the powerful. This *power distance reduction tendency* will be stronger at a

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<sup>4</sup> A situation in which each participant's gain or loss of utility is exactly balanced by the losses or gains of the utility of the other participants. If the total gains of the participants are added up and the total losses are subtracted, they will sum to zero (source: Wikipedia page Zero-sum game).

smaller power distance. Consequently, power is addictive: the more power a person acquires, the stronger he strives for even more power. A crucial implication is that the less-powerful are co-responsible for the power relation in which they participate, though in a lesser degree than the more-powerful, as follows from the relational definition of power. And the greater the power distance, the smaller the less-powerful are (and can be) co-responsible. Furthermore, tolerance to power differences is something less-powerful learn from early age (Ibid.).

The power distance reduction tendency is expected to relate to personal characteristics, notably self-evaluation. Judge et al. (2003) define self-evaluation as a broad, latent, higher-order construct indicated by four well established traits in personality literature:

- Locus of control: beliefs about the causes of events in one's life.
- Self-esteem: the overall value that one places on oneself as a person.
- Generalized self-efficacy: an evaluation of how well one can perform across a variety of situations.
- Neuroticism: the tendency to have a negativistic cognitive/explanatory style and to focus on the negative aspects of the self.

Employees who evaluate themselves positively are expected to have more confidence in their capabilities to successfully do their tasks, and feel confident that they can handle their (increased) influence and responsibility. Positive self-evaluation leads to a stronger power reduction tendency, and self-confident people value a more equal power distribution and experience a smaller power distance to the more-powerful (Mulder, 1984). Employees with a less positive self-evaluation may appreciate an equal distribution of power, but when tensions increase, for example in case of a crisis, they will prefer not to take responsibility and accept the authority of the more-powerful (Mulder, 1984; Mulder et al., 1971; Boin and 't Hart, 2003). We will return to this below.

Maynard et al. (2012) in their multilevel review found that self-evaluation traits are expected to influence psychological empowerment, but have hardly been included in studies of psychological empowerment. However Seibert et al. (2011) in their meta-analytic review found a strong positive relationship between the four core self-evaluation traits and psychological empowerment, and Spreitzer (1995) showed that high self-evaluation positively affects feelings of psychological empowerment.

Another important personal characteristic related to power is individual prominence which has several aspects. People who are attributed individual prominence are seen as powerful leaders. They are characterized as (i) entrepreneurial, highly self-confident, capable, energetic, and risk-taking, (ii)

having expert power, and (iii) having upward influence in the organization (Mulder et al., 1971) or outward influence (Mulder et al., 1983)<sup>5</sup>, or both (Kanter, 1979).

People with strong prominence also have a strong motivation to use power; and vice versa, people who show strong power use, are attributed strong individual prominence (Mulder, 1984). However, strong power use may also only be based upon the position in the social system and not on personal characteristics. When that is the case, prominence of the more-powerful is likely to be overestimated by the less-powerful. Self-evaluation also plays a role for the less-powerful. The higher the self-evaluation of the less-powerful, the lower prominence they attribute to the more-powerful, and the stronger they will try to reduce the power distance.

#### *(4) Constructivist approach*

Besides the explicit use of power discussed above, power has also a discursive dimension which may hide power relations and power use from being observed. This form of power is embedded in the stories organization tell about themselves, and these stories help to reproduce everyday beliefs and practices, to produce apparent consensus and acquiescence, and replace visible controls by hidden cultural forms of domination (Hardy and Leiba-O'Sullivan, 1998). The constructivist theory of power helps to understand this role of hegemonic power of management (Hardy and Leiba-O'Sullivan, 1998; Doorewaard, 1989; Doorewaard and Brouns, 2003), the less visible power sources which influence the perception of how authority and responsibility are distributed. Language becomes politics when it is used to justify and legitimize the consequences of power and dependence, and especially where it hides the actual use of power. Language, symbols, rituals, ceremonies, ideologies are used to manage meaning, and this leads to hiding power differences behind practices that are taken for normal and just (Pfeffer, 1981). As a consequence, grievances do not exist, demands are not articulated, conflict does not arise, and resistance does not occur.

Research has shown that stories are also an important means for an organization of communicating its identity to the outer world. If organizations claim to have implemented advanced and innovative organizational management concepts, such as empowerment, total quality management etc., the environment appreciates those organizations more, even if they do in fact not practice these organizational forms (Staw and Epstein, 2000). In other words, the strong stories about structural empowerment may as such be an antecedent of psychological empowerment.

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<sup>5</sup> We use positive self-evaluation, professional skill and connectivity (upward and outside influence) together as measurement of individual prominence in chapter 2 and further.

The strength of hegemonic power lies in the more or less self-evident way in which the organization's main characteristics produce social practices with unequal opportunities (Doorewaard, 1989). By acting according to the established rules and mores, by freely following decisions, employees reproduce organizational practices – not being aware of the power structure underlying these practices (Doorewaard, 1989; Doorewaard and Brouns, 2003). Hegemonic power processes are concealed processes in which meaning and identity are formed. And these in turn encourage consent with the dominant organizational view, and result in the acceptance of organizational practices, despite the possible disadvantages for those involved. Meaning is produced through portraying dominant organizational norms and values as common sense and indisputable notions of truth, through emphasizing consensus, and through legitimizing rationalities. Identity formation refers to the development of commonly shared values, norms, habits and attitudes concerning organizational goals such as group performance and quality (Doorewaard, 1989; Doorewaard and Brouns, 2003). Labels, ceremonies and stories function to seduce organization members to consent with the dominant organizational view. When the power of stories is large, psychological empowerment may exist – even if in practice there is no structural empowerment at all.

##### (5) Contingency approach

As already mentioned in the section on the motivational approach to power, the context may influence how power is perceived and used, and different personalities handle power differently, which will be especially visible in situations of crisis. This points more generally to the contingency approach, where power relations are influenced by the context. For our study, this is important as the literature shows a strong tendency to centralization under crisis (Staw et al., 1981; Drabek and McEntire, 2003), suggesting that autonomous groups are not very well suited to situations of crisis.

The central idea of the contingency approach is that the effectivity of organizational structures depends on situational factors: Different situations call for different approaches to handle and manage an organization. Or as Lawrence and Lorsch (1967) concluded, effective organizations have a structure that fits to the environmental circumstances. The basic concepts to discuss the functioning of an organization are *differentiation* and *integration* (Lawrence and Lorsch, 1967). Differentiation refers to segmentation of the organizational system in subsystems which develop attributes (e.g. behavioral attributes of members) in relation to the requirements of its external environment. This then requires integrating the activities of the various subsystems to accomplish the organization's tasks.

Inside organizations, the behavior of subsystems and their members needs to be influenced to assure that they act in the interest of the organization. Outside organizations, coalitions of actors use their power to influence the behavior of organization members (Mintzberg, 1983). Depending on the number of influential actors, the environment can be dominated, divided or passive (Koopman and Pool, 1992). In a dominated environment, there is one external actor strongly influencing organizational behavior. For example, a holding company that is restricting the policy space for its subsidiaries. In a divided environment, different external influencers make different demands. The environment is passive when there are many actors, and none of them has a clear influence or there is no collective representation of interest. In that case the organization can be rather autonomous and independent from contextual influences<sup>6</sup>. External and internal power relations interact with each other. This interaction determines the power balance within and around the organization, and it results into specific power configurations, consisting of the organizational design of the division (differentiation) and coordination (integration) of tasks, and of the situational factors (Mintzberg, 1983). Those in the organization who achieve integration, are perceived to be influential (Lawrence and Lorsch, 1967).

In our study this approach is important, especially in relation to crisis situations (see chapter 5), which generally result from adverse conditions in the environment (Staw et al., 1981). In these situations, important goals of the social system are at stake, and the probability that these goals will be reached becomes (too) small. There is a strong time pressure for the system to respond (Mulder, 1984; Mulder et al., 1971). People experience crises as episodes of threat, uncertainty and anxiety (Staw et al., 1981; Boin and 't Hart, 2003). Individual behavioral consequences are often withdrawal and reduction of information processing (Staw et al., 1981). Under these circumstances individuals expect and call for strong leadership (Mulder, 1984; Mulder et al. 1971; Boin and 't Hart, 2003). They voluntarily chose for a large power distance from the strong leader, and the deeper the crisis, the more power distance is needed (Mulder, 1984; Mulder et al., 1971). This makes crisis management a leadership issue (Boin and 't Hart, 2003), with leaders that during crisis situations exert more power and are less oriented at consulting group members (Mulder et al., 1971; Kanter, 1979). In economic decline, leaders' outside connections change, reducing their personal control and consequently the control function within organizations grows (Kanter, 1979). Organizational effects of crisis are centralization of authority, concentration of decision making, increase of hierarchical, top-down communications, more formalization of procedures, and enhancement of coordination and control (Staw

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<sup>6</sup> Our companies are in the IT sector – highly dynamic, with a series of actors in the environment that have influence on the operation of the organizations we study.

et al., 1981; Drabek and McEntire, 2003). As a result, crises threaten the status quo and delegitimize the underpinning policies and institutions (Boin and 't Hart, 2003). For the organizational concepts as empowerment and autonomous groups, this would imply that they may be abandoned during more problematic situations.

Although the management approaches to crisis have long been characterized by command and control, critics regard this approach too static and rigid (Dynes, 1994; Drabek and McEntire, 2003; Wolbers et al., 2017). Instead of assuming that crises have a disorganizing effect upon individuals and that new structures are needed to control actions, this alternative approach builds on the acceptance of ambiguity and discontinuity, and on cooperation with organization members: it allows them to decide, adapt and solve problems, within the existing structures. So even in crisis management, part of the literature considers approaches supporting distribution of authority and responsibility, more effective.

In the case studies the various power theories will be deployed, as they focus on different dimensions of power constellations and power use in organizations, which all play some role.

## **1.2 Research questions**

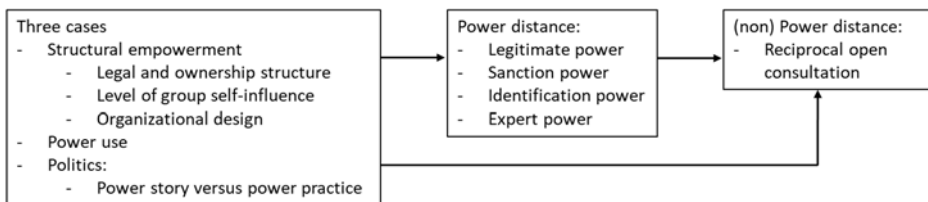
Structural empowerment focusses on the transfer of authority and responsibility from upper management to employees through organizational conditions (Maynard et al., 2012). Psychological empowerment is a psychological state of 'feeling empowered' (Spreitzer, 1995), and structural empowerment results in increased levels of psychological empowerment (Maynard et al., 2012). However, the delegation of authority and responsibility can be constrained through the use of power. In the extensive research on empowerment this role of power has been given little attention (Hardy and Leiba-O'Sullivan, 1998; Boje and Rosile, 2001), as most of the literature implicitly or explicitly reads empowering as 'energizing' (Bartunek and Spreitzer, 2006). We fill the gap in the literature by focusing on the other meanings of power (authority, capacity) when investigating the role of power behind empowerment.

If structural empowerment is condition for psychological empowerment, the latter may not be sustainable without the former, and the found positive effects may disappear over time. Organizations may on the long run benefit from structural empowerment, and therefore implement it in a weaker or stronger way. On the other hand, if the existing power relations can be hidden behind a pervasive 'empowerment story', management strategies may effectively hide power relations and make the use of power invisible. In that case, 'real' distribution of power may be unnecessary for psychological empowerment and its positive effects. If an organization has a strong empowerment ideology, this may be accepted by the members, even if it in fact does not exist.

The tension between power distribution and organizational politics leads to our overall research question, which we answer by comparing three organizations with strong empowerment ideologies, but different levels of structural empowerment: To what extent are organization members able to distinguish the de facto use of power given these strong ideologies? Are differences in structural empowerment important for psychological empowerment, or is the dominant story, created by more-powerful, decisive?

In chapter 3, we compare three cases in order to clarify the nature of structural empowerment, which leads to three dimensions: legal and ownership structure, group self-influence, and organizational design. After having done this, we investigate the effect of the differences in structural empowerment, the differences in power use, and the differences in organizational politics (left block in model 1), on the perception of the power distance within organizations. Differences between the cases (structural empowerment, power use and politics) are expected to influence the perception of power distance, and especially the perceived level of reciprocal open consultation: the more structural empowerment, the less individual power use, and the stronger the story, the lower the perceived power distance, and the higher the perceived level of reciprocal open consultation. The latter can be seen as an indicator for the level of power distribution. This part of the analysis is done at the level of the organizations (model 1).

Figure 1.3: Model 1 Organization level model for chapter 3



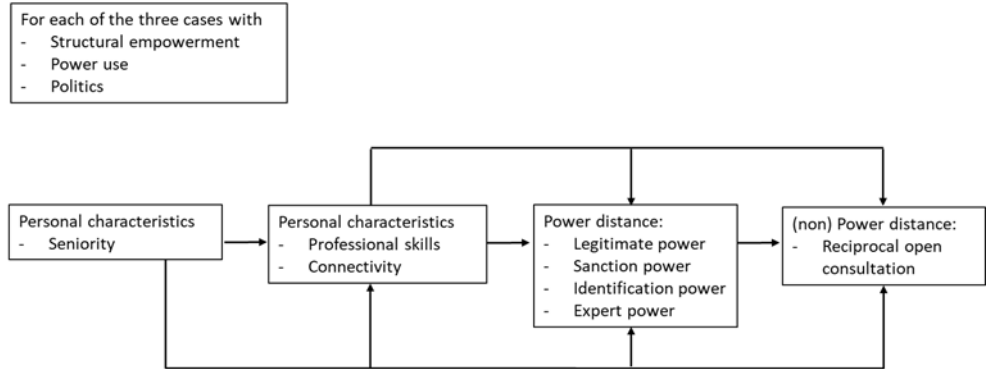
As the perception of the power distance is also influenced by personal characteristics of the more-powerful and the less-powerful, we also do an analysis at the individual level. We did not measure self-evaluation in all the three cases, nor did we do this for all aspects of prominence. Therefore, we use here the following personal characteristics: seniority, connectivity and skill level.<sup>7</sup> Model 2 shows the assumed relations. Seniority influences the skill level and connectivity, and all these personal characteristics influence the perception of the power distance. Furthermore, the lower the perceived power distance, the higher the perceived level of reciprocal open consultation. We test the model for each of

<sup>7</sup> In chapter 4, we will use the other personal characteristics. By the way, we do not include the obvious variable gender, as the cases are strongly male dominated.



the three organizations, using Structural Equation Modelling, and we compare the findings.

Figure 1.4: Model 2 Individual level model for chapter 3



Summarizing, in chapter 3 we answer the following questions, at the level of organizations (model 1: Q2, Q3) and at the level of individuals (model 2: Q2, Q3, Q4):

- Q1: What is structural empowerment? What are the characteristics of organizations that support structural empowerment?
- Q2: What is the effect of structural empowerment, and related power use, on the perception of the power distance?
- Q3: What is the effect of politics (the ‘empowerment story’) on the perception of the power distance?
- Q4: How are these effects influenced by personal characteristics?

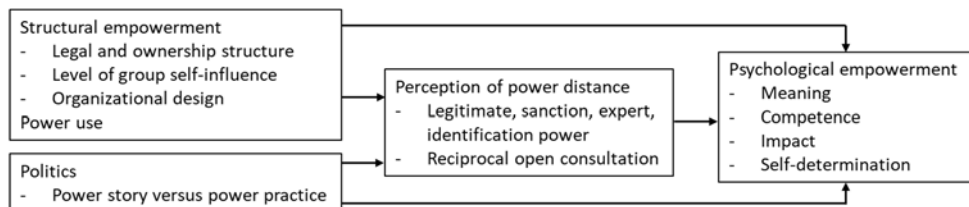
In chapter 4, the focus is on *psychological empowerment*. If structural empowerment is an antecedent to psychological empowerment, more structural empowerment may result in more (and more sustainable) psychological empowerment (Maynard et al., 2012). The more authority and responsibility are shared, the role of reciprocal open consultation increases (Mulder, 1984), and decisions are more often made on the basis of arguments instead of power relations. This implies that organization members have themselves persuaded by good arguments of others, and formal hierarchical positions do not dominate decision-making. This we call autonomy and self-influence, of which high levels are only possible when power differences are not too large (Mulder, 1984). Finally, when lower structural empowerment goes together with strong narrative politics, perceived levels of reciprocal open consultation and psychological empowerment are expected to be higher than expected in relation to structural empowerment.

Apart from structural empowerment, also individual power use plays a role. When more-powerful individuals make use of their power sources to actually influence decision-making, this will affect the sense of autonomy and control less-powerful feel in relation to their work. Higher levels of perceived power use are expected to lead to lower levels of psychological empowerment. In the situation where politics is used to legitimize and hide inequality in power, psychological empowerment might still be high. People may still feel that they have power. They may even feel they are in a situation of reciprocal open consultation. This belief can just as well lead to outcomes like high performance, job satisfaction, commitment and reduction of stress and turnover.

In chapter 4, we answer the following questions at the organization level (model 3: Q5, Q6):

- Q5: Do organizations with different levels of structural empowerment and related power use (and related different levels of power distance) also differ in terms of psychological empowerment?
- Q6: What is the effect of politics, of pervasive empowerment stories?
- Q7: Do organizations with different levels of structural empowerment also differ in prominence attributed to the more-powerful?

