

Self-Leadership in Activity-Based Working

A Case Study exploring how Self-Leadership can help
Employees to meet the rising Demands in ABW

Stockholm School of Economics

Master Thesis in Business & Management

Specialization in Management

ABSTRACT

The growing popularity of Activity-Based Working (ABW), an advanced office design and management system, has also brought new office research to the scene. Current research offers limited solutions to how employees can meet the rising demands of an activity-based workplace. This article examines how self-leadership can help employees to meet these demands, in particular the complexity of everyday decision-making, an output-driven environment and environmental stressors. In a multiple-case study, three themes were identified, which each offer a distinct solution to individual employees: (i) Employees should leverage reflective decision-making by conducting self-observation in order to increase self-awareness; (ii) employees should apply and communicate self-goal setting in order to reach a new level of trust within the firm; (iii) employees should employ a specific set of self-leadership strategies in order to cope with the increased responsibility and autonomy. In conclusion – assuming that self-leadership is an appropriate leadership style for an activity-based workplace – this article shows how employees can meet the rising demands of ABW by making use of specific self-leadership strategies.

Key Words: Activity-Based Working, Office, Self-Leadership, Decision-making, Employees

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Submission Date: May 16th, 2016

ACKNOWLEDGEMENTS

First of all, we would like to thank our wonderful supervisor Lena Lid Falkman for guiding us in this endeavor and constantly providing us with constructive feedback. In particular, we would like to express our gratitude to her for including us in her research group, thus providing us with helpful insights and facilitating the writing of this thesis in every way possible.


Second, we would like to thank Vasakronan and PE Accounting and all participating interviewees for taking the time to contribute with their valuable perspectives and insights into their personal and work lives. This study would not have been possible without them. We would particularly like to thank Britt Lindqvist of Vasakronan and Olle Rydqvist of PE Accounting for being so open towards the project and cooperative in establishing contact to interview participants.

Finally, we would like to express our gratitude to our friends and family for understanding our commitment to this study and the partial withdrawal from other responsibilities.

Stockholm, May 16th, 2016



Marvin Billerbeck



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ABBREVIATIONS

Acronym	Explanation
ABC	Activity-Based Costing
ABM	Activity-Based Management
ABW	Activity-Based Working
ASLQ	Abbreviated Self-Leadership Questionnaire
CRE	Corporate Real Estate
ICT	Information and Communications Technology
IT	Information Technology
RSLQ	Revised Self-Leadership Questionnaire
SCC	Subjective Cognitive Complaints
SD	Standard Deviation
SEK	Swedish Krona
SL	Self-Leadership

1 INTRODUCTION

After working for an American and then a Japanese company, Paul¹ was hired by a Swedish firm that had recently implemented Activity-Based Working. After hearing about the rules of ABW, i.e. the freedom of where, when and how to work, Paul described this as his ‘dream environment’. Two months into the job, Paul worked on a project. He gathered information, analyzed some data, but did not generate concrete results. He did not reach out much to his colleagues, who were not always present anyway. His supervisor did not check on his daily work, he just wanted to see results. After a while, Paul’s motivation started to decline. Colleagues noticed Paul’s problems and decided to bypass him when they need support for their projects. Four weeks later, Paul’s supervisor decided to talk to him and finally, to let him go. A colleague reflects on Paul’s situation: ‘If you are new here and come into this kind of work, then you can feel very lost. Nobody sees you, you see many people, but you don’t know what they do. They don’t sit in the same corner every day. How do I know how this company works?’ (Interviewee [7, 10], 2016).

The first chapter commences by outlining the background of the study in section 1.1, before explaining the problem and purpose in section 1.2 and leading to the research question in section 1.3. Finally, section 1.4 describes the thesis outline.

1.1 Background

Over the past decades, the proportion of the workforce employed in offices has been constantly increasing (Seddigh, 2015). In Sweden, the amount of people working in offices has surpassed those working in manufacturing (Larsson, 2012). The contemporary office landscape is mainly composed of individual-, shared- and combi offices (closed and open spaces with assigned seating). The traditional purpose of office designs is focused on optimizing space and cutting costs. However, companies are increasingly shifting this focus towards more enhancing office solutions that foster employee engagement, talent retention and motivation as well as productivity and innovation (CBRE, 2014). Managers begin to view the workplace as a strategic asset which can help to encourage the corporate culture and increase business performance (Jones Lang LaSalle, 2012). If carried out conscientiously, a workplace strategy can be a means to maintain a competitive advantage (CBRE, 2014).

¹ Based on a true incident/name changed

Several economic, social and technological trends are causing this shift in workplace strategy (Jones Lang LaSalle, 2012). First, intense competition among businesses requires companies to find ways to differentiate themselves in order to attract the best talent and provide a work environment, which enables them to thrive. Moreover, the rising importance of innovation causes the need for a workplace that promotes creativity and allows for collaboration. In addition to that, the business world is exposed to constant change and thus the work environment benefits from being more flexible and agile in order to adapt smoothly to these changes. In line with that are technological trends such as digital transformation and cloud computing which render office work more mobile. Furthermore, organizations become more decentralized and informal by adapting flat hierarchies, which has to be represented in the workplace in order to be compatible.

Due to these developments, Activity-Based Working emerged as an innovative office design solution. ABW is based on the premise that no employee has an assigned workstation. It provides employees with a variety of predetermined activity areas tailored to the actual needs of the people and the organization. This approach addresses the current developments by facilitating collaboration and communication among employees and it is set to increase individual productivity as well as job satisfaction (Parker, 2014; De Been & Beijer, 2015; Van der Voordt, 2004).

1.2 Problem and Purpose

The individual office worker is directly affected by the current developments since the increased decentralization and flexibility of organizations leave employees with more responsibility for their work behavior (Houghton & Yoho, 2005). This is in line with the introduction of Activity-Based Working, which implies a higher responsibility and autonomy of each employee demanding a high level of cooperation and adaptability. Consequently, the implementation of ABW is no plain shift in office design and usage: Management has to introduce a ‘supplementary working philosophy that requires a paradigm shift’ (Appel-Meulenbroek et al., 2015). This new philosophy usually translates into an increased autonomy, responsibility and flexibility for employees, who metaphorically turn into ‘one-man businesses’ (Appel-Meulenbroek et al., 2011, p.123). Due to the paradigm shift, ABW emerges as a more complex office design than previously thought (Parker, 2014). The differences to other office types are so extensive that often significant and problematic side effects appear (Seddigh, 2015). These include complex everyday decision-making because of the high freedom and flexibility, the development of an output-driven work environment caused by high autonomy and responsibility and environmental stressors such as noise, distraction and crowding due to the flexibility and informality of the workplace.

Therefore, the demands on employees increase significantly, as they are required to overcome these challenges in order to make full use of the workplace’s possibilities. The new demands and

conditions in ABW necessarily affect the nature of leadership (Kotter, 1982, Crouch & Nimran, 1989, Koetsveld & Kamperman, 2011). New leadership approaches need to consider the freedom and autonomy an employee is exposed to and hence be more focused on the individual. Consequently, empowering leadership and similar concepts were proposed to transform the challenges into opportunities. Employees are empowered to take on more responsibility and lead themselves suggesting that the traditional heroic leader on top of the hierarchy directing the employees behavior is no longer contemporary (Houghton et al., 2013). Instead, today's highly educated knowledge workers are encouraged to influence and lead themselves. The concept of self-leadership was first notably introduced in 1986 and has received increasing research attention (Manz 1986). It suggests a self-influence process through which individuals direct and motivate themselves towards a desired performance. Self-leadership implies that external guidance from formal leaders is less significant when achieving work objectives – instead the individual employee takes responsibility for it. Hence, it appears as an intuitive leadership approach in Activity-Based Working.

The purpose of this study is to explore the application of self-leadership in activity-based workplaces and develop knowledge about the role of self-leadership in helping employees to cope with the higher demands in ABW. The study intends to integrate the previously separate concepts of Activity-Based Working and self-leadership, thereby developing a provisional theory (Edmondson et al., 2007). This leads to the research question guiding this study:

How can self-leadership help employees to meet the rising demands in Activity-Based Working?

1.3 Delimitations

In order to ensure adequate research and be able to achieve reliable and valid results, the study has two main delimitations.

First, both sample companies, Vasakronan and PE Accounting, are based in Sweden, and thus the study is limited to Swedish activity-based offices. Despite this, Sweden constitutes a good sample market as it is considered as one of the pioneering countries in Activity-Based Working besides Australia and the Netherlands. This becomes evident by examining the available body of research on ABW, which originates largely from Sweden and by observing the increasing number of ABW implementations in Sweden.

Second, the focus of this study is on the two sample companies in particular. The underlying reason is the intention to allow for emphasis and an adequate level of detail in the research. Two companies were chosen in order to reach a high level of validity by increasing the substantiation

of the findings. The companies were selected based on complementing characteristics in order to maintain a coherent empirical sample. However, the results are not yet generalizable beyond the two sample companies (See sections 3.5 and 5.3).

1.4 Thesis Outline

In order to answer the research question mentioned beforehand, this study takes on the following structure as presented in Table 1.

Chapter	Description
2. Theoretical Foundation	The second chapter provides a comprehensive literature review of Activity-Based Working and self-leadership. Furthermore, it illustrates the theoretical gap and proposes a synthesis of the two concepts, embedded in a theoretical framework.
3. Methodology	The third chapter introduces the methodological approach, including the case selection, data collection and -analysis as well as a description of the quality of the research design.
4. Empirical Findings & Analysis	The fourth chapter presents the findings of the pre-study and main-study. It illustrates the three most important themes found in the main-study, which are analyzed in the context of the relevant literature, connected with the theoretical framework and expressed in a provisional theory.
5. Discussion	The fifth chapter discusses the theoretical and practical implications from the findings presented beforehand. Furthermore, it explains the limitations of the research and proposes future fields of research.
6. Conclusion	The last chapter summarizes the conducted study.

Table 1: Thesis Outline

2 THEORETICAL FOUNDATION

The following chapter comprises four parts. Section 2.1 and 2.2 provide a literature review of Activity-Based Working and self-leadership. The theoretical gap is summarized in section 2.3. The synthesis of the two concepts and theoretical framework is described in section 2.4.

2.1 Activity-Based Working

In this section, Activity-Based Working is defined and distinguished from similar concepts. Thereafter, research regarding the impact of activity-based offices on four different areas is summarized.

2.1.1 Definition and Conceptual Delimitation

Activity-Based Working is an office design, usage and management system that originated with a design by the Dutch consultancy Veldhoen + Company in the mid-1990s (Parker, 2014). It centers on the fact that employees (esp. knowledge workers) engage in diverse activities throughout the day and thus require different types of work settings and technologies tailored to suit those activities (Koetsveld & Kamperman, 2011). Therefore ‘employees should be allowed to determine themselves where, when and how they want to carry out their job activities’ (Appel-Meulenbroek et al., 2011, p.123).

In practice, when a firm adopts the concept, it redesigns its office layout by eliminating assigned workstations and private offices for introducing shared floor sections; in most cases (i) so-called ‘cockpits’ for concentration, (ii) meeting areas for consultation, (iii) open workspaces for communication and (iv) places for informal consultation (See Appendix A for ABW office design examples) (Appel-Meulenbroek et al., 2011; Parker, 2014). The different shared floor sections are firm-specific, e.g. a high degree of concentrated work requires more ‘cockpits’, and they are defined by different physical artefacts (i.e. furniture) and architectural elements (Maarleveld, Volker, & Van der Voordt, 2009; Malm et Strömbäck, 2015). The introduction is usually accompanied by a (substantial) investment in ICT and interior design (e.g. lockers) that allows employees to work in any location, wirelessly or on a network (Bodin-Danielsson, 2010; Parker, 2014).

The most dominant goals of an introduction of ABW are efficiency- and productivity gains and cost reduction (De Been & Beijer, 2015; Mosselman & Gosselink, 2009). Therefore it shares common notions with its predecessors Activity-Based Costing (ABC) and Activity-Based Management (ABM), which all ‘tended to be adopted by organizations having very strong outcome orientations’ (Parker, 2014, p.15). In contemporary research, activity-based offices are

also termed flex(ible) offices, club offices or non-territorial offices, even though its supporters stress that ABW differs from these and the earlier concepts of hot desking, teleworking, hoteling or open offices due to the fact that, among others, ABW introduces different shared floor sections, which are tailored to the nature of the firm (Appel-Meulenbroek et al., 2011; De Croon et al., 2005; Seddigh, 2015; Veldhoen, 2012).

Since its origination, the concept of ABW has steadily attracted the interest of organizations – especially in Australia, the Netherlands and Sweden – as well as of researchers (Beckmann & Gross, 2015). Veldhoen + Company and competitors promoted and installed activity-based offices in hundreds of European firms and extended their reach into Asia, Australia and the US (Parker, 2014). The take-up has been particularly enthusiastic in Australia, where global firms test new working models since ‘risks are smaller and the appetite within property teams is larger’ (Trimble, 2015, p.2).

2.1.2 Cost and Benefit Effects

In general, expectations for workplace innovations are very high. In addition to that, the various stakeholders of a firm might have differing views on what to expect. Therefore, a consideration of costs and benefits – in a monetary and non-monetary sense – can help decision makers to set priorities in objectives and anticipate potential risks (Van Der Voordt, 2004). In this section, cost and benefit effects are presented as impacts on financials, communication and collaboration, productivity and employee satisfaction and health.

2.1.2.1 Financial Impact

Since Corporate Real Estate (CRE) is a costly resource, mostly the second largest behind labor costs, there is a demand for new ways of working, such as ABW, which is supposed to result in a reduction of floor space per employee and overhead costs (Pole and Mackay, 2009; Appel-Meulenbroek et al., 2014). Research shows that occupancy in the office as a whole peaks at 50% to 80%, leaving 20% to 50% of workspaces ‘unoccupied at any one point in time due to meetings, sickness, business travel or vacation’ (Seddigh, 2015; Parker, 2014, p.12). Advocates argue that approx. 30% of space could be reduced by introducing activity-based offices, which in-turn increases the density of office floor occupation. In major cities the average cost of providing one employee with a workspace amounts to ~\$12,000, which emphasizes this potential lever for cost savings (Chan et al., 2007). In addition to that, overhead costs such as rental, cleaning- and energy services (e.g. heating, ventilation), insurance, security and churn costs, i.e. costs that occur due to moves and changes of employees within a building, could be reduced by an ABW introduction (Davis et al., 2011; Appel-Meulenbroek et al., 2011; Parker, 2014).