Figure 1.5: Model 3 Organization level model for chapter 4



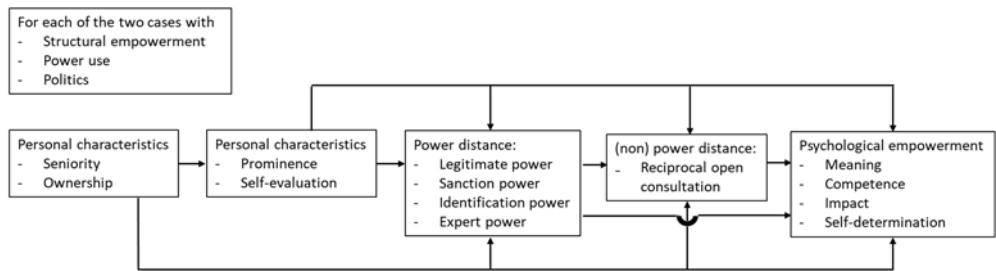
How individuals respond to power constellations depends on personal characteristics, on self-evaluation, and on how they evaluate the more-powerful. To clarify this, we also do an analysis of the relation between structural empowerment and psychological empowerment at the individual level, for two of the cases. Employees who evaluate themselves positively are expected to have more confidence in their capabilities to successfully do their work (competence dimension of psychological empowerment). They will be prepared to take responsibility and influence their own activities and those of their group (impact and self-determination dimension of psychological empowerment). Self-confident people feel a smaller power distance to the more-powerful, and will try to reduce the power distance.<sup>8</sup> Employees with less positive self-evaluation can appreciate a more equal distribution of power too. But when it becomes tense, for

<sup>8</sup> The power distance reduction theory - Mulder, 1984

example in case of a crisis, they prefer not to take responsibility and accept easily the authority of the more-powerful. Self-evaluation does also affect behavior of the more-powerful individuals. People with a high prominence, will try to maintain the power distance to the less-powerful and are inclined to a stronger use of power.

Whether differences in attributed prominence, self-evaluation (and other personal characteristics) influence the perception of the power distance, and individual psychological empowerment, can be investigated at the individual level, and we do this for both cases that mainly differ in the level of structural empowerment.

Figure 1.6: Model 4 Individual level model for chapter 4



In chapter 4, we answer, the following research questions at the individual level (model 4: Q8, Q9, Q10):

Q8: Do organization members that score low on perceived power distance, score high on reciprocal open consultation and on psychological empowerment?

Q9: Do organization members who attribute high prominence to the more-powerful also experience higher levels of perceived power distance and lower levels of reciprocal open consultation and lower levels of psychological empowerment?

Q10: What is the effect of seniority, ownership, and positive self-evaluation?

In chapter 5, we focus on the sustainability of self-steering and empowerment. Because of the tendency in organizations to (re)centralize power in crisis situations (Mulder, 1984; Boin and 't Hart, 2003; Drabek and McEntire, 2003), crisis situations are an important test for the sustainability of self-steering and empowerment. Are these organizational management concepts typically for periods of prosperity, and abandoned in periods of crisis? In order to understand the life cycle of organizations that adopted empowering organizational forms we conduct a longitudinal case study of the full life cycle of an organization with a very strong self-steering ideology combined with a concentrated ownership structure. In chapter 5, we address the following questions:

Q11:How did the members perceive the role of power in the organization, and how did this influence their self-steering behavior?

Q12:What happened when the dot-com crisis of the early 2000s hit the company, and how did members react on the plans and interventions of the owners to survive the crisis?

Q13:How did employees react on the takeover by a traditionally organized company?

So in more general terms, does self-steering under conditions of crisis disappear, and do organization members accept the loss of authority and responsibility under those conditions? Is this acceptance dependent on contextual factors such as the strength of the empowerment and self-steering narrative, and on personal characteristics? And what happens afterwards?

## **Chapter 2: Method and data**

### **2.1 A brief description of the cases**

We study four small to medium sized organizations that consciously position themselves as consisting of autonomous and empowered groups. The companies provide business services for IT and/or finance. They have an external environment in which several external influencers, for example customers, suppliers, partners and competitors, make different demands upon the organization, and the technological context changes rapidly. To be able to quickly respond to this complex and turbulent external environment (Koopman and Pool, 1992) these organizations use minimum division of labor and maximum autonomy. The organizations we study have in common that the actual work for a large part takes place in cooperation with the customer and often at the customers' site. This means that the customer has quite some influence on the work of the organization members. They also have in common that the knowledge and skills of their members are the most important factor of production. As these are not owned by the organization, they do not appear on the balance sheet and thus form a relatively uncontrollable factor. Consequently, the commitment of the professionals is of vital importance to the effectivity of the company as a whole and particularly to the steering of the company (Depickere, 1999). In order to stimulate employees to contribute to organizational goals, other mechanisms have to be used than the traditional division of labor, standardization, hierarchical management, procedures and rules, and this makes room for new management strategies like self-steering.

Three of our cases, REFR, NEXT and SOLV, have been using autonomous groups from the beginning, and a fourth company, PART, started to use autonomous groups more recently. Most important difference is that within PART there is an explicit management structure, which is not present within the other cases.

SOLV is used in the comparative study as well as in the longitudinal study, as we did an earlier case study about SOLV (Sinteur, 2002). In the comparative case study we compare SOLV, NEXT and PART. We used REFR as a test case, to test our instrument. Because of the limited size of the latter, we do not use the findings in the comparative analysis.

PART (est. 1996) is an ICT service provider specializing in online, enterprise solutions and business intelligence, with offices in the Netherlands and in two other European countries. As from 2012 PART builds its culture around three core values – happiness, initiative and expertise. PART claims to “create a working environment that encourages teamwork, taking responsibility and working from an entrepreneurial spirit. Empowerment leading to employee engagement”. At the

time of our study, there are four subsidiaries in the Netherlands. Empowerment within PART is based on a ‘cell model’: A cell is an autonomous group, and whenever it has more than 50 employees, it splits to remain informal and flexible (Wintzen, 2006). The ‘cells’ do have a structure with managerial positions.

SOLV (est. 1996) delivered project management and consultancy services in information and communication technology (ICT). Self-steering – as it was called within SOLV – took place within ‘business projects’ (TVW, 1998a), an autonomous group of highly educated, independent professionals. Business projects were autonomous in developing own products and services, with an own profit and loss account, own recruitment and selection, and own acquisition activities. Everyone within the organization could start a business project, after its business plan was approved by a consultative group selected by the new business project itself. Business projects ceased to exist when there was no longer a market for their services or when members no longer enjoyed their work. SOLV had no staff departments or secretarial support. It also had no formal functions like account managers, personnel managers, or other specific managers (TVW, 1998a). Depending on the situation people fulfilled certain roles, for example the finance or marketing role, but this was always temporary. In 1998 new subsidiaries were established next to SOLV as well as the umbrella organization TVW.

NEXT (est. 1999) supports improving the financial function within organizations. It started in 1998 as a self-steering group within SOLV, but transformed in 1999 into a subsidiary within TVW (see case SOLV). It had the same organizational principles as SOLV. When TVW was taken over by a large IT company (DINR) in 2004, most organizational units (among those SOLV) were incorporated in that company, but NEXT remained relatively independent – keeping its self-steering principles. In 2009, an ‘employee buyout’ started, which became effective in 2012 when NEXT started – still with self-steering groups – with 110 employees, of which 68 had become shareholder.

REFR (est. 2004) delivers professional services in business intelligence. It started with three former employees from SOLV who left SOLV when it was taken over. Later two other former SOLV employees joined, followed by employees from other companies. As from 2012 it continues as a cooperative. Members of the cooperative are not the individuals, but their individually owned LLCs.

The period in which we collected the data is presented in Table 2.1. We kept in touch with the companies for at least one year after finishing to avoid that we only report a specific snapshot.

Table 2.1: Period data collection

Case	Data collection	Period covered
SOLV	February 2001 – February 2002	February 2001 – December 2014
REFR	June 2014 – October 2014	June 2014 – October 2015
PART	October 2014 – March 2015	October 2014 – March 2016
NEXT	April 2015 – October 2015	April 2015 – October 2016

## 2.2 Design

The phenomenon we research – autonomous groups – needs to be studied within their complex context. The influence of the context on the power differences and psychological empowerment is a core topic of the study. That is why we use the case study approach: collecting evidence by studying the phenomenon within its natural situation (Hutjes and van Buuren, 1992). As context is relevant, one needs more cases, in different environments. At the same time, the context may change over time, influencing the level and perception of the power distribution. This would require a longitudinal approach. We did a first case study (SOLV) more than 10 years ago, and this is helpful in three ways. (i) We use the design and lessons of this earlier study (Sinteur, 2002) to design our current case studies. (ii) We use SOLV for studying how it has developed in strongly (economically) changing contexts. (iii) As one of the other cases (NEXT) is a late descendant from the company studied back then, we can extend our longitudinal study of SOLV by analyzing what happened with this spin-off. So we use a longitudinal and comparative case study approach.

We started the case study with asserting consent for including the organization in the study. Then we obtained a list of names and contact information for every organization member. We wrote a general introduction which was sent by email throughout the organization. In this introduction, we explained briefly what the research was about, we promised confidentiality, explained how and when the results would be presented and how the researcher could be reached. Then we approached each respondent individually, without asking further consent of managers.

We then continued with analyzing documents and we held interviews with some next-higher organization members. For these interviews we chose next-higher organization members who did not have a next-higher colleague themselves, because they would not or only partly answer the questionnaire (see below). These interviews were, amongst others, used to learn about the company structure and the terminology used. We adapted our survey (see below) to the language used in

the company<sup>9</sup>. We kept the introduction to the survey as short as possible so the respondents would answer the questions without being primed. For the same reason, we only interviewed respondents after they had finished the survey.

We transcribed interviews immediately afterwards. In the period we interviewed, we did send several reminders (up to four) to organization members who had not yet completed a questionnaire. We stopped when response was at least 75%. After finishing the interviews, the survey data were analyzed. We checked whether we could discern special groups in the survey data which were not included in the interviews. This was not the case.

After finishing data collection, we analyzed the cases separately, and the outcomes were presented to the company, in order to validate our observations. The feedback we got supported our interpretations of what we observed. After that we compared the cases. Below we give the details of how that was done.

### **2.3 Data collection**

We have collected data from different sources, to avoid problems related to single source studies. We used interviews, documents, observations and a survey to gather our data. For the case SOLV we made use of the data we collected in 2002 when we performed exploratory research (single case study) on the balance between self-steering and steering and the role of power (Sinteur, 2002). For the longitudinal analysis we traced the career of former SOLV employees on the web (LinkedIn), in order to investigate whether they kept on working under self-steering conditions.

#### ***Interviews***

We used semi-structured interviews to get information on several variables: the location of *decision making* and the instances and level of *power use*. We also asked about the business philosophy, in order to detect the level of *narrative politics*. In every interview, we tried to uncover whether power was used and whether counter-power was organized. We also asked about *organizational design*. We talked in-depth with respondents about the various subjects, but aimed at responses in the language of the individual interviewee – as we wanted to learn about the practice as well as the ‘ideology’ of empowerment. In the interview we wanted to find out how dominant the organization’s story is and in how far it is lived up to in practice and at the same time learn about the interviewee’s own

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<sup>9</sup> For example, for unit we use ‘business project’ for SOLV, ‘subsidiary’ for PART and ‘niche’ for NEXT, for next-higher we use ‘business project trekker’ (initiator) for SOLV, ‘field manager’ for PART and ‘niche trekker’ for NEXT, for top management we use ‘bv trekkers and webmasters’ for SOLV, ‘Board’ for PART and ‘niche trekkers overleg’ for NEXT.



attitudes, beliefs and values. The interview guide with the various subjects and the related questions is in Appendix III.

The interviews were tested in the REFR pilot, and this showed what questions resulted in detailed conversation. We learned what questions focus on the main points and what questions could be left out. We also learned that recording the interviews was necessary.

Following the organizational boundaries we interviewed members from every group within the organization. We tried to interview at least 10% of every group, in order to capture the various views and opinions. Within the groups we pursued a mix of members according to their role (consultant, sales, controller, manager, director), members who differ in the amount of years they are with the company, the amount of years of work experience, men and women. When during the process of interviewing it became clear that something special was going on within a group, we interviewed more members of this group. Sometimes we followed a suggestion of respondents who advised us to speak to someone and also some respondents came up to us their selves and asked if they could be interviewed. We stopped interviewing when we hardly heard anything new.

The interviews were held by one researcher, and therefore interviews were held in the same way, with the same knowledge and background. We tape recorded every interview in order to engage fully in the conversation, to not lose any data, and to record what words were used. We transcribed part of the interviews literally (full transcription). Because of time constraints, we transcribed from the other interviews only the important responses. Table 2.2 shows the number of interviews by case.

Table 2.2: Interviews per case

Organi- zation	Number interviews	Number employees	Type	Transcription
NEXT	29	106	4 controllers, 10 directors, 1 sales, 14 consultants	21 full, 8 partly
PART	23	142	3 directors, 5 managers, 15 consultants, 2 groups	6 full, 19 partly
REFR	6	13	4 directors, 2 consultants	None
SOLV	None	192		

Most interviews were done one-to-one. We tried a few group interviews, but these were too difficult to plan: group members hardly work together at the same place. Many respondents had little time for an interview, and therefore we often went to the customers' site where they worked and interviewed them at lunch time. But many respondents took then plenty of time for the interview. When the interview was done at the home office, we made sure that we had a private room to talk.

Often respondents said they had no secrets for their colleagues but after the interview several made the remark that it was a good idea not to be overheard by colleagues. And some told sensitive things after the tape recorder had been switched off.

After a short introduction on both sides, we asked for permission to record the interview and promised confidentiality. The interview started with a basic question, often 'what is the goal of your group?' After that we reacted to what the respondents told us. Then from time to time we started a new subject, if the respondents had not started about the subject themselves.

Some questions were asked in every interview, but for other it depended on the dynamic of the interview. Given the restricted amount of time, some subjects were not discussed with a respondent. When important subjects remained undiscussed and/or the respondents wanted to talk a second time, a second interview was arranged.

In order to gain valid data, we tried to create an atmosphere of a mutual conversation (Fielding and Thomas, 2001). We allowed respondents to use their own way of defining the world. We showed real interest in the response, and created an atmosphere of understanding. For this it was helpful that the interviewer has experience in the working field of the respondents (which is not subject of the research). When respondents told about something they found difficult, we could respond by saying 'I can imagine that you find this difficult', or even say 'I would also find this difficult' when we felt so. Our purpose was to create a genuine interplay between researcher and respondent (Ibid.). Generally we asked open questions. By prompting, for instance repeating or rephrasing questions, we encouraged respondents to produce an answer. By probing, for instance follow-up questioning, we tried to get a fuller response (Ibid.). We did this particularly when respondents gave shallow or ambiguous answers or showed emotion. But during the interview we used other techniques to encourage respondents to provide us with an answer.

In order to avoid rationalized, polite and socially acceptable answers, we provided the respondent with feedback. For instance, when respondents told something that contradicted to something they had said before, we mentioned the contradiction and asked for a clarification. Sometimes we evoked a response by expressing surprise or confusion or by sharing views we had heard or our own views. One of the things we tried to find out was whether power is used and if counter power is organized. But because of the taboo on power (Mulder, 1984; Pfeffer, 1992) we did this as much as possible without plainly discussing the subject of power. We asked for personal examples, e.g., who decided on something and how the respondent was involved. The interviews were meant to get information from

respondents about themselves and about their perception of others and of events, and about facts: how were things organized, and how they had changed over time. Whenever respondents became speculative, we neglected this information.

Our way of interviewing (as every) risks bias and may influence the respondent. But the influence was on that interviewees would express themselves, and not on what they would say (Fielding and Thomas, 2001). What is allowed in interviews ultimately depends on the analytic task for which the data are used (Ibid.). So during the analysis we carefully dealt with the responses. For example, in cases where we expressed our own view during an interview, and the interviewee agreed without any detailed explanation, this answer was not used in our analysis. But when the respondents reacted by arguing in detail about the subject, we used their arguments. When respondents were not aware of certain subjects, we posed further questions and sometimes even made suggestions, in order to get them thinking aloud about the subject. Again, only when they gave details we used their comments in our analysis, and when they speculated, we did not.

### ***Documents***

We used documents and administrative data provided by the organizations upon our request, e.g. bylaws, agreements, contracts, annual reports, annual plans, staff handbook, etc. These documents reveal the formal design of the company, and show to what extent authority and responsibility are delegated, and whether and how ownership of the company is shared, as this is expected an important power source. We also used these documents and the company website to discover the company stories.

### ***LinkedIn, Web***

We used the web (mainly LinkedIn) to obtain personal characteristics like the amount of years with the company and the amount of years of work experience. For the longitudinal analysis we used the web and mainly LinkedIn to trace employees and their careers. It proved not difficult to find most of the SOLV staff their CV with the required information.

### ***The survey***

The questionnaire consists of three elements: the Core Self Evaluation instrument, containing 12 questions (Judge et al., 2003), the Psychological Empowerment instrument, containing 12 questions (Spreitzer, 1995) and the customized Interaction Analysis Questionnaire (IAQ) (Mulder, 1984), containing between 42 and 51 questions depending on the case. The questionnaire is organized in two parts. The questions on Core Self Evaluation and on Psychological empowerment are mixed in the first part of the survey. The IAQ – which does focus on relations

with others – forms the second part of the survey. In the introduction to the survey we mentioned that joining the survey is voluntarily, that data would be treated confidentially and that the results would be presented in such a way that they could not be traced back to single or small groups of respondents. In the SOLV case, the questionnaire consisted only of the IAQ. The (Dutch) items are in Appendix V.

The survey was sent to all employees within the organization. Several items in the survey are about one's next-higher colleague; organization members without next-higher (e.g. top management) were not asked to respond to these items. We had a fairly high response rate (Table 2.3).

Table 2.3: Surveys per case

Organization	Response	Response rate	Number employees	Type
NEXT	78	73,6	106	15 next-higher, 63 non-next-higher
PART	106	74,6	142	10 next-higher, 96 non-next-higher
REFR	13	100,0	13	8 next-higher, 5 non-next-higher
SOLV	130	67,7	192	18 next-higher, 112 non-next-higher

We used a follow up-questionnaire to ask former SOLV employees about their motive to stay with DINR or the motive to leave SOLV or DINR, to find out if self-steering played a role. We traced email addresses of 98 (51%) of the 192 former SOLV employees, 41 (21%) of them finished the questionnaire.

## 2.4 Operationalization and measures

The concepts<sup>10</sup> in our research model, are operationalized and measured as follows.