Nevertheless, a migration towards ABW also requires (substantial) technological, architectural and structural fit-out investments, whose payback derives (i) from the costs savings mentioned beforehand and (ii) from an increase in communication, collaboration and productivity, supposedly leading to revenue growth (Veldhoen, 2012; Parker, 2014). A recent study has shown that the likelihood of an ABW introduction is highly dependent on the firm size, i.e. larger firms are far more likely to implement ABW, as for smaller firms ‘the IT and fit-out investment involved (...) is potentially prohibitive’ (PCA, 2014, p.8). Besides the implementation of the shared floor sections including ergonomically sound furniture and storage elements (e.g. lockers), firms investments include those in ICT, allowing employees to work (wirelessly) at any place - inside or outside of the firm (Volker & Van der Voordt, 2005; Koetsveld & Kamperman, 2011).

2.1.2.2 Communication and Collaboration

Studies show that, just as open offices, activity-based offices generate positive results with regards to an increase in communication and collaboration (Seddigh, 2015; De Been & Beijer, 2014; Lee & Brand, 2005). Several possibilities for formal- and informal communication and knowledge sharing are provided, which most employees describe as pleasant and useful (De Been & Beijer, 2015). Particularly informal interaction has been shown to transfer a lot of knowledge and information (Brill & Weidemann, 2001). Furthermore, scholars have found significant benefits in cases where ABW facilitates inter-departmental communication, i.e. breaking down the ‘spatial, temporal and psychological silos’ of an office (Koetsveld & Kamperman, 2011, p.304; Elsbach & Bechky, 2007).

Those benefits, as advocates argue, will in-turn have a positive effect on productivity and the performance of the firm (Opitz, 2003; Brill & Weidemann, 2001).

However, scholars have also found negative indications regarding communication and collaboration in activity-based offices. Due to the openness, conversations are conducted shorter and rather impersonal, leading to less social bonding and friendships among colleagues (Bodin-Danielsson, 2010). Furthermore, the ‘findability’ of colleagues becomes more problematic, since, without a respective IT application, employees usually do not know where a colleague is sitting or if he/she is present at all (De Been & Beijer, 2015). New research has also shown that the risk of workplace conflict slightly increases in activity-based offices (Bodin-Danielsson et al., 2015).

Therefore, even though communication and collaboration increases in an ABW setting, researchers observed a lower satisfaction with communication in activity-based offices versus traditional cellular offices (De Been and Beijer, 2014).

2.1.2.3 Individual Productivity

A major agenda to drive ABW adoption is a potential increase in productivity, which can be reached by working more effectively and/or efficiently (Van der Voordt, 2004). Even though a multitude of case studies and little research exist that show an increase in productivity after implementing ABW, scholars admit that ‘empirically measuring the ABW benefit of productivity improvement is still the holy grail of the industry’ (Appel-Meulenbroek et al., 2011; Parker, 2014, p.13). For instance, since ABW is mostly implemented in knowledge-producing organisations, finding adequate measures is problematic (e.g. how to measure the productivity of a manager?) (Van der Voordt, 2004). Secondly, since ‘every company is unique and requires its own ‘customised’ solutions’, the result might be that successful case studies being published are evidence of a selection bias (Koetsveld & Kamperman, 2011, p.318). Finally, since productivity is often measured on a group level (i.e. not individually), the composition of the group might alter in an ex-ante/ex-post measurement process – therefore it is hard to say whether productivity changes due to the ABW implementation or the structure of the group (Van Der Voordt, 2004).

When productivity is measured, potential indicators in knowledge-producing firms can be (i) actual labor productivity (e.g. number of sales calls/hour), (ii) perceived productivity, (iii) amount of time spent on certain tasks or (iv) absenteeism due to illness (Van Der Voordt, 2004). The measures (i) and (iii) are particularly addressed by ABW, which draws upon Duffy’s (1997) research of implementing differing types of workspaces (shared floor sections) for knowledge workers, mainly depending on the degree of autonomy that the job entails and the level of interaction required between colleagues (See Appendix B for detailed figure). According to Duffy (1997), a fit between the demand of the work task and the design of the workspace results in more productive employees. Even though shared floor sections are introduced in activity-based offices, including ‘cockpits’ for concentration, lack of concentration has been mentioned as a major problem in current research on ABW (De Been & Beijer, 2014; De Been & Beijer, 2015; Bodin-Danielsson, 2010). Due to the increased openness and increased density of office floor occupation, employees argue that noise, acoustics as well as visual distraction decreases concentration and influences productivity. This effect might be larger in firms where the shared floor sections are not well adjusted to the nature of the firm. Concerning (iv), Bodin-Danielsson, (2010) found that ABW reduces the amount of absenteeism due to illness – nevertheless the suspect of ‘hidden sick leaves’ (p.76), due to the choice of working from home, should not be discarded.

2.1.2.4 Employee Satisfaction and Health Factors

Different office types have an effect on employee satisfaction (Seddigh, 2015; De Been & Beijer, 2014). De Croon et al. (2005) describe that a change in office type results in employees

experiencing forms of psychological and physiological short-term reactions² (e.g. stress, job induced fatigue, changes in job satisfaction) and, over time, also long-term reactions (e.g. decreased performance, psychosomatic health complaints). An introduction of ABW includes two major features that might cause significant reactions: An increased employee-autonomy and the reduction of office floor space per employee ('crowding').

While research has shown that employee satisfaction increases when given more autonomy (e.g. choosing a workstation), it could also be seen that a reduction in floor space per employee leads to a significant decrease in employee satisfaction (De Been & Beijer, 2014; De Been & Beijer, 2015; Seddigh, 2015; Lee & Brand 2005). De Been & Beijer (2014) wrote that 'the possibility to choose a workstation according to personal preferences did not seem to compensate for the negative effects of openness within the office environments' (p.152).

In more detail, the employee satisfaction decrease due to the reduction of floor space per employee can be attributed to several reasons: First, due to the increase in density of office floor occupation ('Taylorisation of space') employees face environmental stressors such as noise and crowding (Bodin-Danielsson, 2010; De Been & Beijer, 2015; Parker 2014, p.10). Secondly, employees' loss of a personal desk 'contradicts universal psychological needs such as expression of status [and/or] personalization of the workspace' (Van der Voordt 2004, p.240). Finally, what Parker (2014) describes as 'all performances becoming visible' (p.6) means that employees working in activity-based offices 'are continually on show and under surveillance for their projected industriousness and efficiency' (p.6). Therefore, the increased surveillance and perceived loss of control over their forms and frequencies of social interactions results in lower employee satisfaction (Davis et al, 2011).

Although initial longitudinal studies on activity-based offices did not confirm an increase in workplace-related health problems, other scholars suggest that employees, who struggle with this 'idealized representation of mobility, flexibility, adaptability and efficiency', might leave the firm at some point, meaning that only the 'survivors' remain in activity-based offices over time (Mosselman & Gosselink 2009; Bodin-Danielsson, 2010; Parker 2014, p.6).

2.2 Self-Leadership

This section will explore the concept of self-leadership in three parts: First by defining self-leadership in terms of its applicable strategies. Second, it will integrate self-leadership in the theoretical context of related concepts. Finally introduce predictable outcomes of the application of self-leadership, which eventually lead to an improved individual, team and organizational

² Also termed subjective cognitive complaints (SCC) by Stenfors et al., 2013

performance. Figure 1 provides an overview of the interrelation of the three parts and the ultimate effect.

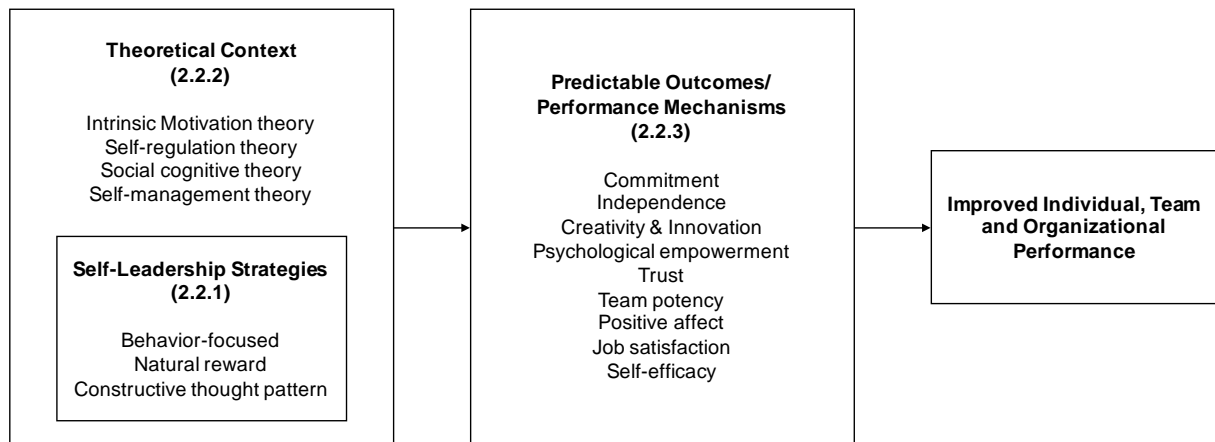


Figure 1: A Model of Self-Leadership Theoretical Context and Performance Mechanisms (Neck & Houghton, 2006)

2.2.1 Definition and Self-Leadership Strategies

This thesis will focus on the definition of Charles C. Manz, which represents the classic view on self-leadership (Manz, 1986). Although the concept has received increasing attention and ideas were added, Manz' definition remains the core and base of all subsequent research. He describes self-leadership as a self-influence process through which people direct and motivate themselves to achieve a desired level of performance (Manz, 1986; Neck & Manz, 2013). This self-influence process rests upon a systematic set of self-leadership strategies designed to influence personal performance (Neck & Houghton, 2006). These strategies can be classified into three categories: behavior-focused strategies, natural reward strategies and constructive thought pattern strategies and are summarized in Table 2 (Manz & Sims, 2001; Neck & Manz, 2013; Prussia et al., 1998).

Classification	Included Self-Leadership Strategies
Behavior-focused	Self-observation Self-goal setting Self-rewards Self-correcting feedback Self-cueing Rehearsal
Natural rewards	Building natural rewards into a task Finding natural rewards within the task Finding natural rewards in the context surrounding
Constructive thought pattern	Identify dysfunctional beliefs and assumptions Positive self-talk Mental imagery

Table 2: Classification of the Self-Leadership Strategies

Behavior-focused strategies are aimed to raise self-awareness in order to facilitate behaviors that are related to required but unpleasant tasks (Neck & Manz, 2013). These strategies are self-observation, self-goal setting, self-reward, self-correcting feedback, self-cueing and rehearsal. Self-observation serves to become aware of certain behaviors and possibly identify undesirable actions or behaviors that should be changed or expanded. Based on the observations, individuals can then set appropriate goals for themselves, a technique that is proven to be an effective measure for enhanced performance (Locke & Latham, 1990). Furthermore, self-set rewards can increase the motivation to reach the self-set goals (Neck & Manz, 2013; Manz & Sims, 1980). Self-correcting feedback, also referred to as self-punishment, should, in turn, consist of the assessment of failures and undesirable behaviors, which should then lead to altering these behaviors. Self-cueing serves as an effective strategy to keep behaviors focused on the desired outcome and includes external cues such as lists, notes or even wallpapers. Finally, it is suggested that rehearsing a task such as a presentation will lead to an improvement of the actual performance (Manz & Sims, 2001).

Natural reward strategies intend to motivate individuals by the intrinsic characteristics of the task itself, which lead to increased feelings of competence and self-determination (Neck & Manz, 2013; Manz & Sims, 2001; Houghton et al., 2012). This can be achieved in three ways: by building

more pleasant and enjoyable features into a task, finding rewarding features within the task itself or by finding naturally rewarding aspects in the physical environment surrounding the work (Manz & Sims, 2001). For instance, the former could include creating a more enjoyable work environment by decorating the workplace while finding rewards within the task could be achieved by shifting focus to enjoyable aspects such as customer interaction (Houghton & Neck, 2002).

Constructive thought pattern strategies are focused on changing or creating mental processes and thought patterns in order to facilitate optimistic thinking and thus enhance performance (Neck & Manz, 1992; Manz & Neck, 1991; Neck & Manz, 2013). First, individuals are supposed to identify the dysfunctional beliefs and assumptions which are the result of dysfunctional thought patterns and exchange them with constructive thought patterns (Burns, 1999; Neck & Manz, 2013; Neck & Manz, 1992). Second, individuals should become aware of their self-talk habits. Negative self-talk should be eliminated as it affects cognition negatively, while positive self-talk should be consciously encouraged (Neck & Houghton, 2006). Finally, mental imagery refers to visualizing successful performances before actually conducting the task (Driskell et al., 1994). This was found to be positively affecting individual performance.

Current research has identified some additional strategies that overlap with the three traditional ones but add distinct nuances to them (Houghton et al., 2012). Self-awareness strategies extend upon the self-observation strategy, while volitional strategies look into the self-goal setting process in more detail (Georgianna, 2007). Moreover, motivational strategies emphasize the performance outcome and strive to increase long-term effectiveness.

2.2.2 Theoretical Context

Self-leadership and the self-leadership strategies are a normative concept which operates within the theoretical context of several descriptive theories, including self-regulation (Kanfer, 1970; Carver & Scheier, 1981), social cognitive theory (e. g., Bandura, 1986), self-control (Cautela, 1969; Mahoney & Arnkoff, 1978, 1979; Thoresen & Mahoney, 1974) and intrinsic motivation theory (e. g., Deci and Ryan, 1985) (See Figure 1). In order to fully capture the nature of self-leadership, the theoretical concepts are examined and put into the context of self-leadership.

Self-regulation describes the process of an individual assessing the current performance situation and comparing it to the desired standard or state. If there is a discrepancy between the two, the behavior is adjusted in order to eliminate it (Carver & Scheier, 1981; Carver & Scheier, 1998). However, Locke & Latham (1991) suggest that even though people are natural self-regulators, they are not necessarily effective in that matter. Self-leadership strategies are therefore aimed at increasing self-regulatory effectiveness (Neck & Houghton, 2006). Thereby self-leadership is a

complementary concept that improves the self-regulation process in terms of increased effort and task performance.

Social cognitive theory constitutes the second major concept, besides self-regulation, that self-leadership strategies are based upon (Manz, 1986). It also focuses on the elimination of the discrepancy between the current situation and the desired standard. However, social cognitive theory suggests that first there is a phase of discrepancy production by the individual before efforts are made to reduce it. The underlying assumption is that individuals control and set their own performance standards. In this respect, social cognitive theory focuses on self-efficacy. Self-efficacy refers to the self-assessment of the necessary capabilities to perform a task (Bandura, 1991; Gist, 1987). Self-leadership strategies, particularly natural reward and constructive thought pattern strategies, are aimed at increasing self-efficacy (Prussia et al., 1998) and thus supplement social cognitive theory.