**Power distance** is measured with the Interaction Analysis Questionnaire (IAQ) (Mulder et al., 1983; Mulder, 1984). Five influence (power) dimensions are distinguished: *sanction power*, *legitimate power*, *expert power*, *identification power* and *reciprocal open consultation*. Each is measured using three to five items, e.g. 'It is my opinion that I should follow his leadership under all circumstances' for legitimate power, 'I would feel uneasy if he did not appreciate my work' for sanction power, 'I follow his advice readily because he is better informed or skilled than I am' for expert power, 'I would like to do many things the way he does' for identification power and 'He is amenable to persuasion if the arguments I put forward in support of my view are better than his' for reciprocal open consultation.

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<sup>10</sup> Definitions can be found in Appendix I.

The IAQ is originally in Dutch, and as the work force of the organizations is Dutch too, this is unproblematic. The IAQ is developed for studying hierarchical organizations where authority and responsibility are located within management, and tested in several organizations (Mulder, 1984). Nevertheless, we found that the instrument could also be used for studying organizations without formal management positions. As was shown by the factor structure and the reliability tests (Sinteur, 2002). Despite these positive experiences, we modified the instrument during the current study, also to match the language and interactions within organizations without formal management positions. For example, the next item on reciprocal open consultation, ‘if we have diverging opinions, he/she will not ‘pull rank on me’ but he/she will search for arguments and also listen to mine’, assumes that manager positions exist, – which is not always the case in self-steering organizations. Therefore we changed it into ‘In discussions, he puts forward substantial arguments and also listens to mine’. The changes in the questionnaire are explained in more detail in Appendix II.<sup>11</sup>

We use a Likert scale consisting of six categories, coded from -3 (totally disagree) to +3 (totally agree) and disregarding the 0, the ‘no opinion’ or ‘neutral’ option, to force respondents to express an opinion. For every respondent we calculate a mean of the score on the items, for all the five influence dimensions.

**Individual prominence** of the next-higher is measured by three dimensions *connectivity*, *professional skill* and *self-evaluation (next-higher)*. Connectivity is an influence dimension from Mulder’s instrument (Mulder et al., 1983; Mulder, 1984), using six items, e.g. ‘He has considerable influence on people outside the organization (external environment)’. Professional skill is an influence dimension from Mulder’s instrument (Mulder et al., 1983; Mulder, 1984), using four items, e.g. ‘He is a highly skilled professional’. Self-evaluation (next-higher) is measured using items based on the Core Self-Evaluation Scale (Judge et al., 2003) that will be addressed below, e.g. ‘When he makes plans, he is convinced that he can make them succeed’. We use the same Likert scale as mentioned above. The score on each of the three measures is the mean of the item scores. Individual prominence is calculated as the mean of the three measures for every respondent. These three dimensions of individual prominence correlate strongly (Appendix II).

**Psychological empowerment** is measured using Spreitzer’s instrument (1995). It distinguishes four dimensions: *meaning*, *competence*, *self-determination* and *impact*. Each dimension is measured using four items, e.g. ‘The work I do is very important to me’ for meaning, ‘I have mastered the skills necessary for my job’

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<sup>11</sup> In our efforts to adapt, customize and extend the IAQ we had extensive conversations with the inventor of the instrument, Mauk Mulder who agreed on the changes.

for competence, 'I have significant influence over what happens in my department' for impact and 'I have significant autonomy in determining how I do my job' for self-determination. For our survey, we used the Dutch translation by Janssen et al. (1997). We use the same Likert scale as mentioned earlier. For every respondent we calculate a mean of the score on the four items, for all the four dimensions separately. Several authors (Spreitzer, 1995; Koberg et al., 1999; Seibert et al., 2011; Harris et al., 2009; Carless, 2004) conclude that one may use an overall scale for empowerment (measured by the average of the score on the four dimensions). This is followed by several (Gómez and Rosen, 2001; Chen and Klimoski, 2003; Chen et al., 2007; Wallace et al., 2011; Laschinger et al., 2004; Avey et al., 2008; Pieterse et al., 2010), but others (Gagné et al., 1997; Kraimer et al., 1999; Liden et al., 2000; Siegall and Gardner, 2000; Hon and Rensvold, 2006; Wang and Lee, 2009) use the dimensions separately. We preferred to keep the dimensions separate in order to analyze whether or not they have different antecedents.

**Self-evaluation (ego)** is measured using the Core Self-Evaluation Scale from Judge et al. (2003). It distinguishes four dimensions: *locus of control*, *self-esteem*, *generalized self-efficacy*, *neuroticism*. Each is measured using four items, e.g. 'I determine what will happen in my life' for locus of control, 'Sometimes when I fail I feel worthless' for neuroticism, 'When I try, I generally succeed' for generalized self-efficacy and 'Overall, I am satisfied with myself' for self-esteem. For the questions in Dutch we used the Dutch translation by de Pater et al. (2007) for which they have demonstrated reliability and validity. We use the same Likert scale as mentioned earlier. For every respondent we calculate a mean of the score on the four items, for all the four criteria. Self-evaluation is then calculated as the mean of the four criteria.

**Legal and ownership structure:** We got an up-to-date overview of the distribution of shares and share certificates, and we summarized this by type of owner (Table 2.4). The organizations provided also documents like statutes, agreements and contracts, and from these documents, we retrieved (i) the formal/legal *decisions* (e.g. appoint, suspend and dismiss directors, issue shares, change statutes, dissolution, merger, and split up of the company), (ii) *who* takes these decisions (bodies, and their members) and (iii) *how many* personal votes are needed to decide (Table 2.5). Together, ownership and the decision-making rules show to what extent authority is concentrated or distributed according to legal design. Legal design with concentrated authority is scored 1, and with distributed authority is scored 2.

Table 2.4: Example of recording ownership structure

Type of share and shareholder	Number of persons	Share
Priority shares		
Board member	1	50%
Normal shares		
Board member	1	29.7%
STAK		10%
Share certificates being 10% of normal shares		
Employees	38	44%
.....	.....	.....

Table 2.5: Example of recording legal decisions

Decision-making body	Members	Number of members	One vote per	Needed for decision	Decision	Document id
Management of the company	One director for every subsidiary	9	Director	Absolute majority	Calling an AGM, issue of shares, ...	3, 6
.....	.....	.....	.....	.....	.....	.....

**Organizational design** data come from interviews, where organizational issues and self-influence (see below) were addressed directly and indirectly. For example, when asking about behavior or decision-making, interviewees share accepted organizational rules (whether they like them or not). Through this approach we cover the reciprocal relationship between individual behavior and organizational structures which shape the identities of organizations (Doorewaard, 1989). As soon as people, consciously or not, behave according to organizational rules, they at the same time through their behavior reinforce the organizational rules. If people do not follow the rules (any more), these rules cease to exist.

The following organizational design concepts were covered in the interviews: span of control, shared goals, task feedback, group task significance, group responsibility, total compensation, group size, group stability, group task identity, group task variety, task interdependency, group composition, group coordination, outsider steering and task autonomy. For all interview items see Appendix III.<sup>12</sup> From the transcripts, we take all fragments that relate to organizational design, and categorized those by design concept. Before every fragment we put the code of the respondent. If a text fragment contains information about different subjects,

<sup>12</sup> In the SOLV case we did not do interviews, but use the data collected for Sinteur (2002). As the author was employed at SOLV between 1999 and 2005, this report is based on experience, observations and documents (Sinteur, 2002; Derix, 2000).

the text is used more often. We then annotated the fragments in one sentence using the respondents' words, after which we put the code who said this (Figure 2.1). If more respondents say similar things there are more codes behind the sentence. The codes of who said something are short but reveal the group someone belongs to, and the role someone has. For example, in one case the first letter of the code indicates the role (M is consultant, T is director, C is controller, S is sales), the second letter indicates the group, the third is a number (1 is first interviewee of that role in that group, 2 is second interviewee of that role in that group, etc.). Through this approach we have produced a systematic overview of what was said and by who, and this shows the shared and diverging views and expressions.

Figure 2.1 Organizing the interview data 1

<b>Design concept</b> Task feedback	
<b>Basis question</b> How are results determined?	
Every group has its own P&L	MF1, TG1, TS1, MT1, TD1, MI2, TC1
Only billable hours are registered and shared, not unbillable	TG1, MI2, CT1
We receive responses of our customers about our work	TT1

From the definitions of the design concepts, we extracted criteria (Appendix IV) of how design contributes to structural empowerment, to the distribution of authority and responsibility. We then match these criteria with what is said in the interviews. If what we found in a case corresponds strongly with those criteria, it is scored 'green', if it corresponds partially 'yellow', and 'red' if it corresponds hardly. The final score is the average of the individual scores. If this is between two colors, the relative weight of the criteria is decisive. Figure 2.2 gives as example our conclusion on group task identity for one case.

Figure 2.2 Organizing the interview data 2

Group task identity. The group task is an as complete as possible, delimited work package.
The group task is as complete as possible - Summary of our findings - Score: green
Responsibilities between groups are well delimited / demarcated - Summary of our findings - Score: yellow
Final score: green

For every case we rate in this way every design concept in terms of its support for distribution of authority and responsibility: Score is 1 if it does not support the distribution of authority and responsibility (red), and 2 if it does (green). We



highlight the characteristics that result in different levels of structural empowerment between the cases. Finally, we calculate an average for these organizational design concepts as measure for organizational design.

**Amount of self-influence** is also based on interviews. We first created a table of decisions likely to be made in the organizations under study, based on our own experience, adapted with the decisions found in interviews. In the interviews, we asked several direct questions about decision making, such as “How are decisions made within your group?”, “By whom?”, “What is your influence on decisions?”. We also searched within the interview transcripts for fragments that refer to decisions.

Following Manz (1992) we categorize decisions in *what* is to be done (tactical decisions, e.g., on standards and objectives), *why* it is to be done (strategic decisions) and *how* it is to be done (operational decisions). For every case we identified whether these decisions are made by group members (being the lowest level where a competent decision can be made) or whether they are made by or approved by higher levels in the organization (Table 2.6).

Table 2.6: Example of recording decisions made in groups

Category	Area of authority	Subject	Decision/ approval group member	Decision/ approval higher level
Operational	Work methods	Define individual work methods	1	
.....	.....	.....	.....	.....

In one case, PART, we also did two group interviews. In the individual interviews, group members told that decisions were made by managers, and at the same time talked about own decision-making – without reflecting on the tension between these two contradicting statements. Therefore we wanted to check how decision making within PART would be explained in group interviews. One was with a group working at the same client, the other was with a group working with the same technology. In the latter, the group collectively completed the decisions-table. We checked whether the results matched with the individual interviews. What decisions were made by whom remained the same, but in the group-interview, reflection did occur, and the group consensus emerged that decisions were made by managers contradicting the idea of own decision-making.

For SOLV we completed the table of decisions using data from our previous case description (Sinteur 2002), which was based on observations, documents (Derix, 2000), and own experience.

The table of decisions is used to calculate for the three cases the level of group autonomy (self-influence) as the ratio between the number of decisions made by group members and the total number of decisions for each category (operational, tactical, strategic).

**Structural empowerment:** the score for structural empowerment can now be obtained as the average of the scores on legal and ownership structure, organizational design, and the amount of self-influence (Table 2.7).

Table 2.7: Scoring structural empowerment

Score for distribution of authority and responsibility				
		SOLV	PART	NEXT
Legal and ownership structure		score	score	score
Organizational design	Design concept 1	score	score	score
	Design concept 2	score	score	score
	.....	.....	....	....
Average organizational design		average	average	average
Self-influence groups	Category 1	score	score	score
	Category 2	score	score	score
	.....	.....	....	....
Average amount of self-influence		average	average	average
Average (org / legal/ self-influence)		average	average	average

**Power use** data come from interviews and documents (business plans, minutes etc.). By asking organization members about power use, they mention power use which is acknowledged by them (whether they like it or not). Being acknowledged, it will influence their behavior. Individual power relations are relations of autonomy and dependence, which we earlier defined power distance. At the level of the organization power is predominance which takes shape in asymmetries in the use of power sources through which authority arises (Doorewaard, 1989). In asking about power use in interviews, we reveal these asymmetries in the use of power sources and reveal distribution of authority.

In interviews, we asked questions about (control of) decision making, without directly mentioning power. But also without asking directly about power use, interviewees regularly mentioned power use they observed. We searched in the interview protocols and the documents information about (i) who decides on what, and based on what power sources, and also by (ii) who controls access to decision making, and based on what power sources. The results are summarized in tables (Table 2.8 for an example) that show for every organization the degree of distribution of power. Also here, for SOLV the information comes from our earlier case study (Sinteur, 2002), observations, and documents (e.g., Derix, 2000).

Table 2.8: Example of recording power use

Who has influence	Based on what sources	Power source
Directors	Director of subsidiary, foundation	Legitimate
	Access to decision-making and information in (financial) management	Legitimate
Commercial successful consultants	Providing interesting assignments	Sanction
.....	.....	.....

**Politics** is measured by determining the use of ‘political’ language in company communication and by employees, reflecting the pervasiveness of the company’s story. We collected the labels, ceremonies and stories used to manage meaning and to manage the legitimation communicated for the use of power. Data come from interviews and company (PR) documents (e.g., the company website).

In interviews, we asked about values and norms, e.g., “what are the core values of your organization?” and “do core values differ per group?” (see Appendix III). However, we also searched the transcripts to find where interviewees refer to labels, ceremonies and stories in different contexts. This shows how strongly these are shared among the employees.

Then we compared behavior in practice with the official stories, leading to conclusions about what labels, ceremonies and stories are used to manage meaning? are the stories top down (mentioned in corporate communication) or bottom up (not mentioned in corporate communication)? how strongly are they shared (mentioned by different organization members)? and to what extent is behavior (practice) in line with these stories.

The interviews also revealed how language is used to legitimize and/or hide the use of (what kind of) power.

We recorded the findings in tables, which are used to summarize how strong the stories are (Table 2.9).

Table 2.9: Example of recording politics

Elements	Company
Top down story	Yes
Story Shared	Strongly
Daily behavior according to story	No
Language	Story used to legitimize and hide use of legitimate power

**Seniority** is measured as the average of age, number of years in service of the company and number of years of working experience. Information on age and length of service were provided by the organizations. Working experience was extracted from LinkedIn. Those who could not sufficiently be traced in LinkedIn were contacted personally.

**Gender** data were received from the organizations. We did not use this data because of the low percentage of women amongst respondents (21.8% within NEXT, 3.8% within PART, 0% within REFR and 13.8% within SOLV).

**Certificate owner** is scored yes or no, using data about the distribution of shares and share certificates which we received from the organizations.

**Out of service:** We followed organization members on LinkedIn for one year after finishing the study to find out who left the company, for all cases except SOLV. We did not use this data because of the low percentage of people leaving within one year (0% within NEXT, 2.6% within PART). REFR was with 15.4% the exception, but also small, easily leading to high percentages.

### **Longitudinal study:**

A set of variables is only created for the longitudinal study:

**Career after takeover:** We used LinkedIn for information about the employees who worked with SOLV at the time of our previous study (2001 – 2002). For every employee, we traced their careers within SOLV (and the holding TVW), and the career after the takeover of SOLV/TVW in 2004 by another company (DINR). We did the same for the employees who worked with NEXT at the time of the takeover. We identify the *type* of companies they moved to in the 2002-2014 period, and their type of contract with that company. We differentiate between: employee DINR, (co)owner TVW-spinoff, (co)owner other company, freelancer/independent, employee of a TVW-spinoff, and employee other company. Finally we register if the employee mentioned DINR on LinkedIn (since it took some time until TVW was fully integrated within DINR). For example see figure 2.3.

Figure 2.3 Organizing career data

146	BP Sinteur, Irene	1999 – 2005	Jan 2004 - Jun 2005 DINR	Jul 2005 - Jun 2006 PMtD	Jul 2006 - Present Sinteur Beheer BV
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Most of the employees could be traced with LinkedIn. Those who could not, were traced on the web (sometimes it was found that they were deceased) or by contacting colleagues with whom they had worked together.

**Importance attached to self-steering:** For the longitudinal study, we distributed a survey among the employees who worked with SOLV at the time of the take-over using items asking about the motive to stay with DINR or the motive to leave SOLV or DINR (see Appendix VII). Respondents could choose one or more of eleven answer categories. These categories are based on work-related motives of Kooij et al. (2011). They concern ‘sufficient autonomy’, ‘salary’, ‘secondary benefits’, ‘opportunities for continued growth’, ‘job security’, ‘interesting work’, ‘working with self-steering teams’, ‘possibilities to use competencies’, ‘adequate acknowledgement’, ‘relationship with next-higher’, ‘private reasons’. Respondents were also given the possibility to formulate their own motive and to explain their answers. The answers helped to divide the respondents into two groups: one group that mention decline in self-steering and need for autonomy as reasons to leave; another group for whom other motives did count.

**Months with SOLV** is measured calculating the difference in months between date out of service and date in service SOLV. Date in service was received from SOLV, date out of service was obtained using LinkedIn. If only the year was given instead of month than month out of service is July.

**Number of business projects within SOLV:** number of business projects that employees of SOLV had joined while working with SOLV, at the time of the previous study (2002). Data was received from SOLV.

**Months with DINR** is measured calculating difference in months between date out of service and date in service (January 2004) for employees of SOLV that stayed after the takeover. Date out of service was obtained using LinkedIn. If only the year was given instead of month than month out of service is July.

**Salary:** monthly salary with SOLV at the time of the previous study (2002). Data was received from SOLV.

**Role:** is scored 1 if an employee is a non-next-higher and 2 if an employee is a next-higher. Data were received from the organizations.

Not all data could be collected for all cases since our first case study dates from 2002. In Table 2.10 the availability of data is presented per case.