Self-control or self-management refers to a self-influence process focusing on how a certain task is performed in order to reach a certain target outcome or standard (Stewart et al., 2011). Self-management builds the basis for the behavior-focused strategies. However, self-leadership expanded this notion by adding cognitive oriented strategies, i.e. natural reward and constructive thought pattern strategies. Manz (1991) in turn suggested that self-leadership not only addresses how a task is performed but also raises the awareness of what the task is and why it exists. Thereby self-leadership takes into account intrinsic as well as extrinsic forces influencing performance.

Intrinsic motivation is the basis of the natural rewards strategies which emphasize the positive effect of rewards inherent to the performance of a task (Neck & Houghton, 2006). Cognitive evaluation theory suggests that the need for competence and self-determination is the main driver of intrinsic motivation (Deci & Ryan, 1985). Therefore, natural reward strategies aim to fulfill this need in order to create intrinsic motivation.

2.2.3 Self-Leadership Outcomes

A number of outcomes have been found to be related to the application of self-leadership strategies (Neck & Houghton, 2006). These consequences can in turn directly affect the performance of the individual exercising self-leadership and could even extend to the team or organizational level (See Figure 1).

Commitment is one of the results of engaging in self-leadership as self-leaders often develop ownership over their tasks, which in turn leads to an increased feeling of autonomy and thus a greater level of *independence* (Manz & Sims, 2001; Houghton & Yoho, 2005). Moreover, research suggests that self-leadership fosters individual *creativity* and organizational *innovation* (Houghton & Yoho, 2005; Manz & Sims, 2001). In addition to that, *trust* and *team potency* are

self-leadership outcomes that lead to a higher team effectiveness (Bligh et al., 2006). *Positive affect* and *job satisfaction* are two further related predictable outcomes that are linked to self-leadership, in particular to constructive thought pattern strategies (Neck & Manz, 1996). Furthermore, especially the behavior-focused strategies can lead to *psychological empowerment* (Neck & Manz, 2013). Research suggests that self-leadership is indeed the main mechanism to create feelings of empowerment (Houghton & Yoho, 2005; Prussia et al., 1998). Finally, *self-efficacy* is another main result of self-leadership. It is suggested that self-efficacy is the main mechanism through which self-leadership affects performance (Prussia et al., 1998; Neck & Manz, 1996).

2.3 Theoretical Gap

Modern organizations continue to become more decentralized and flexible which leaves organizational members with more responsibility for their work behaviors (Houghton & Yoho, 2005). With this trend ABW emerged as a means to not only optimize office utilization but also to leverage on more flexibility, autonomy and collaboration to increase employee productivity (Appel-Meulenbroek et al., 2011; Van der Voordt, 2004). In such an environment, leadership necessarily undergoes changes due to the different conditions. For instance, Crouch and Nimran (1989) point out that employees perceive their supervisor more positively if they are able to see and hear the supervisor and Kotter (1982) suggests that managers highly rely on spontaneous face-to-face meetings, which is both difficult to achieve in ABW. In line with that, Bodin-Danielsson et al. (2013) found that employees in an activity-based office assess leadership as rather poor and Koetsveld & Kamperman (2011) propose to ‘let go of line-of-sight management’ (p.312). However, apart from that, little research has been conducted on leadership in different office types. It mostly concentrates on the embodied and aesthetic perspective of leadership (e.g. Ropo et al., 2015; Ropo et al., 2013; De Paoli & Ropo, 2015). In particular, self-leadership, though receiving much research attention, appears to be insufficiently researched in relation to different types of office spaces. This is despite the fact that self-leadership seems to be especially applicable to deal with arising leadership challenges in contemporary office spaces such as ABW as the concept aims to help individuals to influence themselves to higher performance whereas external guidance becomes less significant (Manz, 1986).

This calls for academic research that combines the concept of self-leadership with different office types, especially ABW (See Figure 2). As ABW has seen significant attention from companies (Parker, 2014) and researchers (e.g. Appel-Meulenbroek et al., 2011; Koetsveld & Kamperman, 2011; Parker, 2014; Appel-Meulenbroek et al., 2015; De Been & Beijer, 2015), this thesis will focus on the activity-based office type.

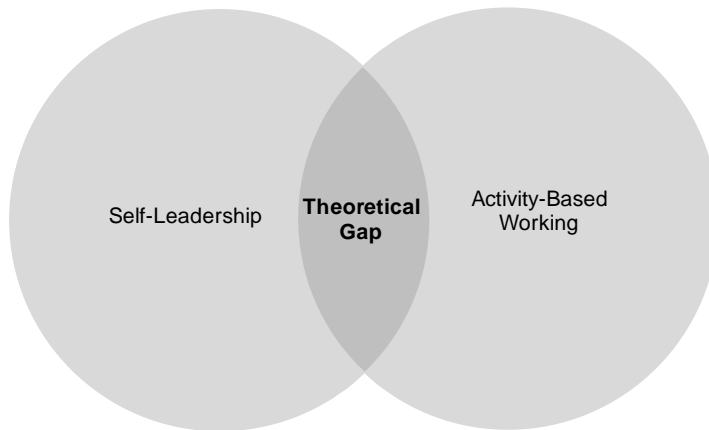


Figure 2: Theoretical Gap

This thesis will assume that self-leadership is a suitable leadership approach in an ABW office and it will thus be interesting to investigate how self-leadership can be applied in practice. This will not only add to academic research of self-leadership and office types but has moreover practical relevance, which can help managers and employees in activity-based offices to cope with the rising demands in an ABW workplace.

Addressing the identified research gap, this study takes on an exploratory approach and analyzes self-leadership application in the activity-based office in order to address the following research question:

How can self-leadership help employees to meet the rising demands in Activity-Based Working?

2.4 Theoretical Framework

In this section, a possible synthesis of Activity-Based Working and self-leadership is presented and potential effects of self-leadership on the activity-based office design are stated.

2.4.1 Appropriateness of Self-Leadership in an ABW Setting

Little research has been conducted that specifies the circumstances and situations in which self-leadership should be encouraged (Manz & Sims, 2001; Markham & Markham, 1998). At the forefront is Houghton and Yoho's (2005) *Contingency Model of Leadership and Psychological Empowerment* (See Appendix C), which suggests that certain contingency factors – follower development, situational urgency and task structure – dictate which leadership style should be chosen for a specific setting. One of the four leadership styles examined is empowering leadership (or *SuperLeadership*), which is defined as leading others to lead themselves and hence strives to promote follower self-leadership by actively encouraging self-leadership strategies, self-problem

solving and/or psychological ownership of work tasks (Manz & Sims, 2001; Houghton & Yoho, 2005). The model suggests that an empowering leadership style is appropriate in settings where long-term follower development is important, the situational urgency is low and the work tasks are rather unstructured and complex. In order to determine the appropriateness of an empowering leadership style (and thereby self-leadership) in an ABW setting, the model is applied in an ABW context along the three contingency factors and the resulting rising demands of an ABW environment are identified.

In settings where the first contingency factor, *follower development*, is important, a leader wishes to enhance follower capabilities over a longer time frame and to pass on the process and responsibility to an individual or group, only monitoring the progress (delegating) (Manz & Sims, 2001; Houghton & Yoho, 2005; Hersey & Blanchard, 2001). Accordingly, when ABW is introduced, a firm adopts a so-called output (or outcome-, result-) driven orientation, meaning that employees are evaluated based on their outputs rather than through their work process (Parker, 2014). Hereby, the leader defines the output targets and deadlines and wants employees to take on personal accountability for their results (Kuan and Black, 2011). The granted autonomy represents a rising demand in ABW, which needs to be met. In addition to that, studies show that ABW was implemented mostly in industries where medium to long-term projects and client relationships are of high importance (finance, IT and accounting) and employee capabilities are worth investing in over a longer time period (PCA, 2014).

The second factor, *situational urgency*, suggests that e.g. in crisis situations, the need for specific and task-oriented instructions dominates and that there might not be enough time to develop self-leadership capabilities in employees (Manz & Sims, 2001; Houghton & Yoho, 2005). Examples are a fire evacuation or a military combat situation. However, even though research found that employees in activity-based offices are subject to different environmental stressors that cause psychological and physiological reactions (e.g. stress caused by noise and acoustics, visual distraction and crowding), there is low situational urgency in an ABW context (Seddigh, 2015; De Croon et al., 2005; De Been & Beijer, 2015).

The third factor, *task structure*, relates to the degree to which a task environment is structured or unstructured (Houghton & Yoho, 2005). For instance, an unstructured environment is characterized by high levels of uncertainty, ample behavioral discretion and by tasks that are creative, analytical and intellectual (Manz & Sims, 2001; Roberts & Foti, 1998). In accordance with these characteristics is an ABW setting, which is generally implemented in knowledge-producing firms and therefore creative, analytical and intellectual in nature (Van Der Voordt, 2004). In an activity-based office employees face the complexity of everyday decision-making, since they are able to choose among different shared floor sections tailored to suit their work activities (Koetsveld & Kamperman, 2011). Employees have to pre-assess, decide and re-assess

every day which floor section fits the demand of their work task in order to be productive (Duffy, 1997). In addition to that, they might be uncertain of the complexity and unexpectedness of arising problems within the task before they chose a certain floor section (Appel-Meulenbroek et al., 2011). Therefore, an ABW setting inhibits an unstructured task environment with work tasks being rather complex, i.e. another rising demand.

By drawing on Houghton and Yoho's (2005) model, it becomes evident that empowering leadership, and therefore self-leadership, might be an appropriate leadership style in an ABW setting (See Figure 3).

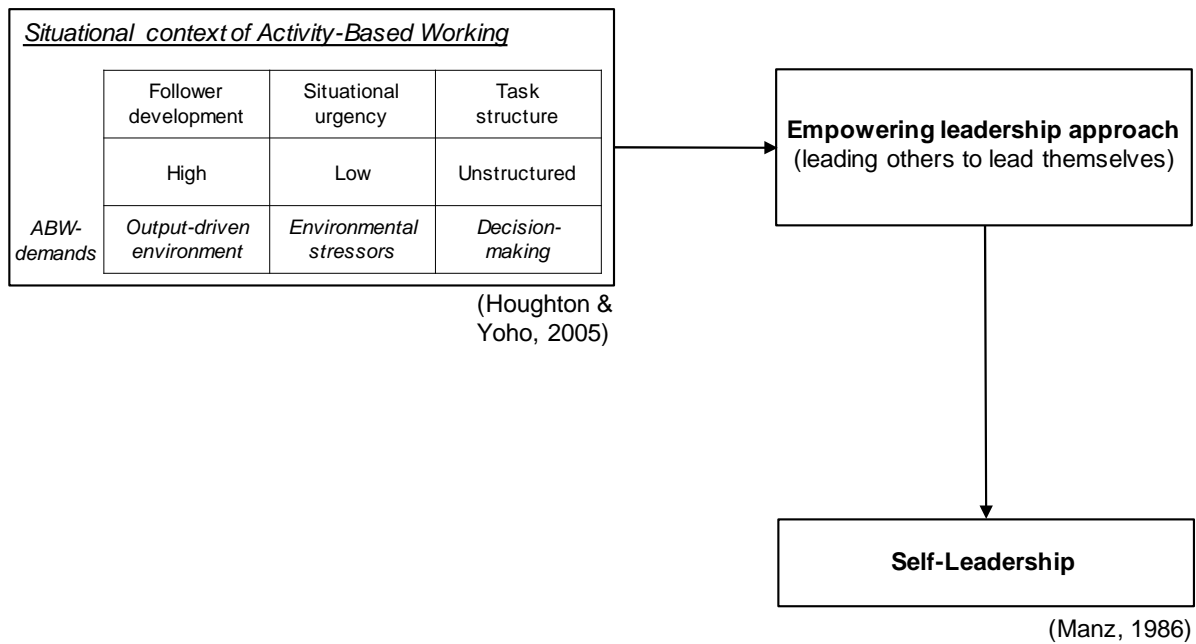


Figure 3: Contingency Model of Leadership and Empowerment in an ABW Context

2.4.2 Self-Leadership's Effect on ABW

It becomes evident, that the application of different self-leadership strategies might be helpful to individuals in different situations in an ABW setting. For instance, the increasing autonomy and responsibility of an output-driven environment could be facilitated with behavior-focused strategies such as self-goal setting, self-rewards and self-cueing in order to stay motivated and focused. In addition, the constructive thought pattern strategy of visualizing a successful performance in advance as well as natural rewards inherent to the work could support employees in managing the autonomy and responsibility in an output-driven environment. Moreover, environmental stressors such as crowding might be counteracted by behavior-focused strategies of self-observation and self-correcting feedback loops which lead to optimizing the choice of a pleasant surrounding for the individual employee. Furthermore, the complexity of everyday decision-making through increased employee autonomy might be facilitated by the behavior-

focused strategy self-observation, which in turn leads to a higher self-awareness and an optimized choice for each employee. These considerations further substantiate the appropriateness of self-leadership in various ABW specific situations.

In order to address the research gap and answer the research question, a comprehensive theoretical framework (See Figure 4) has been developed that embodies the model-based assumption of self-leadership fitting to ABW as well as the indication that the outcomes of self-leadership, if adequately applied, might have a direct effect on the demands of ABW. Therefore, this article examines the influence of self-leadership outcomes on three specific demands of Activity-Based Working, namely (i) decision-making, (ii) environmental stressors and (iii) output-driven environment.