Table 2.10: Availability data per case

		SOLV	PART	NEXT
Structural empowerment		X	X	X
	Legal and ownership structure	X	X	X
	Organizational design	X	X	X
	Level of group self-influence groups	X	X	X
Power use	Who has influence based on what sources	X	X	X
Politics	Strength story and use language	X	X	X
Power distance				
	Sanction power	X	X	X
	Legitimate power	X	X	X
	Expert power	X	X	X
	Identification power	X	X	X
	Reciprocal open consultation	X	X	X
Psychological empowerment				
	Meaning		X	X
	Competence		X	X
	Self-determination		X	X
	Impact		X	X
Self-evaluation (ego)			X	X
Individual prominence		X	X	X
	Connectivity	X	X	X
	Professional skill	X	X	X
	Self-evaluation (next-higher)		X	X
Personal characteristics				
	Seniority	X	X	X
	Certificate owner		X	X
	Gender	X	X	X
	Out of service		X	X
	Career after takeover	X		X
	Importance attached to self-steering	X		
	Months with SOLV	X		
	Number of business projects within SOLV	X		
	Months with DINR	X		X
	Salary	X		
	Role	X	X	X

## 2.5 Analysis

Within the organizations we follow the formal units as they are recognized by the organization, as the perception of power depends on the group one belongs to (Haslam, 2001). Formal borders within the organization also create expectations on behavior which are self-fulfilling. Finally physical closeness that goes with identification and increased social interaction within established groups, contribute to the development of a common reference framework that has the tendency to reinforce the validity of separate political units (Pfeffer, 1981). Which

are relevant units can differ between organizations, and in our cases it are self-steering groups with their members and sometimes group leaders, and LLC's with their managers.

Power distance, individual prominence, psychological empowerment and self-evaluation are measured at the individual level, and for analysis at the organization or group level, we average the individuals' scores to a group/organization score.<sup>13</sup> Structural empowerment, the amount of self-influence of groups, power use, politics, legal structure, and ownership are measured at the level of the organization.

The reliability of the constructs power distance, individual prominence, psychological empowerment and self-evaluation was confirmed using factor analysis and reliability analysis (with Cronbach's alpha). See Appendix II for a more detailed description of the procedures. The models at the individual level were tested using statistical analysis with SPSS 24 and AMOS 24. Some descriptive statistics were calculated. With Structural Equation Modelling (SEM) we investigate for each of the cases the relations between personal characteristics, attributed individual prominence, self-evaluation, perception of the power distance and psychological empowerment. Since SEM requires that there be no missing data, only data of non-next-higher are used. The number of cases was 63, 96 and 112 for NEXT, PART and SOLV respectively, and only one respondent of NEXT was lost due to missing data.

After testing the model for the three organizations separately, we compare the results between the cases, and relate the differences to the differences in structural empowerment.

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<sup>13</sup> The so-called additive approach (Chan, 1998).

## Chapter 6: Conclusion

In the previous chapters, we investigated the relation between structural empowerment, power distance and psychological empowerment. Although the literature suggests that structural empowerment is a condition for psychological empowerment, authors understand the concept structural empowerment in diverging ways. So the first task in chapter 3 was the clarification of what the different aspects of structural empowerment are. When discussing the meaning of structural empowerment, the issue of power relations within organizations comes up, as increasing structural empowerment is expected to go together with reduced power distances. However, in the empirical empowerment literature the issue of power is hardly taken into account. In chapter 1 we have discussed the various dimensions of power that are used in following chapters. Chapter 3 compares three organizations with different levels of structural empowerment, and we found that stronger structural empowerment leads to smaller power distances. But at the same time, the empowerment stories in the three organizations are strong, which leads to equally high levels of reciprocal open consultation. Chapter 4 compares two companies and shows that more structural empowerment and related smaller power distance result in higher levels of psychological empowerment. In contrast to many other studies, we do not take psychological empowerment as a single variable but differentiate between four dimensions of psychological empowerment. We show which of these dimensions are related to structural empowerment and to the different power distance dimensions. As power use has structural and personal aspects, we take into account the influence of personal characteristics such as seniority, ownership, prominence and self-evaluation.

One of the cases in chapter 3 was already studied some fifteen years ago, and that enabled us to study now the long term development of the case, which is done in chapter 5. The company – with a high level of structural empowerment in several dimensions – was taken over by another firm in the early 2000<sup>th</sup>, a firm that had no structural empowerment implemented whatsoever. The longitudinal study brings two insights, one is the refinement of the characteristics of structural empowerment, especially on the role of shared ownership, the other about further careers of professionals that have worked under conditions of structural empowerment.

Below we summarize the findings, discuss how they answer the research questions and draw practical and theoretical conclusions.



### ***Structural empowerment***

We use the definition of structural empowerment as suggested by Maynard et al. (2012) and Seibert et al. (2004). They define structural empowerment as the delegation of authority and responsibility to organization members, to the lowest level in an organization where a competent decision can be made. Although several authors include in this definition also management *strategies* that are expected to support psychological empowerment, we argue that these are not part of structural empowerment because these strategies may also be used as alternative for structural empowerment: in that they enhance cognitive states of feeling empowered without actually sharing power. We showed that structural empowerment is achieved through (i) legal design and distributed ownership, (ii) situating a large amount of decision making power within groups, and (iii) specific organizational design characteristics (Q1)<sup>45</sup>.

Comparing three organizations suggests that structural empowerment increases when organizations consist of (point iii) work groups that are limited in size (group size), in which group members coordinate their tasks themselves (group coordination) and where job regulation responsibilities are distributed amongst group members (group responsibility), knowledge about the results of work activities are strongly shared (task feedback), and an incentive system is in place that rewards performance at individual and group and organizational level (total compensation). Furthermore, minimal external influence on work group performance (outsider steering) and maximum control for group members (task autonomy) also positively affect structural empowerment.

The organizations also differed in terms of the distribution of decision making power, leading to different levels of self-influence of groups (point ii). Self-influence means that group members decide *what* is to be done (tactical decisions, e.g., on standards and objectives), *why* it is to be done (strategic decisions) and *how* it is to be done (operational decisions). In the organizations studied, operational self-influence is high, giving the professionals room for doing their work. The differences occur at the tactical and strategic level.

Finally, the comparison of the organizations also suggests that the distribution of authority and responsibility, established through these organizational design characteristics, is only sustainable if it is supported by an appropriate legal and ownership structure (point i). Ownership in this context not only means sharing profits but also sharing voting rights on important decisions that influence the nature of the organization and affect the interests of the staff. Unequal distribution

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<sup>45</sup> Refers to the research questions as formulated in the various chapters.

of ownership means unequal distribution of power sources which limits the distribution of authority and responsibility.

### ***Power and power distance***

As is dominant in the empowerment literature, many organizations approach psychological empowerment as psychological state that should be attained without distribution of authority and responsibility through their legal and organizational design. Those organizations can increase psychological empowerment by using stories on empowerment that *energize* their staff (Q3). What we have shown in chapter 3 is that such strong stories may radically influence members' perception of the power distance: legitimate power is seen as irrelevant whereas reciprocal open consultation becomes a shared value. In other words, these stories hide discrepancies between the perception of the power distance as being small, and a factual power configuration without distribution of power. This is called organizational politics: deploying an effective PR and through strong stories, building an internal and external reputation of being empowering and *self-steering*, without actual implementation of this design concept. The literature suggests that this organizational politics can effectively hide the use of power (Pfeffer 1981; Doorewaard, 1989; Doorewaard and Brouns, 2003; Hardy and Leiba-O'Sullivan, 1998). However, we found that the actual level of structural empowerment, and related power use, also influence the perception of the power distance (Q2). We found that language and ideologies used to manage meaning do not completely hide power differences, as organization members do report power use, parallel to a strong adherence to the empowerment story. At the same time they seem not always aware of the large discrepancy between the story and the reality of power use.

We also investigated the role of personal characteristics, such as seniority and prominence, on the perception of power use and power distance (Q4). We found that in organizations with strong structural empowerment, the individual prominence attributed to the next-higher is relatively low and that more senior employees feel more independently and in their perception power distances are smaller.

### ***Psychological empowerment***

In chapter 4 we investigate the effect of structural empowerment and the corresponding power distance on psychological empowerment, at the individual and at the organizational level, by comparing two companies.

At the *organization level*, we distinguish in the analysis between the four dimensions of psychological empowerment. The level of structural empowerment and power distance are not related with the meaning dimension of psychological

empowerment nor with the competence dimension (Q5). Both organizations have similar average scores on these two dimensions. The companies are both knowledge intensive organizations with highly educated professionals, which may explain the similar scores on competence. The similar scores on the meaning dimension can be explained in two different ways. One is that the scores are the effect of the rather similar stories the companies have about themselves, stories that can be expected to have a strong influence on the beliefs, values and standards. The other is that Spreitzers' (1995) items on meaning do not capture influence from narrative politics, but reflect the meaning of the work people do (Menon, 2001), which are also rather similar between the two cases. Which of the two is the better would need additional research we will discuss below.

For the two other psychological empowerment dimensions, we do find differences between the cases. We did find a negative relation between the power distance and the score on the impact dimension of psychological empowerment: lower power distances go together with a higher score on the influence felt on the work unit. The same holds for the self-determination dimension: a lower power distance goes together with a higher score on influence on one's own work.

We found that the perceived level of reciprocal open consultation is similar in both cases, despite differences in structural empowerment. We interpreted that as the effect from the strong empowerment story. This effect becomes clear when comparing the psychological empowerment scores between roles and between groups (Q6). Large differences in the level of psychological empowerment between group members and their next-higher indicates that empowerment is a managerial strategy instead of real distribution of power: the next-higher has more power, and this is reflected in higher psychological empowerment. The same is true for small intergroup differences: if all groups have about the same level of psychological empowerment, psychological empowerment seems more a belief than reflecting power distances that differ between groups.

In the organization with centralization of power, the more-powerful are attributed high individual prominence, even higher than they do evaluate themselves, they are perceived as stronger leaders based on their position in the organization (Q7). In the organization with strong structural empowerment, next-higher score relatively low on prominence, and lower than they evaluate themselves. Also, the difference between self-evaluation of the less-powerful and the prominence attributed to the more-powerful is also small: a low perceived power distance.

At the *individual level*, we found that the power distance dimensions have a direct effect on psychological empowerment, but that there is no mediation by reciprocal open consultation as theory suggests. In cases where structural empowerment is high, the level of perceived reciprocal open consultation positively affects

psychological empowerment. Where structural empowerment is low, and organizational politics (the story) is strong, reciprocal consultation is uniformly high but has no effect on psychological empowerment (Q8). Instead, some power dimensions may have positive effects on psychological empowerment, which seems to depend on the leadership style. For example a supportive leader (sanction power – psychological approval) with decision-making power positively influences psychological empowerment (Parker and Price, 1994).

Similar to what we found at the organization level, organization members who perceive a lower power distance, experience higher levels of psychological empowerment, specifically on the empowerment dimensions impact and self-determination.

In line with the theory, we found that individual prominence goes together with power distance: Prominence attributed to the next-higher correlates positively with the score on all power distance dimensions, especially identification power and expert power, but also on reciprocal open consultation (Q9). This may be because people using strong power, are seen as highly confident, as strong leaders, but at the same time, highly confident people are more likely to be persuaded by good arguments of others (reciprocal open consultation). Therefore one has to look at the *difference* between the prominence of the more-powerful and the prominence attributed to the more-powerful: If the attributed prominence exceeds the self-reported prominence, than prominence is likely to be attributed to strong power use based on position, instead of large self-confidence. One is perceived as a strong leader without actually being one. Also the difference between the prominence of the less-powerful and the prominence attributed to the more-powerful is indicative: The smaller the difference, the stronger the upward power reduction tendency and the smaller the perceived power distance will be. Furthermore, as far as attributed prominence has a direct effect on psychological empowerment dimensions, this effect is positive. But it also positively influences power dimensions of which some have a positive and others have a negative effect on psychological empowerment dimensions. The effect of prominence on psychological empowerment is complex and needs further research.

Self-evaluation influences the perception of the power distance as well as psychological empowerment. The less positive the self-evaluation of an organization member, the stronger the role of legitimate power, indicating a larger acceptance of positional power. And, the more positive self-evaluation, the higher the score is on reciprocal open consultation. This shows that personal characteristics influence the perception of the power distance, and therefore also the power distance itself: Stronger self-evaluation neutralizes power differences to some extent (Q10). And as we saw before, if organization members attribute a lower self-evaluation to the more-powerful than to themselves, they also perceive

a smaller power distance. Finally, a positive self-evaluation also influences psychological empowerment. The more positive the self-evaluation, the higher psychological empowerment in terms of competence, and impact on the group. Also other personal characteristics influence psychological empowerment. Ownership correlates positively with empowerment-dimension impact. In an organization with distributed ownership, being one of the owners increases the feeling of influence on ones' work unit, in accordance with their actual influence through their legal vote. Finally, seniority does not affect psychological empowerment, but it influences the perception of the power distance: seniority makes less susceptible for power differences.

### ***Sustainability***

In situations of crisis, more-powerful are expected to use their power for securing their interests. Using the PART case, we showed that when an organization has a strong empowerment story but no structural empowerment, this use of power will easily be accepted by the less-powerful. They are used to the contradiction between story and actual power configuration, and are inclined to contribute to the company's mission, goals and objectives. Therefore, when story and actual power configuration do not match, they choose for *loyalty*. In contrast, the SOLV and NEXT case suggest that moderately high structural empowerment makes the use of power disputed (Q11). However, how this works out depends on the counter power of the less-powerful. In the NEXT case, where ownership is rather equally shared, the less-powerful have a vote in important decisions and therefore have real impact, enabling them to raise *voice* against power use. In contrast, the SOLV case shows that when ownership is concentrated, the less-powerful lack counter power, which hinders to raise voice against power use (Q12). However, they maintain their individual power (self-determination) based on competence. When story and actual power configuration no longer match, we found that *exit* was the dominant reaction (Q13). Within two years after being taken over by a non-self-steering company, already more than half of the SOLV members left. And we found that half of them again found or created other self-steering environments. A detailed study of the development of NEXT showed that not only knowledge and skills were a power source (expert power), but also a shared identity (identification power): In SOLV, the less-powerful saw themselves being in the same group as the owners, and therefore could not even think of collective resistance. In the NEXT case, the owners were seen as the others, whereas the NEXT employees shared a self-steering ideology. This different identity also made collective action easier, and resulted in the end in success.

### ***Summary***

Overall, these results suggest that the degree of structural empowerment positively influences the level of psychological empowerment. This holds especially for the dimensions impact and self-determination. Real distribution of power is beneficial for psychological empowerment and – as we expect – for its positive organizational effects. Secondly, without real delegation of authority and responsibility, empowering organizational forms are vulnerable, and easily threatened under conditions of crisis. On the longer term, psychological empowerment may therefore not be sustainable without structural empowerment, as may be the positive effects of psychological empowerment.

### ***Practical implications***

Firstly, clarifying the concept of structural empowerment and the role of power has a practical impact, as it informs organizations pursuing self-steering and empowerment about the nature and aspects of it: a combination of structural empowerment and small power distances. In our approach it is also stressed that power is part of every social system (Mulder, 1984), and consequently self-steering is a matter of degree in creating a more even power balance. The notion of degree versus ‘yes or no self-steering’ is of course very relevant in practical situations where possibilities for change always go together with constraints.

Secondly, we developed an instrument to measure empowerment. This instrument does measure empowerment in its symbolic sense, and the real distribution of power. And it does not only measure whether organization members believe they are in control, but also measures the actual control organization members have over their work. This instrument can be used to guide empowerment programs, such as the implementation of self-steering. It may also be used to evaluate to what extent these programs deliver on their power distribution promises and whether they are fad or fab (Maynard et al., 2012). Finally, the instrument can be used to create awareness of power differences, amongst less-powerful as well as more-powerful, in order to motivate them to take action to change the status quo.

### ***Theoretical implications***

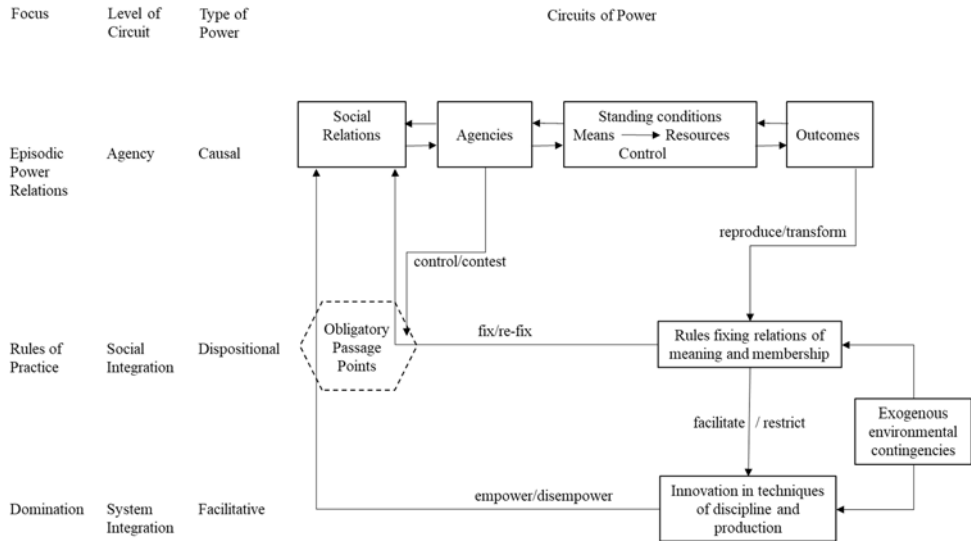
In this study, we contributed to the relevant theory in a few ways. Firstly, we have clarified the concept of structural empowerment as defined by Seibert et al. (2004) and Maynard et al. (2012). We excluded managerial empowerment practices, and restrict the definition to structural characteristics only: (i) the legal and ownership structure, a much-neglected dimension; (ii) the amount of self-influence of groups; and (iii) design concepts related to work, group and context of the group that enable or constrain the distribution of authority and responsibility. We have shown that in terms of this definition radical structural empowerment is possible.

Secondly, although several authors claim that the four dimensions of psychological empowerment can be reduced to one construct (Spreitzer, 1995; Koberg et al., 1999; Chen and Klimoski, 2003; Chen et al., 2007; Harris et al., 2009; Seibert et al., 2011; Wallace et al., 2011), our analysis show, in compliance with several other authors (Gagné et al., 1997; Kraimer et al., 1999; Liden et al., 2000; Siegall and Gardner, 2000; Hon and Rensvold, 2006; Wang and Lee, 2009), the opposite: it are clearly four separate dimensions, which are in different ways influenced by power use and power differences. As we showed, the meaning and the competence dimension play a different role compared to the impact and self-determination dimension. The latter relate to power differences and by aggregating the four dimensions this may become invisible.

Thirdly, we combined several concepts of power in our study and feel that this is useful to understand the relation between power and empowerment. In his *Frameworks of Power*, Stuart Clegg (1989) developed the *Circuits of Power* approach, based on an extensive review of the power literature. The concepts of power we distinguished as well as our research model can – with hindsight – be placed in this approach. Fitting our research model in the “circuits of power” may clarify and correct Clegg’s model on some aspects. And, as discussed below, it supports our conclusion that for psychological empowerment at least some structural empowerment is needed. Clegg distinguished three circuits of power (Clegg, 1989; Boje and Rosile, 2001), which together constitute his model (Figure 6.1):

- Episodic circuit (micro level) which contains the episodes of day to day interaction, work and outcomes, the intermittent exercise of power by agencies.
- Dispositional circuit (macro level) consisting of socially constructed rules, membership categories (us/them) and mental maps or blueprints. Rules socially construct meanings and membership relations. Here authority is legitimated.
- Facilitative circuit (macro level) which contains systems of reward and punishment and the materiality of technology, job design and networks. Here structures of domination arise, which empower/disempower agencies at the Episodic level.

Figure 6.1 Circuits of power (Clegg, 1989)



This model can be translated to our study. The Episodic circuit is where social relations, and therefore also power relations (the *relational approach* to power) are situated. Agencies are the employees, the next higher, and the various organizational entities that play a role. The agents in the power relations are motivated to use power sources they control (the *power sources approach*), and to reduce or increase power distances. This is influenced by the way they evaluate themselves as well as the agents to which they relate (the *motivational approach* to power).

A problem with the Episodic circuit is that it is in fact not conceptualized as a circuit, and does not specify the relations between the various boxes. Clegg clarifies it to some extent in that social relations constitute agencies, agencies use resources they control for producing outcomes. Arrows pointing in the left direction would represent ‘resistance’, and therefore would lead to a permanent dynamic. Most of the analyses in chapter 3 and 4 are at the level of the Episodic circuit, as we ask how social relations (level of structural empowerment, power distances, stories) influence the means and resources to control, and through this have an effect on outcomes (psychological empowerment).

The Dispositional circuit of power is where social integration takes place. In this circuit, the rules that order relations of meaning, membership and belonging are created. This is where we find organizational politics, using labels, ceremonies and stories, values and norms to manage meaning (the *constructivist approach*).



At this level, also the environmental contingencies that influence power relations play a role (the *contingency approach*).

The Facilitative circuit represents the change (innovation) of the techniques of production and of discipline. One such an innovation was in NEXT to introduce collective ownership, that when implemented, changes the social relations in the Episodic circuit.

The Episodic circuit consists of the acts of power, the Dispositional and Facilitative circuit represent the field of power. The Episodic circuit moves through these circuits of power. For example, the employees in our cases are knowledge workers working for clients. Since it is their knowledge that is sold, they have control over work outcomes. This gives them power to influence the meaning of what it is to be a consultant (Dispositional circuit) and to ask for rewards or more freedom and autonomy, through innovation of the organization (Facilitative circuit). Through this, empowerment may increase. However, the determination of the appropriate rewards and appropriate levels of autonomy, takes place in the Facilitative circuit, and the dominant meaning about this is constituted with the Dispositional circuit. The junctures where the circuits of power interact, are called obligatory passage points. The ‘obligatory points of passage’ represent stabilization of organizational innovation and of the meaning attached to this – which is the result of strategies of the various (collective) agents.

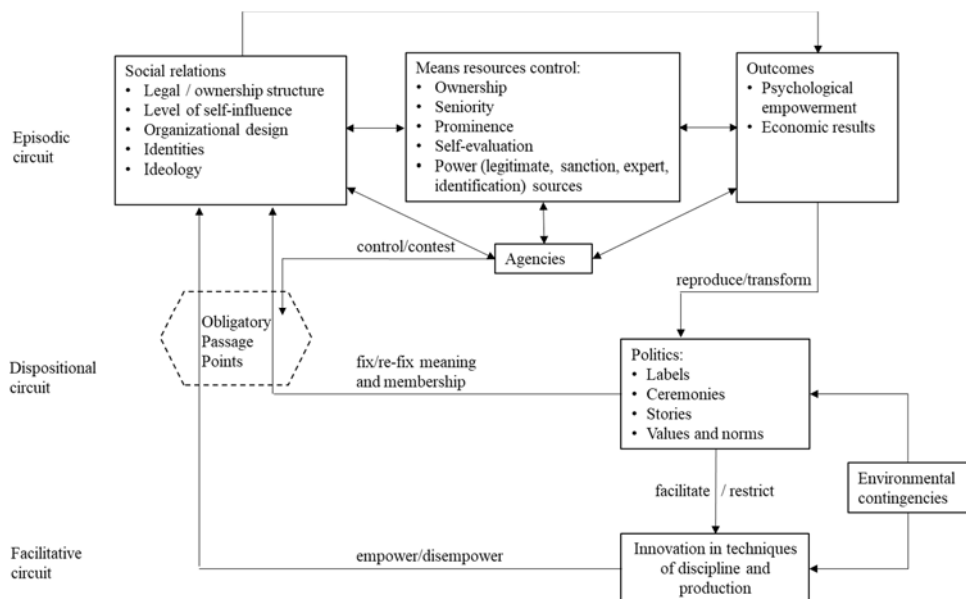
In chapter 5, we discuss various examples of the junction of the three circuits. The SOLV case showed how the legal authority of the owners (Episodic circuit: social relations) was not strong enough to intervene during a crisis, as the social identities and dominant stories were resources of the employees to resist. The decreasing economic results (outcomes) was used to question and transform the self-steering story. The owners started to delegitimize the strong business philosophy based on the five pillars (Dispositional circuit), under pressure of a declining market (environmental contingency). This was successful as most of the employees seemed to accept the changed story (obligatory passage point) and that enabled the owners to reduce the autonomy of the working groups (Innovation at the Facilitative level), and to use their legal and economic (ownership) power resources to sell the company (outcome in the Episodic circuit).

As the NEXT case showed, the organization members resisted DINR management when it wanted to sell NEXT (Episodic circuit). That was possible through collective action, resulting in a changed story (we are the real owners) which moved through the obligatory point of passage of being accepted even by DINR management, which sold NEXT to the employees (outcome in the Episodic circuit). The NEXT story resulted in innovation: shared ownership, which facilitated empowerment (Facilitative circuit).

These examples explain that for empowerment at least some structural empowerment is needed. Within NEXT, through organizational innovation (Facilitative circuit), the social structure of the company is characterized by distributed legal and ownership structure, by a high level of self-influence and by a design that leads to a stronger distribution of authority and responsibility, structural empowerment is embedded in the Episodic circuit of power. And these organizational innovations and the use of the gained power resources are facilitated by the dominant story (Dispositional circuit). This enables reciprocal influencing and enables organization members of NEXT to stabilize the self-steering model, as possibilities to control and contest the passage points remain distributed.

In contrast, organization members of PART lack structural empowerment at the level of social relations in the company (Episodic circuit), and also cannot influence innovation in that direction (Facilitative circuit) as the story is hiding this lack of power (Dispositional circuit), which hinders at the level of the Episodic circuit to reformulate interests and collectively strive for more structural empowerment. So the transformation of the story, the organizational innovation, and the influencing of the passage points are all blocked. Interestingly, some changes towards structural empowerment are taking place more recently, but these originate from changes in the view of the management of the company.

Figure 6.2: Our research model within the ‘circuits of power’



## Summary

Recently the concept of autonomous self-steering teams has regained popularity in management discourse and in the public debate. However, consensus is lacking on a shared definition and how to implement self-steering in practice, and the role of power is rather ignored. In a comparative case study of three organizations and a longitudinal study of one of these organizations, we contribute to improving the concept of ‘self’-steering by analyzing the role of power within self-steering.

The discussion on self-steering comes from a long tradition. Already in the 1960s, experiments were done with autonomous groups (Cooney, 2004). Organizational design using such groups became subject of the sociotechnical systems approach. At the individual level focus was on job enrichment in order to enlarge motivation and productivity of employees (Vough and Parker, 2008). In the 1980s, self-management and self-leadership were introduced as concepts of how people manage and lead themselves (Stewart et al., 2011). In the 1990s, empowerment gained interest as management strategy to stimulate employees to become more proactive and effective (Cooney, 2004).

Extensive literature on the outcomes of empowerment provide evidence that it is positively related to job satisfaction, organizational commitment and performance, and negatively to strain and turnover (Seibert et al., 2011; Maynard et al., 2012). These behavioral and motivational effects are not the only reason for the current popularity of empowering management concepts such as self-steering. By identifying themselves with popular management concepts, organizations gain legitimacy and cultural support, which improves their external reputation, even when these concepts are not actually implemented (Staw and Epstein, 2000). However, only story telling about self-steering is not without risk: not meeting created expectations of sharing power is an important reason for empowerment programs to fail (Hardy and Leiba-O’Sullivan, 1998; Harley, 1999).

In the empowerment debate originally the focus was on authority, i.e. on sharing power (Kanter, 1993). This resulted in the concept of *structural empowerment*. However in literature there are diverging perspectives on the definition of structural empowerment. In most of these, managerial behavior is not distinguished from structural dimensions. In this study we explicitly make this distinction and restrict structural empowerment to what we see as its core: the delegation of authority and responsibility to employees, more specifically to the lowest level in an organization where a competent decision can be made (Seibert et al., 2004). When the concept of empowerment was adopted by management literature, it was adapted to management discourse and the focus was on empowerment as giving energy, instead of authority, in order to get work done

and increase productivity (Thomas and Velthouse, 1990; Bartunek and Spreitzer, 2006). This resulted in the concept of psychological empowerment which dominates the empowerment debate. *Psychological empowerment* is an intrinsic motivation reflecting a sense of control in relation to one's work and an active orientation to one's work role. It is manifested in four cognitions (Thomas and Velthouse, 1990): *meaning*: the alignment between the demands of the work role, and one's own beliefs, values and standards; *competence*: the belief in one's capability to successfully perform work activities; *self-determination*: a sense of choice concerning the initiation or regulation of one's actions; and *impact*: the belief that one can influence strategic, administrative, or operational activities and outcomes in one's work unit.

For studying the much neglected role of power within empowerment, we use different power approaches. We explain them by positioning them, with hindsight, within the model of Clegg (1989) that shows how power works in organizations through three connected power circuits:

- The Episodic circuit is where social relations, including power relations, are situated. In a power relation the more-powerful has more influence on the behavior of the less-powerful than reverse (*the relational approach*) (Pfeffer, 1981; Mulder, 1984). The agents in the power relations are motivated to use power sources they control: legitimate power, expert power, sanction power, identification power (*the power sources approach*) (French and Raven, 1959; Mulder, 1984), and to reduce or increase power distances (Mulder, 1984; Hofstede, 1984) which is influenced by the way they evaluate themselves as well as the agents they relate to (*the motivational approach*) (Mulder, 1984). For self-steering, the non-power relation (reciprocal open consultation) seems important as it is the relationship in which everyone, including the one who is otherwise more-powerful, is prepared to be persuaded by good arguments of the others. This relationship is only possible if the other power sources are not too unevenly distributed (Mulder, 1984, 2004).
- The Dispositional circuit of power is where social integration takes place. In this circuit, the rules that order relations of meaning, membership and belonging are created. This is where we find organizational politics, using labels, ceremonies and stories, values and norms to manage meaning (*the constructivist approach*) (Pfeffer, 1981; Hardy and Leiba-O'Sullivan, 1998; Doorewaard, 1989). At this level, also the environmental contingencies that influence power relations play a role (*the contingency approach*) (Lawrence and Lorsch, 1967; Mintzberg, 1983; Koopman and Pool, 1992). Important is the situation of crisis in which organizations often face recentralization of power and strong centralized leadership

(Staw et al., 1981; Boin and 't Hart, 2003; Drabek and McEntire, 2003). This would imply that decentralized organizational concepts as self-steering are vulnerable during such situations.

- The Facilitative circuit represents the change (innovation) of the techniques of production and of exercising power. Here are the structural characteristics of the organization created, including the level of structural empowerment: organizational design supporting or restricting distribution of authority and responsibility, and the structures of ownership.

Using this approach, the following questions are answered:

- Q1: What aspects of structural empowerment are deterrent for the distribution of authority and responsibility?
- Q2: How do organization members perceive the power distances in the organization, under different conditions of structural empowerment and politics of pervasive empowerment stories? Do members believe the story also when the structural conditions contradict it?
- Q3: What is the effect of structural empowerment, and the perception of the power distance, on psychological empowerment? And how do pervasive empowerment stories told by organizations influence this relation?
- Q4: How do self-steering organizations behave under crisis?

In order to answer these questions, we study three companies, PART, NEXT and SOLV, which are knowledge intensive organizations providing business services in the fields of IT and/or finance. The organizations are characterized by highly educated members who have the competences needed to take on authority and responsibility in order to respond to the economically and technologically highly dynamic constellations in which they work. For answering questions 1, 2, and 3, we compare the organizations. In order to investigate the behavior under conditions of crisis, we conducted a longitudinal case study of one of the cases.

For this study different data sources are used: formal and legal documents, business communication and websites, interviews, observation and a survey. The questionnaire consists of (i) the Core Self Evaluation instrument, containing 12 questions (Judge et al., 2003), (ii) the Psychological Empowerment instrument, containing 12 questions (Spreitzer, 1995) and (iii) the customized Interaction Analysis Questionnaire (IAQ) (Mulder, 1984), containing between 42 and 51 questions depending on the case. We used a Likert scale consisting of six categories, coded from -3 (totally disagree) to +3 (totally agree) and avoiding the 'no opinion' or 'neutral' option, to force respondents to express an opinion. As power use relates to personal characteristics, we also collected information

through the organizations and LinkedIn about gender, ownership and seniority, and the latter is composed of age, years in the companies and years of working experience. The questionnaire had a response of 68% up to 75%. The survey data are analyzed using SPSS24 and AMOS24. We interviewed in PART and NEXT members with a variety of roles. Interviewees in these two organizations were 16% and 27%. In SOLV we did not do interviews, but use the data collected for Sinteur (2002). For tracing the careers of 95% of the former employees of the case in our longitudinal study we used LinkedIn.

Comparing three organizations – based on documents, websites, and interview data - suggests that the next aspects of structural empowerment are crucial for distributing authority and responsibility (Q1):

- Organizational design concepts: work groups that are limited in size (group size), in which group members coordinate their tasks themselves (group coordination) and where job regulation responsibilities are distributed amongst group members (group responsibility), where knowledge about the results of work activities is strongly shared (task feedback), and an incentive system is in place that rewards performance at individual and group and organizational level (total compensation), with minimum external influence on work group performance (outsider steering) and maximum control for group members (task autonomy).
- Distribution of decision making in which group members not only decide upon how they do their work (operational) but also what is to be done (tactical) and why (strategic).
- Legal design and ownership structure supporting an equal distribution of ownership, where ownership not only means sharing profits but also sharing voting rights on important decisions that influence the nature of the organization and affect the interests of the staff.

The organizations differ in structural empowerment in that it is strongly present in NEXT on all aspects, reasonably in SOLV (in distribution of decision making and organizational design and not legal design and ownership) and not in PART.

Despite the differences in structural empowerment, all three organizations have strong stories on empowerment and self-steering. These stories influence members' perception of the power distance (Q2): in all three organizations legitimate power is seen as irrelevant whereas reciprocal open consultation is a shared value. This shows the effectivity of these stories in hiding the discrepancy between the perception of small power differences and a factual power configuration without distribution of power. These stories create an external as well as internal reputation of an empowering and self-steering organization, without the necessity of actual implementation of these concepts. However, we found that language and ideologies used to manage meaning do not completely

hide power differences. In PART, with hardly any structural empowerment, the power distance is larger than in the other two companies. Also in interviews organization members of PART do report power use, parallel to a strong adherence to the empowerment story. At the same time they seem not always aware of the large discrepancy between the story and the reality of power use.

The comparison of cases shows at the organization level that the level of structural empowerment and power distance are related to psychological empowerment (Q3), more specifically: lower power distances go together with a higher score on the influence felt on the work unit (*impact*) and with a higher score on influence on one's own work (*self-determination*). Within PART, with hardly any structural empowerment, differences in the level of psychological empowerment between group members and their next-higher are large compared to NEXT, which indicates that within PART empowerment is a managerial strategy instead of real distribution of power: the next-higher has more power, and this is reflected in higher psychological empowerment. The same is true for intergroup differences: within PART all groups have about the same level of psychological empowerment, which indicates that psychological empowerment is more a shared belief within the organization than a reflection of differences in power distances within groups. The latter is the case within NEXT: there power differences within groups are reflected in differences in the levels of psychological empowerment.

At the individual level, we found that the power distance dimensions have a direct effect on psychological empowerment, but that there is no mediation by reciprocal open consultation as theory suggests. Similar to what we found at the organization level, organization members who perceive a lower power distance, experience higher levels of psychological empowerment, specifically on the dimensions impact and self-determination. In the organization without structural empowerment, and with a corresponding large power distance, reciprocal open consultation proved to have no influence on the level of psychological empowerment. One can conclude that the latter is reached through empowering stories. In the organization with structural empowerment, and with the corresponding small power distance, reciprocal open consultation influences the level of psychological empowerment leading to a higher level of psychological empowerment. Comparing the two cases shows the difference between on the one hand empowerment as a real distribution of power and on the other hand empowerment as a managerial strategy.

Self-evaluation influences the perception of the power distance as well as psychological empowerment. The less positive the self-evaluation of an organization member, the stronger the role of legitimate power, indicating a larger acceptance of positional power. The more positive the self-evaluation, the higher the score on reciprocal open consultation. This shows that personal characteristics

influence the perception of the power distance, and therefore also the power distance itself: Stronger self-evaluation neutralizes power differences to some extent. And, if organization members attribute a lower self-evaluation to the more-powerful than to themselves, they perceive a smaller power distance. And, the more positive the self-evaluation, the higher psychological empowerment in terms of competence, and impact on the group.