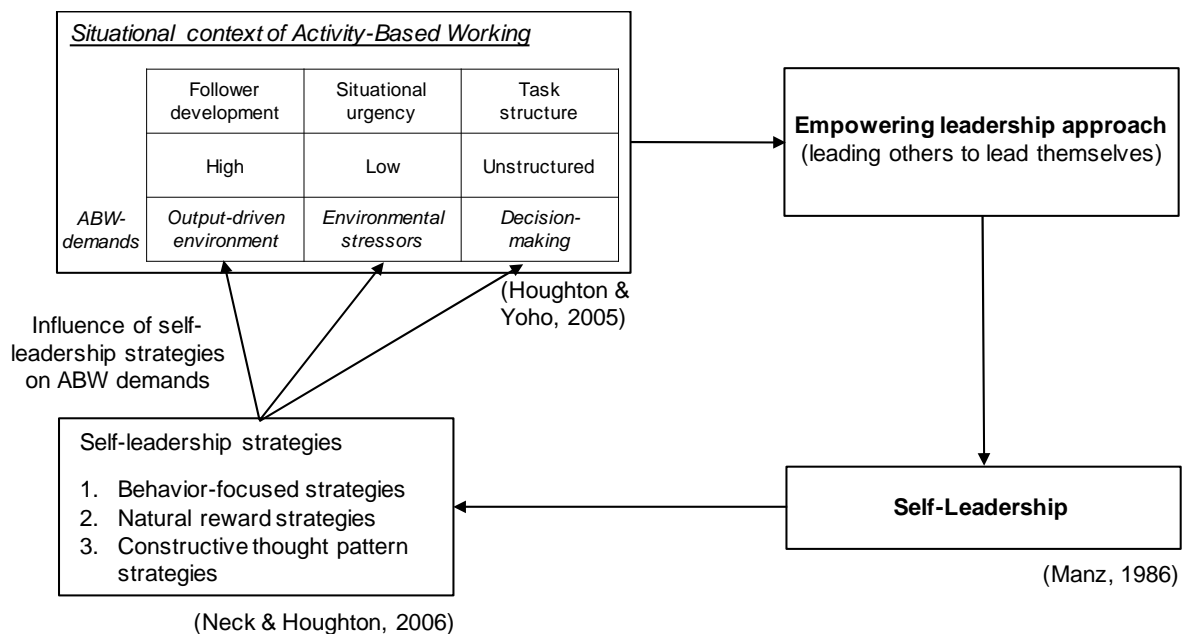


Figure 4: Theoretical Framework

3 METHODOLOGY

This chapter introduces the methodological approach in section 3.1, describes the case selection in section 3.2, elaborates on data collection in section 3.3 and on data analysis in section 3.4, and ends with the description of the quality of research design in section 3.5.

3.1 Choosing an appropriate Research Method

This article takes on a social constructivist view on leadership, considering it a co-construction and product of sociohistorical and collective meaning making through the interplay of leadership actors (e.g. leaders, managers, followers) (Creswell, 2009; Fairhurst & Grant, 2010). This product is continuously constructed and reconstructed, leading to changed perceptions and behaviors of people (Bryman, 2012; Lambert, 2002). An introduction of ABW might cause employees to conduct a reconstruction and, in time, shift towards a self-leadership approach, whose application and influence on ABW demands is the focus of this article. In line with social constructivism, this article relies on employee's views of the situation as well as on the environmental context of employees in order to inductively develop a theory and pattern of meaning (Creswell, 2009). Moreover, given the intermediate state of prior theory and research in the field, the combination of quantitative and qualitative methods seems appropriate when a new construct (a provisional theory) is proposed out of two separate bodies of literature (Edmondson et al., 2007; Mackenzie and Knipe, 2006). By combining the two parts, the strength of the study is greater than either qualitative or quantitative research on its own (Creswell & Plano Clark, 2007). Therefore, a mixed method strategy is applied, which has the following characteristics: (i) It is sequential – meaning that at first, a quantitative pre-study is carried out to determine the self-leadership capabilities of employees before a qualitative case study is conducted. (ii) There is a focus on the qualitative part, which means that both parts are not equal in weight. (iii) The pre-study data has a supportive role and provides important context for the larger qualitative case study.

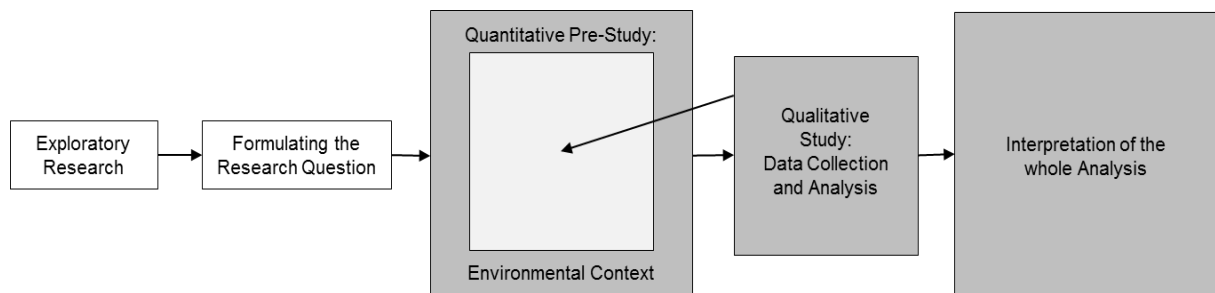


Figure 5: Overview of the Sequential Mixed Research Method

The research method applied, as seen in Figure 5, is clearly structured and its appropriateness and internal consistency among all elements is described as follows (Edmondson et al., 2007).

At first, extensive exploratory research was carried out in order to provide an overview of Activity-Based Working, self-leadership and their potential synthesis. Therefore, various databases such as JSTOR, Emerald Insight, ScienceDirect and Google Scholar were examined. The respective concepts have been delimited from similar concepts, which were then excluded from this research. The existent literature was applied to limit the scope of the study and to focus on the presented research gap. The purpose of this article is to answer the following research question:

How can self-leadership help employees to meet the rising demands in Activity-Based Working?

In order to use an approach that answers to the nature and purpose of the question, a sequential mixed method with an emphasis on qualitative research is used. The first part of the mixed method is a quantitative pre-study in form of a survey, which captures the self-leadership capabilities existent among the respective employees and provides an overview of the structure of the workforces. The second part is a qualitative, embedded multiple-case study, which consists of semi-structured interviews at two different companies that examine how successful self-leadership influences specific demands in an ABW environment. The reasoning for this approach is the following: Yin (2009) argues that a case study is relevant when a research question seeks to explain present circumstances ('how'-questions) and when an in-depth description of a phenomenon is pursued. A multiple-case study is favorable as it corroborates the findings and improves the building of theory (Yin, 2009; Bryman, 2012). This study will use a literal replication including two companies that introduced ABW in recent years maintaining a coherent empirical sample. It has multiple units of analysis, which are the different employees from several departments (embeddedness) (Yin, 2009).

In the end, this article seeks to develop a provisional theory of how self-leadership can help employees to meet the rising demands in Activity-Based Working. Therefore, an interpretation of the results of both, quantitative and qualitative, parts and a discussion fulfill this research goal.

3.2 Case Selection

In order to select the right companies for the multiple-case study, several criteria were considered. First, the firms should have introduced ABW in the traditional way according to its definition. This means that they should have introduced shared floor sections tailored to the needs of the firm, each having a different work focus (Bodin-Danielsson, 2010; Parker, 2014). Moreover, the implementation was accompanied by investments in ICT and interior design to enable employees

to work in a flexible way. In addition to that, a typical ABW introduction encompasses changing to a smaller office space or employing more employees to leverage on space utilization savings.

Second, the company should have introduced ABW in recent years, so that current employees are able to remember and assess the differences to their previous work setting.

Lastly, the firms chosen should be in an industry and geography that are in the development of ABW somewhat advanced and therefore representative for the office design. The industry sectors most likely to adopt ABW are banking/finance, accounting, IT, media and real estate (PCA, 2014). Furthermore, the countries most representative for ABW are Australia, the Netherlands and Sweden, with Sweden being most advantageous for this study due to the geographic proximity of the potential firms to the authors. It would allow for easy access and efficient communication, including face-to-face meetings and thorough interviews.

Vasakronan

Vasakronan is a Swedish real estate company with a focus on office buildings (Vasakronan, 2016). It is owned by the Swedish National Pension funds and administers 180 buildings with a total value of SEK 104 billion. With 350 employees, Vasakronan is situated in four locations and introduced ABW in the Stockholm office in the end of 2012 and in the Uppsala office in 2015. Vasakronan is one of the first companies in Sweden to introduce ABW. It was implemented by a team of change management and business development employees who are still responsible for any follow-up action to adapt the office environment according to employees' behaviors and preferences.