Also other personal characteristics influence psychological empowerment. In an organization with distributed ownership, being one of the owners increases the feeling of influence on ones' work unit (impact), in accordance with their actual influence through their legal vote. Finally, seniority does not affect psychological empowerment, but it influences the perception of the power distance: seniority makes less susceptible for power differences.

Crisis situations are a good context to study how power works. In situations of crisis (Q4), more-powerful are expected to use their power for securing their interests. The PART case confirms this. Despite a strong empowerment story, the lack of structural empowerment makes that this use of power is easily accepted by the less-powerful. They are used to the contradiction between story and actual power configuration, and are inclined to contribute to the company's mission, goals and objectives. Therefore, when story and actual power configuration do not match, they choose for *loyalty* (Hirschman, 1970). In contrast, the SOLV and NEXT case suggest that moderately high structural empowerment makes the use of power disputed. How this works out depends on the counter power of the less-powerful. In the SOLV case, where structural empowerment is strong through distribution of decision making and organizational design, but where ownership is concentrated, the legitimate power of owners was not enough to intervene. Power use is averted based on the social relations (episodic circuit) and dominant stories (dispositional circuit). But the owners used the economic decline (environmental contingency) to put the business philosophy up for discussion (dispositional circuit). With success, most organization members accept the changed story through which owners can restrict the autonomy of self-steering groups (innovation in facilitative circuit) and eventually sell the company to a non-self-steering organization. At that moment the less-powerful lack counter power, which hinders them to raise *voice* (Hirschman, 1970) against power use. However, they maintain their individual power (self-determination) based on competence. When story and actual power configuration no longer match, *exit* was the dominant reaction: within two years after the takeover already more than half of the SOLV members had left. And we found that half of them again found or created other self-steering environments.

NEXT, part of the same takeover, stayed relatively independent and kept its self-steering principles. When the new owner decided to sell all subsidiaries including



NEXT (episodic circuit), employees resisted and offered to buy the company themselves, the alternative being their collective resignation. After a long and difficult process the owner accepted the story as changed by the members – “we all are owners”. In 2012 NEXT became independent again with 110 employees of which 68 are owner. The price they paid for the company was earned back within two years.

A detailed study of the development of NEXT shows that not only knowledge and skills were a power source (expert power), but also a shared identity (identification power): In SOLV, the less-powerful saw themselves being in the same group as the owners, and therefore could not even think of collective resistance. In the NEXT case, the new ‘traditional’ company and its management was seen as the ‘others’, whereas the NEXT employees shared a self-steering ideology (dispositional circuit). This different identity also made collective action easier. In the employee buyout an explicit choice was made for distributed ownership, where less-powerful have a voice in important decisions (innovation in facilitative circuit). With this innovation the social structure of the organization is characterized by a distributed legal and ownership structure, distributed decision making and an organizational design supporting distribution of authority and responsibility: structural empowerment is embedded in the episodic circuit. This innovation is supported by the dominant story (dispositional circuit). This enables reciprocal open consultation and enables organization members of NEXT to stabilize the self-steering model because possibilities to control and influence passages between the circuits remain distributed.

Concluding, without actual distribution of authority and responsibility, decentralized organizational concepts as self-steering are vulnerable, especially in crisis situations. In the long term, psychological empowerment and its related behavioral and motivational effects, may not be sustainable without a high level of structural empowerment, including distributed ownership.

Our theoretical contribution is that we have clarified the concept of structural empowerment as defined by Seibert et al. (2004). We have also shown that in terms of this definition radical structural empowerment is possible. Also we showed that the four dimensions of psychological empowerment should be treated as four separate dimensions, which are differently influenced by power differences and power use. Finally, combining several concepts of power helps understanding the relation between power and empowerment. The ‘Circuits of Power’ approach (Clegg, 1989) supports our conclusion that for psychological empowerment at least some structural empowerment is needed.

Our study also has practical implications, as it informs organizations that pursuing self-steering and empowerment requires a combination of structural

empowerment and small power distances. And that self-steering is a matter of degree in creating a more even power balance. Secondly, for our research we developed an instrument to measure empowerment in its symbolic sense as well as the actual distribution of power. This instrument can be used to guide empowerment programs, such as the implementation of self-steering, and can also be used to evaluate to what extent these programs deliver in terms of power distribution. Finally, the instrument can be used to create awareness of power differences, amongst less-powerful as well as more-powerful, in order to motivate them to take action to change the status quo.

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- NEXT (2011e) *Administratievoorwaarden Stichting <BV>.*

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<sup>46</sup> Specific names have been replaced by BV (LLC), eigenaar (owner) and medewerker (employee) respectively for privacy/confidentiality reasons.

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## Appendix I Definitions

This appendix contains the definition of the concepts used in our research model, in alphabetical order.

*Competence*: one's belief in one's capability to successfully perform work activities.

*Connectivity*: recognition of connections of the next-higher inside the company with other groups, inside the company with higher level members and outside the company (Mulder, 1984).

*Expert power*: the less-powerful believes that the more-powerful has a higher level of skill and/or more relevant information than he has and is therefore willing to follow him.

*Identification power*: the less-powerful feels that he and the more-powerful are similar in important respects, and is therefore willing to follow him.

*Impact*: one's belief that one can influence strategic, administrative, or operational activities and outcomes in one's work unit.

*Importance attached to self-steering*: was, for employees who worked with SOLV at the time of our previous study, self-steering a motive to stay with DINR or to leave SOLV or DINR.

*Individual prominence*: perception of the worker regarding: *Connectivity*, *Professional skill*, *Self-evaluation (next-higher)*.

*Legal and ownership structure*: the legal and ownership structure which determine the distribution of legal authority and responsibility within the organization.

*Legitimate power*: the less-powerful is willing to follow the more-powerful because he believes he ought to, based on the formal position the more-powerful has within the organization.

*Level of group self-influence*: the amount of decision making authority and responsibility that resides within groups.

*Meaning*: the alignment between the demands of one's work role and one's own beliefs, values and standards.

*Organizational design*: design concepts related to work, group and context of the group that enable or constrain the decentralization of authority and responsibility.

*Politics*: language, symbols, rituals, ceremonies, ideologies which create everyday beliefs and practices that allow grievances not to exist, demands not to be made, conflict not to arise, resistance not to occur (Pfeffer, 1981).

*Power distance*: perception of the worker regarding the power distribution (Mulder, 1984). Consisting of qualifications: *Sanction power*, *Legitimate power*, *Expert power*, *Identification power*, *Reciprocal open consultation*.

*Power use*: use of power sources by actors to influence outcomes of and access to decision making.

*Professional skill*: the more-powerful possesses, according to the less-powerful, professional skills not directly related to the less-powerful's own professional skill (Mulder, 1984).

*Psychological empowerment*: strength of one's sense of control and active orientation towards work (Spreitzer, 1995). Consisting of dimensions: *Meaning*, *Competence*, *Self-determination*, *Impact*

*Reciprocal open consultation*: everyone, including the one who is otherwise more-powerful in the social system, is prepared to be persuaded by good arguments of the others.

*Role*: whether an employee is a next-higher or a non-next-higher.

*Sanction power*: the less-powerful believes that the more-powerful has the ability to reward and/or punish him and he is therefore willing to follow the more-powerful.

*Self-determination*: one's sense of choice concerning the initiation or regulation of one's actions.

*Self-evaluation (ego)*: the perception of one's worthiness, competence and capabilities in relation to one's environment (Seibert et al., 2011).

*Self-evaluation (next-higher)*: the perception of the worthiness, competence and capabilities of the next-higher, in relation to his/her environment, as perceived by the less-powerful.

*Structural empowerment*: distribution of authority and responsibility to the lowest level where a competent decision can be made (Seibert et al., 2004).

## Appendix II Instrument

In this appendix we explain the instrument we used. After a brief introduction on the content of the questionnaire, the way we tested it and the response, we explain the changes we made during the study and reliability and validity of the final instrument.

### *Questionnaire*

The questionnaire consists of three elements: Core Self Evaluation, containing 12 questions (Judge et al., 2003), Psychological empowerment, containing 12 questions (Spreitzer, 1995) and Qualification of the power distance (Mulder, 1984), containing 42 up to 51 questions depending on the case.

For the questions on psychological empowerment (Spreitzer, 1995), we used the Dutch translation of Janssen et al. (1997). For the questions on Core Self Evaluation (Judge et al., 2003) we used the Dutch translation of de Pater et al. (2007) for which they proved reliability and validity. For the Qualification of the power distance we used the Interaction Analysis Questionnaire (IAQ) of Mulder (1984) which we used in our previous research (Sinteur, 2002).

The questionnaire is organized in two parts. The questions on Core Self Evaluation and on Psychological empowerment are, randomly mixed, presented in the first part of the survey which is introduced as questions about how the respondent stands in life and work. The IAQ is incorporated in the second part of the survey which is introduced as questions about the relation of the respondent with the next higher within the organization. In the overall introduction of the survey we mentioned that joining the survey is voluntary, that results would be treated confidentially and that the results would be presented in such a way that they could not be traced back to one or a few respondents.

### *Response*

The cases, in chronological order, with number of completed surveys is presented in Table II.1.

Table II.1: Surveys per case

Organization	Response	Response rate	Number employees	Type
NEXT	78	73.6	106	15 next-higher, 63 group members
PART	106	74.6	142	10 next-higher, 96 group members
REFR	13	100.0	13	8 next-higher, 5 group members
SOLV	130	67.7	192	18 next-higher, 112 group members

## *Changes*

The items we use for measuring psychological empowerment and self-evaluation (ego), which we introduced after case SOLV, remain unchanged throughout the study. This is because these are questionnaires used often in research and for which reliability and validity is proven.

Changes in our instrument concern the Interaction Analysis Questionnaire (IAQ) of Mulder (1984). The reason for changing this instrument lies in the fact that the IAQ is developed and tested within the context of 'traditional' organizations and based on experiments. In our previous research (Sinteur, 2002) we concluded that this instrument is valid in the context of a case study of a self-steering organization. At the same time we think the instrument can be better adjusted to common language and interactions within self-steering organizations. For adapting and customizing the IAQ we extensively collaborated with the original author.

Our first case, REFR, with only 13 respondents, was explicitly used to analyze the interpretation of the questions in the context of a self-steering organization. For this we observed respondents filling in the questionnaire and changed questions to improve interpretation. After cases SOLV, PART and NEXT, using factor analysis, we investigated whether the items we used for measuring influence factors, indeed measure the underlying variables we intend to measure. Using Cronbach's alpha we tested the reliability of these variables. Based on this analysis we changed questions.

After finishing the case studies we analyzed the complete dataset. This includes the data of every case and the data of influence factors, psychological empowerment and self-evaluation (ego). Based on the reliability of influence factors we made a final decision about the composition of our variables for measuring influence factors. Based on factor analysis we concluded whether the items we chose indeed measure the underlying variables we intended to measure. We also report on reliability and validity of psychological empowerment and self-evaluation (ego).

With the Cronbach's alpha we used list wise deletion which means that when a respondent had a missing value for one of the items within a variable, all responses of this respondent are excluded from the analysis. With factor analysis we used pair wise deletion (if possible) which means that when a respondent had a missing value for one of the items only the specific missing values are excluded from that analysis. Missing values in data are those questions that were not asked in specific cases (for example respondents who do not have a next-higher are not asked questions about the next-higher), which we coded '888', and those questions that



were not answered by the respondent, which we coded '999'. So we have two types of missing values:

- '888' question not asked
- '999' answer not given

Factor analysis was done on the items (principal component analysis, rotation is Varimax, exclude cases pairwise), in two ways: (i) Eigenvalues larger than 1; (ii) Extract the number of factors equal to the number of variables we intended to measure.

We used a Likert scale consisting of six categories, coded -3 totally disagree, -2 disagree, -1 disagree a little, 1 agree a little, 2 agree, 3 totally agree, and disregarding the 0, the 'no opinion' or 'neutral' option, to force respondents to express an opinion. Within this scale the distance between -1 (disagree a little) and +1 (agree a little) is larger than the distance between the other categories. Recoding to a 1 to 6 scale showed that this does not influence the results.

### *Composition of influence factor variables*

Based on the analysis per case and of the complete dataset, the influence factor variables are composed of the following items (see appendix V):

- Connectivity: Acnt26, Acnt32, Acnt41, Acnt48, Acnt55, Acnt64
- Expert power: Ixpt37, Ixpt54, Ixpt62
- Legitimate power: Ilgt34, Ilgt44, Ilgt49, Ilgt65
- Identification power: Iidf39, Iidf47, Iidf52, Iidf63, Iidf71
- Sanction power: Isnc31, Isnc36, Isnc50, Isnc58, Isnc66, Isnc69
- Professional skill: Aprf25, Aprf40, Aprf57, Aprf68
- Reciprocal open consultation: Iroc43, Iroc46, Iroc59, Iroc61, Iroc78
- Self-evaluation (next higher): Aslf42, Aslf56, Aslf67, Aslf72, Aslf74
- Individual prominence: Connectivity, Professional skill, Self-evaluation (next higher)

The variables are composed of the same items for every case, except for:

- Connectivity: REFR does not have Acnt26 and Acnt32.
- Reciprocal open consultation: REFR and PART do not have Iroc78 and SOLV does not have Iroc43 and Iroc59.
- Sanction power: SOLV does not have Isnc36 and Isnc69.
- Self-evaluation (next higher): no values for SOLV.
- Individual prominence: no values for Self-evaluation (next higher) for SOLV.

This means that we have two variants of connectivity and sanction power, and three variants for reciprocal open consultation. Based on the strong correlation between the different operationalizations of the variables and the significance of 0 (table II.2), we can see that the variables hardly differ depending on their composition. This means that our variables are robust:

- Connectivity:
  - Acnt1: Acnt26, Acnt32, Acnt41, Acnt48, Acnt55, Acnt64
  - Acnt2: Acnt41, Acnt48, Acnt55, Acnt64
- Reciprocal open consultation:
  - Iroc1: Iroc43, Iroc46, Iroc59, Iroc61, Iroc78
  - Iroc2: Iroc43, Iroc46, Iroc59, Iroc61
  - Iroc3: Iroc46, Iroc61, Iroc78
- Sanction power:
  - Isnc1: Isnc31, Isnc36, Isnc50, Isnc58, Isnc66, Isnc69
  - Isnc2: Isnc31, Isnc50, Isnc58, Isnc66

Table II.2: Correlations between operationalizations

Between:	Pearson correlation	Sign	N
Acnt1 – Acnt2	0.971	.000	311
Isnc1 – Isnc2	0.939	.000	312
Iroc1 – Iroc2	0.941	.000	312
Iroc1 – Iroc3	0.900	.000	312
Iroc2 – Iroc3	0.968	.000	312

### *Analysis Individual prominence*

As we saw in chapter 2, prominence is defined as enterprising, highly self-confident, capable, energetic and risk-taking. Besides power use, especially expert power, it is found to relate with upward influence or outward influence (Mulder et al., 1971, 1983; Mulder, 1984) (Mulder et al., 1971, 1983; Mulder, 1984) or both (Kanter, 1979). This is ‘the’ leadership factor. In our instrument, factors professional skill and self-evaluation (next higher) and connectivity measure this individual prominence. All three measure traits of the next higher without expressing difference in power. These factors correlate strongly (Table II.3) and have overall reliability (Table II.4).

Table II.3 Correlations individual prominence factors

		Connectivity	Professional skill	Self-evaluation (next higher)
Connectivity	Pearson Correlation	1	.508**	.495**
	Sig. (2-tailed)		.000	.000
	N	158	158	158
Professional skill	Pearson Correlation	.508**	1	.413**
	Sig. (2-tailed)	.000		.000
	N	158	159	158
Self-evaluation (next higher)	Pearson Correlation	.495**	.413**	1
	Sig. (2-tailed)	.000	.000	
	N	158	158	158

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table II.4 Reliability individual prominence factors

Cronbach's Alpha	SOLV	REFR	PART	NEXT	All	N (all)	Excluded
Professional skill, Self-evaluation (next higher) and Connectivity	*	.508	.737	.731	.706	181	146
Professional skill, and Connectivity	.555	.488	.759	.582	.567	311	16

\* These questions were not asked in the case of SOLV

### *Analysis Self-evaluation (ego)*

The reliability for the variables used for Self-evaluation is low (Table II.5), therefore we look at the factor analysis (Table II.6).

Table II.5 Reliability Self-evaluation (ego)

Cronbach's Alpha	SOLV*	REFR	PART	NEXT	All	N (all)	Excluded
Self-evaluation (ego)		.709	.665	.712	.683	197	130
- Locus of control Sloc3, Sloc13, Sloc21		-.261	.371	.359	.331	197	130
- Self-esteem Sses14, Sses23, Sses24		.679	.600	.574	.608	197	130
- Generalized self-efficacy Sgse15, Sgse17, Sgse20		.130	.478	.444	.419	197	130
- Neuroticism Sneu5, Sneu10, Sneu19		.596	.589	.464	.587	197	130

\* These questions were not asked in the case of SOLV

To see how well Self-evaluation (ego) is measured, we ran a factor analysis of the influence variables without Self-evaluation (next higher) and with Self-evaluation (ego) because the latter measure similar variables. We also excluded Professional skill from the analysis because this is used to explain influence factors (Expert power and Reciprocal open consultation).

Principal component analysis (suppress small coefficients absolute value below 0.3, eigenvalues greater than 1, Rotation is Varimax, exclude cases pair wise) results in 12 components, total variance explained is 68,975 and rotation converged in 17 iterations. Iroc78 is a factor in itself (.593) and scores on Iroc (.594). Therefore we repeated the factor analysis fixing the number of factors to 11).

Number of components extracted:

- 11: Reciprocal open consultation concurs, total variance explained 66,470, in 20 iterations
- 10: Self-evaluation Self-esteem and Generalized self-efficacy concur, total variance explained 63,868, in 11 iterations
- 9: Identification power concurs, total variance explained 61,000, in 11 iterations
- 8: Sanction power concurs, total variance explained 57,834, in 9 iterations
- 7: Self-evaluation (ego) concurs, total variance explained 54,455, in 13 iterations (Table II.6).

Table II.6 Factor analysis Self-evaluation (ego)

Principal component analysis (suppress small coefficients absolute value below 0.3, fixed number of factors 7, Rotation is Varimax, exclude cases pair wise)

Items per factor	Items per factor our Model							Summary
	Isnc	Ilgt	Iidf	Ixpt	Iroc	Acnt	SE	
Acnt48						.857		Factor 1 in data is Connectivity
Acnt64						.852		
Acnt26						.840		
Acnt32						.800		
Acnt41						.710		
Acnt55						.649		
Iroc59					.831			Factor 2 in data is Reciprocal open consultation
Iroc61					.745			
Iroc46					.709			
Iroc78		-.364			.602			
Iroc43					.488			
Ilgt44		.728						Factor 3 in data is Legitimate power
Ilgt49		.691						
Ilgt34		.645						
Ilgt65		.616			-.338			
Sses23					.305	.605		Factor 5 in data is Self-evaluation (ego)
Sgse15						.589		
Sgse20						.572		
Sses24	.365					.569		
Sses14	.331					.549		
Sgse17						.497		
Sneu19		-.415				.492		
Sloc13		-.349				.481		
Sneu10						.401		
Sneu5		-.379				.362		
Sloc21						.400		
Sloc3		-.316						
Isnc50	.734							Factor 6 in data is Sanction power
Isnc58	.703							
Isnc31	.596				.345			
Isnc69	.538							
Isnc36	.479							
Isnc66	.464	.392						
Iidf47			.803					Factor 7 in data is Identification power
Iidf71			.779					
Iidf39			.631	.363				
Iidf52			.535	.531				
Iidf63			.528			.390		
Ixpt37				.798				Factor 8 in data is Expert power
Ixpt62				.786				
Ixpt54				.674				

Total variance explained: 54,455

These factor analysis show that Self-evaluation (ego) as a whole is a stronger factor than the four separate dimensions. Eleven of the twelve items join one factor when a fixed number of factors is asked.

### ***Analysis Psychological empowerment***

The reliability is high for Impact, acceptable for Meaning (except for case REFR) and for Psychological empowerment as a whole and low for Competence and Self-determination (Table II.7). Therefore we look at the factor analysis (Table II.8).

Table II.7 Reliability Psychological empowerment

Cronbach's Alpha	SOLV*	REFR	PART	NEXT	All	N (all)	Excluded
Psychological empowerment		.797	.765	.771	.770	197	130
- Meaning Emng4, Emng8, Emng11		-.119	.810	.817	.783	197	130
- Competence Ecpt2, Ecpt12, Ecpt18		.202	.614	.639	.600	197	130
- Self-determination Esdt6, Esdt9, Esdt22		.532	.591	.687	.655	197	130
- Impact Eimp1, Eimp7, Eimp16		.931	.868	.807	.853	197	130

\* These questions were not asked in the case of SOLV

To see how well Psychological empowerment is measured we ran a factor analysis of the influence variables without Self-esteem (next higher) and Self-esteem (ego) because generalized self-efficacy and competence are related variables. We also excluded Professional skill from the analysis because this is used to explain influence factors (Expert power and Reciprocal open consultation).

Principal component analysis (suppress small coefficients absolute value below 0.3, eigenvalues greater than 1, Rotation is Varimax, exclude cases pair wise). This factor analysis results in 12 components, total variance explained is 70,881 and rotation converged in 11 iterations. Interesting to see is that Iroc43 now is a factor in itself (.629) (in the previous analysis it was Iroc78) and scores on Iroc (.403). Therefore we repeat the factor analysis fixing the number of factors to 10 (6 influence factors, 4 dimensions of Psychological empowerment). Because Ixpt and Ecpt concur, we repeat the factor analysis fixing the number of factors to 9 (Table II.8).

Table II.8 Factor analysis Psychological empowerment

Principal component analysis (suppress small coefficients absolute value below 0.3, fixed number of factors 9, Rotation is Varimax, exclude cases pair wise)

Items per factor in data	Items per factor in our Model									Summary
	Isnc	Ilgt	Iidf	Ixpt/ Ecpt	Iroc	Acnt	Emng	Esdt	E imp	
Acnt48						.866				Factor 1 in data is Connectivity
Acnt64						.855				
Acnt32						.819				
Acnt26						.817				
Acnt41						.713				
Acnt55						.650				
Iroc59					.840					Factor 2 in data is Reciprocal open consultation
Iroc61					.760					
Iroc46					.689					
Iroc43					.549					
Iroc78		-.378			.513					
Ilgt44		.791								Factor 3 in data is Legitimate power
Ilgt49		.744								
Ilgt34		.647								
Ilgt65		.618			-.324					
Ixpt62				.763						Factor 4 in data is Expert power and Psychological empowerment – Competence
Ixpt37				.747						
Ecpt12		.303		-.592						
Ixpt54				.576						
Ecpt18				-.545						
Ecpt2				-.353				.392	.369	
Iidf47			.802							Factor 5 in data is Identification power
Iidf71			.787							
Iidf39			.616							
Iidf63			.577			.399				
Iidf52			.539	.489						
Isnc58	.744									Factor 6 in data is Sanction power
Isnc50	.714									
Isnc69	.615							-.341		
Isnc31	.587				.420					
Isnc66	.486	.313								
Isnc36	.459							-.303		
Eimp7									.810	Factor 7 in data is Psych. empowerment – Impact
Eimp1									.795	
Eimp16									.688	
Emng8							.861			Factor 8 in data is Psych. empowerment – Meaning
Emng4							.796			
Emng11							.710			

Esdt22								.806		Factor 9 in data is Psych. empowerment – Self- determination
Esdt9								.737		
Esdt6								.505		

Total variance explained: 62,854

Rotation converged in 9 iterations

This factor analysis shows that the four dimensions of Psychological empowerment are strong factors. That Psychological empowerment – Competence and Expert power concur negatively can be expected. When people feel that they are competent themselves they will not feel the need to follow their next higher colleagues because of their expertise.

If we try a factor analysis with a fixed number of factors of 7, to see if the four dimensions of Psychological empowerment concur, we see that the next factors concur negatively (opposite):

- Expert power and Psychological empowerment – Competence
- Sanction power and is Psychological empowerment – Self-determination
- Legitimate power and Psychological empowerment – Impact

Psychological empowerment – Meaning and Psychological empowerment – Impact concur positively.

When fixing the number of factors further we do not succeed in concurring all dimensions of Psychological empowerment into one factor. So Psychological empowerment as a variable is not a strong factor but the underlying dimensions are.

### ***Final instrument***

Our influence factor variables are composed of items:

- Connectivity Acnt26, Acnt32, Acnt41, Acnt48, Acnt55, Acnt64
  - NEXT, PART and SOLV: Acnt26, Acnt32, Acnt41, Acnt48, Acnt55, Acnt64
  - REFR has items: Acnt41, Acnt48, Acnt55, Acnt64
- Expert power Ixpt37, Ixpt54, Ixpt62
- Legitimate power Ilgt34, Ilgt44, Ilgt49, Ilgt65
- Identification power Iidf39, Iidf47, Iidf52, Iidf63, Iidf71
- Sanction power Isnc31, Isnc36, Isnc50, Isnc58, Isnc66, Isnc69
  - NEXT, PART and REFR: Isnc31, Isnc36, Isnc50, Isnc58, Isnc66, Isnc69
  - SOLV: Isnc31, Isnc50, Isnc58, Isnc66
- Professional skill Aprf25, Aprf40, Aprf57, Aprf68



- Reciprocal open consultation Iroc43, Iroc46, Iroc59, Iroc61, Iroc78
  - NEXT: Iroc43, Iroc46, Iroc59, Iroc61, Iroc78
  - PART and REFR: Iroc43, Iroc46, Iroc59, Iroc61
  - SOLV: Iroc46, Iroc61, Iroc78
- Self-evaluation (next higher) Aslf42, Aslf56, Aslf67, Aslf72, Aslf74

They make up strong factors.

- Individual prominence: Connectivity, Professional skill, Self-evaluation (next higher)
  - NEXT, PART and REFR: Connectivity, Professional skill, Self-evaluation (next higher)
  - SOLV: Connectivity, Professional skill

Psychological empowerment as a variable is not a strong factor but the underlying dimensions are. So we use these variables to measure Psychological empowerment:

- Meaning Emng4, Emng8, Emng11
- Competence Ecpt2, Ecpt12, Ecpt18
- Impact Eimp1, Eimp7, Eimp16.
- Self-determination Esdt6, Esdt9, Esdt22

Self-evaluation (ego) is a strong factor but the four underlying dimensions are not. So we use the next variable to measure Self-evaluation (ego):

- Self-evaluation (ego): Sloc3, Sloc13, Sloc21, Sneu5, Sneu10, Sneu19, Sgse15, Sgse17, Sgse20, Sses14, Sses23, Sses24

Reliability for the final instrument is presented in Table II.9.

Table II.9 Reliability overall instrument

Cronbach's Alpha	SOLV	REFR	PART	NEXT	All	N (all)	Excluded
Connectivity	.888	.707	.858	.834	.897	287	40
Expert power	.766	.560	.763	.814	.755	308	19
Legitimate power	.792	.789	.655	.567	.765	310	17
Reciprocal open consultation	.701	.851	.716	.828			
Identification power	.852	.788	.737	.833	.810	303	24
Sanction power	.632	.723	.650	.631	.726	181	146
Professional skill	.686	.219	.642	.789	.683	308	19
Self-evaluation (next higher)		.726	.702	.780	.727	181	146
Individual prominence		.508	.737	.731	.706	181	146
PE – Meaning		-.119	.810	.817	.783	197	130
PE – Competence		.202	.614	.639	.600	197	130
PE – Self-determination		.532	.591	.687	.655	197	130
PE – Impact		.931	.868	.807	.853	197	130
Self-evaluation (ego)		.709	.665	.712	.683	197	130

## Appendix III Interview guide

Subject	Questions
Tasks	First assess what the employee means by group.
	For what products, services, processes is your group responsible. How is this responsibility delimited per group.
	What activities does the group carry out in order to produce these products, services, processes (operational, supporting (planning, etc.), strategic).
Goals	What are the goals of your organization, department, group. And your personal goals. Who defined these goals. In how far are they pursued. Are they achievable. What is the status of the goals at this moment. How is this judged.
	What is your influence on the goals of the organization and the group.
	In how far do your personal goals contribute to the group goals, and the group goals to the goals of the organization.
	In how far have the goals changed over time and why.
Results	What is the result of your organization and your group. In how far is it transparent (information) how this result is established. In how far is it clear what the contribution is of each group. And the contribution of each of your group members.
	Who is responsible for the group result.
	What is the importance of the product, service, process of your group.
	In how far, on what subjects, by whom and how is the performance of groups and the performance of group members addressed.
	In how far have the results changed over time and why.
Rewards	Of what elements is your reward comprised.
	What results are rewarded with these elements.
	What is the relative size of each of these elements.
	How important is each element to you.
	What is your influence on the way you are rewarded.
	How is ownership shared in the organization (e.g. shares) and what influence is connected to this ownership.
Values and norms	In how far have the rewards changed over time and why.
	What are the core values of your organization. In how far are these core values adhered to. How is this determined. In how far do core values differ per group.
	In how far can you give an interpretation to the core values in practice (can you make a personal interpretation, do they provide a framework or are they rules and regulations).
	Can you give examples of norms that are valid in your organization. For example, norms which decide on good or bad behavior (behave, cooperate, relate).
	How much freedom do you have to apply these norms.
	In how far have the values and norms changed over time and why.

Subject	Questions
Steering	On what subjects does outside steering take place.
	In how far is outside steering needed.
	How does outside steering take place and in how far has this changed over time and why.
	In how far is self-steering present. Do you have need for more self-steering.
	How are leaders appointed.
	What influence do you have on the appointment and review of leaders.
Dependence and task variation	In how far is your group dependent on other groups. In how far are groups dependent on each other to be able to do their job. Do activities influence or complement each other.
	In how far are you dependent on others to be able to do your job. Do activities influence or complement each other.
	What influence do you have on the way you perform your activities.
	In how far are your activities varied.
	In how far have your activities changed over time and why.
	In how far is coordination of activities of group members needed. How does this take place.
	In how far has task dependence changed over time and why.
Group composition and stability	What is the size of the groups.
	What percentage of your work time do you work together as a group and how frequently.
	What qualities (knowledge, skill, personality traits etc.) are available in your group. What qualities lack. What is the variation in present and needed qualities.
	In how far are group members deployed in other groups.
	What group members are indispensable and why.
	In how far can you switch groups.
	How often has the composition of your group changed and why.
Power distance reduction	What is the probability for you to fulfil the role of group leader.
	If the group leader disappears who is the most plausible successor.
	Who is actually calling the shots here.
Decision-making	How are decisions made within your group, within the organization. By whom. What is your influence on decisions.

## Appendix IV Criteria per organizational design concept

<b>Group coordination</b>
Groups coordinate their own activities and interrelationships amongst group members
Groups coordinate their relationships with internal parties (e.g. other groups)
Groups coordinate their relationships with external parties (e.g. suppliers, customers)
<b>Group task variety</b>
Group members are deployable for several group tasks
Internal status differences do not interfere with a flexible division of work
Internal status differences do not interfere with internal mobility (between groups)
<b>Outsider steering</b>
The number of outsiders (outside the group but within the company or outside the company) that have authority to influence group activities is limited
The number of subjects on which outsiders have authority is limited
<b>Total compensation</b>
The reward system rewards individual team members for achieved personal growth
The reward system rewards individual team members for (their contribution to) group performance
The reward system makes company performance tangible
<b>Group composition</b>
Groups have mixed compositions (not too homogeneous, not too heterogeneous)
Group members have sufficient competencies to take up authority and responsibility
<b>Group task identity</b>
The group task is as complete as possible (a whole and meaningful piece of work)
Responsibilities between groups are well demarcated
<b>Group task significance</b>
Outcomes of the group's work have significant consequences for other organization members or external clients
<b>Group responsibility</b>
Every group member is responsible for group performance
Job regulation responsibilities are shared amongst group members
<b>Group stability</b>
The composition of the group (its members) is relatively stable
The group members work together at a daily basis
<b>Task interdependence</b>
Tasks of group members to accomplish the work are interdependent or coherent
<b>Task autonomy</b>
Group members have considerable influence on their own activities (choice in work methods, work division and planning)
Group members have considerable influence on the way they work (division, sequence and time planning)
Group members have considerable influence on performance criteria (choice in evaluation criteria)

<b>Task feedback</b>
The group task is linked to a measurable result
Groups receive feedback on their contribution
Measurement of group performance is transparent
The contribution to group performance of every single group member is recognizable and visible
Measurement of individual performance is transparent
Individuals receive feedback on their contribution
<b>Shared goals</b>
Group goals are known
Group goals are achievable (within influence sphere of group members)
Group goals are pursued
Group goals fit organization goals
<b>Group size</b>
Group size is limited
<b>Span of control</b>
The number of management layers is limited
The number of group members supervised by one manager/leader is large

## Appendix V Survey questions per case

The first column is the question number used in case NEXT, second in case PART, third in case REFR and fourth in case SOLV.

V Next	V Part	V Refr	V Solv	Element	Item	Old, New or Changed	Label	Base formulation questions (colored words are replaced in the specific cases by labels used in the organization concerned)
1.	1.	1.		Empowerment	Impact		Eimp1	My impact on what happens in my work unit is large.
2.	2.	2.		Empowerment	Competence		Ecpt2	I am confident about my ability to do my job.
3.	3.	3.		Self-evaluation (ego)	Locus of control		Sloc3	I do not feel in control of my success in my career. (reverse-scored)
4.	4.	4.		Empowerment	Meaning		Emng4	The work I do is very important to me.
5.	5.	5.		Self-evaluation (ego)	Neuroticism		Sneu5	Sometimes I feel depressed. (reverse-scored)
6.	6.	6.		Empowerment	Self-determination		Esd6	I have considerable opportunity for independence and freedom in how I do my job.
7.	7.	7.		Empowerment	Impact		Eimp7	I have significant influence over what happens in my work unit.
8.	8.	8.		Empowerment	Meaning		Emng8	The work I do is meaningful to me.
9.	9.	9.		Empowerment	Self-determination		Esd9	I can decide on my own how to go about doing my work.
10.	10.	10.		Self-evaluation (ego)	Neuroticism		Sneu10	Sometimes when I fail I feel worthless. (reverse-scored)
11.	11.	11.		Empowerment	Meaning		Emng11	My job activities are personally meaningful to me.
12.				Criticism	Critical		Ccr81	When things go wrong, I am the one to name it.
13.	12.	12.		Empowerment	Competence		Ecpt12	I am self-assured about my capabilities to perform my work activities.
14.	13.	13.		Self-evaluation (ego)	Locus of control		Sloc13	Sometimes, I do not feel in control of my work. (reverse-scored)

V Next	V Part	V Refr	V Solv	Element	Item	Old, New or Changed	Label	Base formulation questions (colored words are replaced in the specific cases by labels used in the organization concerned)
15.	14.	14.		Self-evaluation (ego)	Self-esteem		Sses14	I am confident I get the success I deserve in life.
16.	15.	15.		Self-evaluation (ego)	Generalized self-efficacy		Sgse15	When I try, I generally succeed.
17.	16.	16.		Empowerment	Impact		Eimp16	I have a great deal of control over what happens in my work unit.
18.	17.	17.		Self-evaluation (ego)	Generalized self-efficacy		Sgse17	I complete tasks successfully.
19.	18.	18.		Empowerment	Competence		Ecpt18	I have mastered the skills necessary for my job.
20.	19.	19.		Self-evaluation (ego)	Neuroticism		Sneu19	There are times when things look pretty bleak and hopeless to me. (reverse-scored)
21.	20.	20.		Self-evaluation (ego)	Generalized self-efficacy		Sgse20	I am filled with doubts about my competence. (reverse-scored)
22.	21.	21.		Self-evaluation (ego)	Locus of control		Sloc21	I determine what will happen in my life.
23.	22.	22.		Empowerment	Self-determination		Esdt22	I have significant autonomy in determining how I do my job.
24.	23.	23.		Self-evaluation (ego)	Self-esteem		Sses23	I am capable of coping with most of my problems.
25.				Criticism	Critical		Ccrs82	If something needs to change it is up to me to raise the issue. (reverse-scored)
26.	24.	24.		Self-evaluation (ego)	Self-esteem		Sses24	Overall, I am satisfied with myself.
27.	25.	26.	2.	Influence factor	Professional skill	Old	Apr25	His general competence and abilities are considerable.
28.	26.		29.	Influence factor	Connectivity	Changed	Acnt26	He has considerable influence on members of other groups.
29.	27.	27.	3.	Influence factor	Identification power	Old	lidf27	He is an example for his organization members.
30.	28.	28.	4.	Influence factor	Reciprocal open consultation	Old	Iroc28	When he makes a request to an <i>organization member</i> he cares little if the organization member understands the context or not. (reverse-scored)

V Next	V Part	V Refr	V Solv	Element	Item	Old, New or Changed	Label	Base formulation questions (colored words are replaced in the specific cases by labels used in the organization concerned)
31.	29.	29.		Criticism	Self-criticism (next- higher)	New	Iscr29	He can acknowledge his mistakes.
32.	30.	30.	6.	Influence factor	Expert power	Old	Ixpt30	Sometimes I feel 'small' compared to him, because he is so good at his job.
33.	31.	31.	7.	Influence factor	Sanction power	Old	Isnc31	I am pleased if he appreciates my work.
34.	32.		10.	Influence factor	Connectivity	Old	Acnt32	He has considerable influence on what is happening on the hierarchical levels above him.
35.	33.	32.		Influence factor	Reciprocal open consultation	New	Iroc33	If we come to an agreement, we convince each other based by arguments.
36.	34.	33.	9.	Influence factor	Legitimate power	Old	Ilgt34	It is my opinion that I should follow his leadership under all circumstances.
	35.	34.		Influence factor	Self-evaluation (next- higher)	New	Aslf35	He believes in his own capabilities.
37.			8.	Influence factor	Reciprocal open consultation	Old	Iroc75	When we disagree on work, it is not pre- established who will get the best of it.
38.	36.	35.		Influence factor	Sanction power	New, changed	Isnc36	If he appreciates my work, it has specific positive consequences.
39.	37.	36.	12.	Influence factor	Expert power	Old	Ixpt37	On matters that are important in our work he has more knowledge (expertise) than I do.
40.	38.	37.		Influence factor	Self-evaluation (next- higher)	New, changed	Aslf38	When his plans do not succeed, he searches for reasons outside himself. (reverse-scored)
41.	39.	38.	14.	Influence factor	Identification power	Old	Iidf39	I would like to be 'just' like him.
42.	40.	39.	15.	Influence factor	Professional skill	Old	Aprf40	He has a good grip on things in our profession.
43.	41.	25.	1.	Influence factor	Connectivity	Changed	Acnt41	He has considerable influence outside the organization (external environment).



V Next	V Part	V Refr	V Solv	Element	Item	Old, New or Changed	Label	Base formulation questions (colored words are replaced in the specific cases by labels used in the organization concerned)
44.	42.	40.		Influence factor	Self-evaluation (next- higher)	New	Aslf42	When he makes plans, he is convinced that he can make them succeed.
45.	43.	41.		Influence factor	Reciprocal open consultation	New	Iroc43	I am allowed personal job activities if I put forward good arguments in support of them.
46.	44.	42.	18.	Influence factor	Legitimate power	Old	Ilgt44	If he wants me to do something I do not want to, than I sometimes solve the problem by thinking that after all he is <u>our leader</u> .
47.	45.	43.		Influence factor	Self-evaluation (next- higher)	New	Aslf45	Sometimes he fears the future. (reverse-scored)
48.	46.	44.	20.	Influence factor	Reciprocal open consultation	Old	Iroc46	He is amenable to persuasion if the arguments I put forward in support of my view are better than his.
49.	47.	45.	21.	Influence factor	Identification power	Old	lidf47	It appears that he and I are much alike.
50.	48.	46.	22.	Influence factor	Connectivity	Changed	Acnt48	Outside our own group he has considerable influence on <u>the organization</u> .
51.	49.	47.	23.	Influence factor	Legitimate power	Old	Ilgt49	I carry out his instructions simply because he is <u>our leader</u> .
52.	50.	48.	24.	Influence factor	Sanction power	Old	Isnc50	When he responds negatively to me, I find it painful, even if it has no further specific implications.
53.	51.	49.	25.	Influence factor	Expert power	Changed	Ixpt51	In my work I often ask his opinion.
54.	52.	50.	26.	Influence factor	Identification power	Old	lidf52	I would like to do many things the way he does.
55.	53.	51.	27.	Influence factor	Connectivity	Changed	Acnt53	<u>Top management</u> is very inclined to listen to him.
56.	54.	52.	28.	Influence factor	Expert power	Old	Ixpt54	I follow his advice readily because he is better informed of skilled than I am.
57.	55.	53.	41.	Influence factor	Connectivity	Changed	Acnt55	He has considerable influence on people outside <u>the organization</u> (external environment).

V Next	V Part	V Refr	V Solv	Element	Item	Old, New or Changed	Label	Base formulation questions (colored words are replaced in the specific cases by labels used in the organization concerned)
58.	56.	54.		Influence factor	Self-evaluation (next- higher)	New, changed	Aslf56	He feels he is in control of the success in his career.
59.	57.	55.	31.	Influence factor	Professional skill	Old	Aprf57	For our work the group members can learn a lot from him.
60.	58.	56.	32.	Influence factor	Sanction power	Old	Isnc58	I would feel uneasy if he did not appreciate my work.
61.	59.	57.		Influence factor	Reciprocal open consultation	New	Iroc59	He changes his views under the influence of good arguments of group members.
62.	60.	58.	34.	Influence factor	Connectivity	Changed	Actn60	Within the organization he achieves a lot for his group members.
63.	61.	59.	35.	Influence factor	Reciprocal open consultation	Changed	Iroc61	In discussions he puts forward substantial arguments and also listens to mine.
64.	62.	60.	36.	Influence factor	Expert power	Old	Ixpt62	As a professional I can learn a lot from him.
65.	63.	61.	37.	Influence factor	Identification power	Old	Iidf63	If I were in his position I would act the same.
66.	64.	62.	38.	Influence factor	Connectivity	Changed	Actn64	He has considerable influence on his direct superiors.
67.	65.	63.	39.	Influence factor	Legitimate power	Old	Ilgt65	The group members do what he says because he is the appointed leader.
68.	66.	64.	40.	Influence factor	Sanction power	Changed	Isnc66	For group members much depends on his positive assessment of their activities.
69.	67.	65.		Influence factor	Self-evaluation (next- higher)	New	Aslf67	When he starts something new, he is convinced that it will have a positive outcome.
70.	68.	66.	42.	Influence factor	Professional skill	Old	Aprf68	He is a highly skilled professional.
71.	69.	67.		Influence factor	Sanction power	New	Isnc69	I suffer from specific negative consequences if he views my work in a negative light.
72.	70.	68.		Criticism	Self-criticism (next- higher)	New	Iscr70	When I criticize him, he does not run away from it.

V Next	V Part	V Refr	V Solv	Element	Item	Old, New or Changed	Label	Base formulation questions (colored words are replaced in the specific cases by labels used in the organization concerned)
73.	71.	69.	5.	Influence factor	Identification power	Old	Iidf71	He and I have a lot in common.
74.	72.	70.		Influence factor	Self-evaluation (next- higher)	New	Aslf72	He has faith in himself.
75.	73.		11.	Influence factor	Connectivity	Old	Acnt73	He makes sure that certain important things outside the organization (external environment) can be achieved.
76.	74.	71.		Influence factor	Self-evaluation (next- higher)	New	Aslf74	When things get down, he remains optimistic.
77.			17.	Influence factor	Reciprocal open consultation	Old	Iroc78	When we disagree on what should happen, each of us has an equal chance of getting our opinion accepted.
			13.	Influence factor	Connectivity	Old	Acnt76	He has more influence on his direct superiors and top management than they have on him.
			16.	Influence factor	Connectivity	Old	Acnt77	His direct superiors and top management allow themselves to be heavily influenced by him.
			30.	Influence factor	Connectivity	Old	Acnt79	He has top managements' favorable response.
			33.	Influence factor	Reciprocal open consultation	Old	Iroc80	The group members do what he tells them to do because he explains why.
			19.	Influence factor		Old		Even if I cannot determine whether his opinion is right, I still follow it.

## Appendix VI Decisions groups can make

Considering the decisions groups can make in the three cases, we categorize them in operational (related to one's own tasks), tactical (e.g. hiring, payment) and strategic (e.g. strategy of the group and the company). For every case we show whether these decisions can be made by group members (being the lowest level where a competent decision can be made) or whether they are made by management or management approval is needed.

Category	Decision-making areas	Decisions	SOLV		NEXT		PART	
			Decision/ approval group member	Decision/ approval manage- ment	Decision/ approval group member	Decision/ approval manage- ment	Decision/ approval group member	Decision/ approval manage- ment
Operational	Work methods	Determine individual work methods	X		X		X	
	Planning	Determine work order	X		X		X	
		Determine working hours	X		X		X	
		Determine work places	X		X		X	
		Work hour registration	X		X		X	X
	Division of labor	Selection own assignments/tasks	X		X		X	
	Resource allocation	Attach assignments/tasks to group members	X		X		X	
		Determine individual resources	X		X			X
	Goals	Determine daily individual performance criteria	X		X			X
	Group composition	Arrange temporary replacements	X		X		X	
		Coach group members (tasks)	X		X		X	
	External relationships	Coach group members (career)	X		X			X
		Contact with other groups (tasks)	X		X		X	
		Contact with suppliers (operational)	X		X		X	
		Contact with clients (operational)	X		X		X	

Category	Decision-making areas	Decisions	SOLV		NEXT		PART	
			Decision/ approval group member	Decision/ approval manage- ment	Decision/ approval group member	Decision/ approval manage- ment	Decision/ approval group member	Decision/ approval manage- ment
<b>Tactical</b>		Contact with external support (operational)	X		X		X	
		Contact with other groups (deployment)	X		X			X
		Contact with suppliers (commercial)		X		X		X
		Contact with clients (commercial)	X		X			X
		Contact with external support (commercial)	X		X			X
	Work methods	Improve group work methods	X		X		X	
		Determine group work methods	X		X			X
	Planning	Determine individual training needs	X		X			X
		Determine group training needs	X		X			X
		Determine time off	X		X			X
		Determine (unpaid) leave	X		X			X
	Resource allocation	Plan individual education and training	X		X			X
		Subscribe to individual education, training	X		X			X
		Evaluate new resources	X		X		X	
		Select individual education and training	X		X			X
		Select group education and training	X		X			X
		Determine personal contractual hours assignments	X		X			X
		Determine personal tariff	X		X			X
	Goals	Determine contractual hours assignments group members	X		X			X
		Determine tariff group members	X		X			X
		Determine compensation group members	X		X			X
		Selection new resources	X		X			X
		Acquire new resources	X		X			X
		Determine solution to problems (content)	X		X		X	

Category	Decision-making areas	Decisions	SOLV		NEXT		PART	
			Decision/ approval group member	Decision/ approval manage- ment	Decision/ approval group member	Decision/ approval manage- ment	Decision/ approval group member	Decision/ approval manage- ment
		Implement solution to problems (content)	X		X		X	
		Determine individual performance criteria	X		X			X
		Determine periodic individual performance goals	X		X			X
		Determine group performance criteria	X		X			X
		Review performance individual group members	X		X			X
		Review group performance	X		X			X
		Review manager	X		X			X
		Determine general limits and degrees of freedom	X		X			X
		Determine solution to problems (organization)	X		X			X
		Implement solution to problems (organization)	X		X			X
	Group composition	Determine necessary group skills	X		X			X
		Recruit new group members	X		X			X
		Select new group members	X		X			X
		Guide leave of absence	X		X			X
		Choose group leader	X			X		X
		Choose personal manager	X			X		X
	External relationships	Select manager	X			X		X
		Take disciplinary measures		X		X		X
		Dismiss and exclude group members	X			X		X
		Review performance external support	X		X			X
		Review performance other groups		X		X		X

Category	Decision-making areas	Decisions	SOLV		NEXT		PART	
			Decision/ approval group member	Decision/ approval manage- ment	Decision/ approval group member	Decision/ approval manage- ment	Decision/ approval group member	Decision/ approval manage- ment
<b>Strategic</b>	Resource allocation	Determine resource needs group	X		X			X
		Determine budget	X		X			X
	Goals	Determine group compensation		X		X		X
		Determine long-term group goals	X		X			X
		Determine organizational goals		X	X			X
		Determine improvements	X		X			X
		Determine improvement projects	X		X			X
		Adapt products and services	X		X			X
		Develop new products and services	X		X			X
		Determine general tariffs	X		X			X
		Choose new markets	X		X			X
		Determine need for new groups	X		X			X
	Group composition	Determine group tasks	X		X			X
		Determine group size	X		X			X
		Establish group		X		X		X
		Liquidate group		X		X		X
		Liquidate/sell organization(parts)		X		X		X
	External relationships	Select suppliers	X		X			X
		Select clients	X		X			X
		Select management		X	X			X

We sum the amount of decisions to be made or approved of by group members and by management for every category.

Category	SOLV		NEXT		PART	
	Decision/approval group member	Decision/approval management	Decision/approval group member	Decision/approval management	Decision/approval group member	Decision/approval management
<b>Operational</b>	19	1	19	1	12	8
<b>Tactical</b>	38	2	34	6	4	36
<b>Strategic</b>	14	6	16	4	0	20

We divide the number of decisions made by group members by all decisions (in that category). If there are more decisions to be made or approved of by group members than by management, the level is scored 2. If there are more decisions to be made or approved of by management than by group members, the level is scored 1. Of the three levels an average is calculated.

	SOLV		NEXT		PART	
<b>Operational</b>	.95*	2**	.95	2	.60	2
<b>Tactical</b>	.95	2	.85	2	.10	1
<b>Strategic</b>	.70	2	.80	2	.00	1
<b>Average</b>	.87	2	.87	2	.23	1.3

\* share; \*\*score



## **Appendix VII Motives for leaving or staying**

### ***Motive***

#### **Question in follow up questionnaire for people working with DINR.**

Q7 What was your reason to remain working with DINR? (More answers possible)

- ☐ Good promotion prospects
- ☐ Job security
- ☐ Salary
- ☐ Secondary benefits
- ☐ The work is still interesting
- ☐ Sufficient autonomy
- ☐ I can use my skills well
- ☐ Recognition
- ☐ Good relationship with manager
- ☐ Private reasons
- ☐ Otherwise, namely: \_\_\_\_\_

#### **Question in follow up questionnaire for people who left SOLV.**

Q7 What was your reason to leave SOLV (TVW) at the time? (More answers possible)

- ☐ No promotion prospects
- ☐ More job security elsewhere
- ☐ Did not like working with self-steering groups
- ☐ Better salary elsewhere
- ☐ Better secondary benefits elsewhere
- ☐ The work was not interesting enough anymore
- ☐ More need for autonomy
- ☐ I could not use my skills anymore
- ☐ No recognition
- ☐ I could not get along with my manager
- ☐ Private reasons
- ☐ Otherwise, namely: \_\_\_\_\_

**Question in follow up questionnaire for people who left after the takeover.**

Q7 What was your reason to leave DINR at the time? (More answers possible)

- ☐ No promotion prospects
- ☐ More job security elsewhere
- ☐ Not working with self-steering groups anymore
- ☐ Better salary elsewhere
- ☐ Better secondary benefits elsewhere
- ☐ The work was not interesting enough anymore
- ☐ More need for autonomy
- ☐ I could not use my skills anymore
- ☐ No recognition
- ☐ I could not get along with my manager
- ☐ Private reasons
- ☐ Otherwise, namely: \_\_\_\_\_

Q8 If you wish you can explain your reasons further here.

*Categorization answers for importance attached to self-steering*

Self-steering important	Self-steering not important
Not working with self-steering groups anymore	Promotion prospects
More need for autonomy	Job security
No entrepreneurial club, little space for own initiative	Salary
With a small company more influence on finding / achieving own direction	Secondary benefits
Steering by groups themselves did not fit in the hierarchy of DINR	Work is interesting/ not interesting
SOLV and TVW talked more about self-steering than actually practiced it	Sufficient autonomy
I choose more authority, self-development, taking good decision with each other	Use of skills possible/ no longer possible
The philosophy and self-steering disappeared more and more	Recognition/ no recognition
Organization was too large, wanted to start on my own	Good/ bad relationship with manager
	Private reasons
	Do not like to work with self-steering groups
	Tension with consultancy between commitment to customer and financial commitment, not for me
	Preconceptions of male colleagues

## Autonomous groups between power and empowerment

Recently, the concept of autonomous self-steering teams has regained popularity in management discourse and in the public debate. As an empowering design concept, it is positively associated with performance, job satisfaction and organizational commitment, and negatively with strain and turnover. However, consensus is lacking on what empowerment exactly means, and the role of power is rather ignored. This thesis compares three organizations that very strongly claim to be empowering and self-steering, and follows one organization over time. This enables to clarify the concept of 'self-steering' as well as the role of power. We compare organizations in terms of (i) level of delegation of authority and responsibility (structural empowerment), (ii) power use, and (iii) dominant empowerment stories (organizational politics) and analyze how this influences the perception of the power distance and of power use, and the feeling of being in control (psychological empowerment). We show that the organizations differ in terms of structural empowerment, and that radical structural empowerment is possible. Furthermore, the results suggest that organizational politics is never completely concealing, as organization members do see real power distances and power use that exist behind strong empowerment stories. At the same time, real distribution of power is beneficial for psychological empowerment. Finally, we show that without real delegation of authority and responsibility, empowering organizational forms such as self-steering are vulnerable, and easily threatened under conditions of crisis. On the longer term, psychological empowerment may therefore not be sustainable without structural empowerment, as may be the positive effects of psychological empowerment.



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