The company moved into a new office with the introduction of ABW and set up different floor areas including a quiet zone, phone booths, open space meeting areas, etc.. The implementation was accompanied by an extensive investment in IT to ensure efficient communication and work processes in the office.

PE Accounting

Founded in 2010, PE Accounting (PE) is a fast-growing accounting firm, based in Stockholm, offering paper-free and fully digital accounting services to small- and medium sized companies (PE Accounting, 2016). PE is a privately owned firm consisting of accounting consultants, developers, implementers, salespeople and a customer support department. ABW was implemented in May 2015 by a project group including the authors of this study, which provides close insights and a special connection to the company. Moreover, the recent introduction of ABW allows employees to compare with the previous office setting. The implementation was conducted according to best practice, encompassing differently themed work areas as well as high

investment in IT and interior. Although PE remained in the same office, the workforce grew from 21 to 35 employees since the introduction of ABW.

Overall, Vasakronan and PE Accounting are two relatively different companies in terms of industry sector, size, ownership and culture. However, since both firms greatly fit the mentioned criteria this study captures a broad spectrum of the ABW-usage and -environment while it grants a strong representativeness.

3.3 Data Collection

According to Edmondson & McManus (2007) the intermediate state of the research in this study suggests a hybrid approach of quantitative and qualitative data. The former builds the context that allows for a focused qualitative exploration of the proposed relationships.

Pre-Study: Survey

The pre-study takes the form of a survey, which aims to assess the employee's self-leadership skills and provides an overview of the structure of the workforces of both firms. The purpose is thus to evaluate the environmental context of the main study and thereby increase its validity and representativeness.

The survey entails questions from the abbreviated self-leadership questionnaire (Houghton et al., 2012). This is a method to quantify an individual's self-leadership skills. It is based on the revised self-leadership questionnaire (RSLQ) (Houghton & Neck, 2002) but includes fewer questions to increase the response rate and decrease inaccuracy. This study uses the ASLQ since Houghton et al. (2012) suggest that it is more appropriate if self-leadership is only one variable in the context of a larger study (See Appendix D and E for the RSLQ and ASLQ).

In order to ensure easy usability, the entire survey follows a Likert scale measurement method as proposed by the ASLQ. Besides the ease of use, a Likert scale is also widely acknowledged, thus minimizing an understandability bias and the consistent single numerical response renders the data easily quantifiable.

A digital version of the survey was distributed to all 35 employees of PE Accounting (See Appendix E for the ASLQ). A total of 25 valid responses was received which equals a response rate of 71%.

As part of a large study of the Stockholm School of Economics among ABW offices, Vasakronan responded to the ASLQ and thus the data was already existent. The survey yielded 178 valid responses, which represents a response rate of 55%. Since also the firms Microsoft and Wise,

which both changed to ABW in Sweden, had responded to the ASLQ beforehand, it was possible to create a benchmark for a better orientation. It is composed of 318 valid responses.

Main Study: Semi-structured interviews

The primary sources of information for the main study are semi-structured interviews at the two investigated companies. This type of interview allows for a balance between flexibility and structure which is favorable for an exploratory study (Gillham, 2005). Those sources were enhanced by documentation such as academic articles.

The semi-structured interviews were prepared by developing an interview guide based on the theoretical framework (See Appendix F for the interview guide). Three sections of questions addressed each of the identified ABW-related demands. Open questions are used in order to engage the interviewee and explore the different interview sections (Bryman, 2012). Those are complemented with follow-up questions and prompts to ensure a great level of detail.

The interview sample consists of 20 participants, 16 from Vasakronan and 4 from PE Accounting, exhibited in Appendix G. All of them are part of an Activity-based office and belong to various organizational levels and departments. The respective sample sizes were proportionate to the size of the two companies. In both companies, interviews with different employees were scheduled until empirical saturation regarding the research question was reached (Bryman, 2012).

The interview process followed Gillham's (2005) stages of conducting an interview. In the *preparation* phase, the prospective interviewees were approached with the help of a facilitator and received information regarding the purpose of the research and the interview. The interview questions were deliberately not distributed in advance in order to allow for objective and spontaneous answers while mitigating the risk of omitting sensitive information. The *initial contact* and *orientation* phase served as introduction and clarification of the objectives of the study as well as the interviews, thereby providing the interviewee with a direction. In the *substantive* phase, the questions defined in the interview guide were asked, followed up by sub-questions to provide further depth. The *closure* phase gave the interviewees the chance to ask questions and the interviewers to clarify any open issues.

All interviews were held face-to-face in the office facilities of the respective company. During all interviews both researchers were present, one having the task of either leading the interview while the other took notes and intervened with relevant follow-up questions. After each interview, the authors engaged in a short discussion regarding their impressions and themes of the interview. The interviews were recorded and subsequently transcribed to provide a written record of the interviews (Gillham, 2005).

3.4 Data Analysis

In the following, the methods of data analysis for both the pre-study survey and the interviews of the main study will be explained.

Pre-Study: Survey

The analysis of the ASLQ followed the general guidelines of the questionnaire (Houghton et al., 2012). After preparing the data in Excel and SPSS, the self-leadership scores for PE Accounting and Vasakronan were calculated. A value was assigned to each answer possibility, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The ASLQ consists of nine questions, which results in a maximum self-leadership score of 45. As the large study of the Stockholm School of Economics research group only included six questions of the ASLQ, the score for Vasakronan was extrapolated according to the average of the six included questions. The scores were furthermore matched with the age structure of the participants to examine possible relationships between score and age. The results of the individual companies were finally benchmarked with the peer group.

Main Study: Semi-structured interviews

The data analysis for the semi-structured interviews follows the method of a thematic analysis (Bryman 2012; Vaismoradi et al., 2013; Braun & Clarke, 2006). It appears to be particularly applicable for this study since it is described as appropriate for a study taking a constructivist perspective (Vaismoradi et al., 2013). Moreover, thematic analysis entails both description as well as interpretation and, by integrating manifest and latent contents, emphasizes the context of the collected data. These attributes are important to the study at hand to ensure its exploratory nature.

The thematic analysis is based on six phases according to Braun & Clarke (2006) as illustrated in Figure 6.

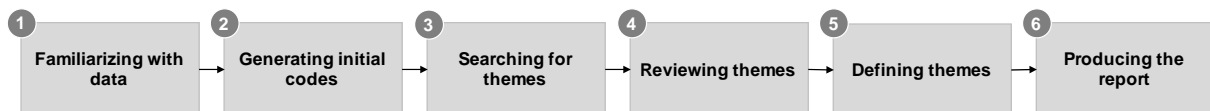


Figure 6: Thematic Analysis Phases (Based on Braun & Clarke, 2006)

First, all data is transcribed, read, re-read and first ideas are noted to become familiar with the data. Second, initial codes are generated by coding relevant data systematically across the whole data set and sorting data relevant to every code. Codes are to be understood as ‘the most basic element of the data or information that can be assessed in a meaningful way’ (Boyatzis, 1998, p.63). Third, on a broader level, potential themes (or categories) are identified and the codes are collated into the relevant theme. Fourth, the developed themes are refined and examined

regarding internal homogeneity and external heterogeneity. The review and refinement is done regarding the coherence of codes within the theme and subsequently regarding the coherence of the themes within the entire data set. Fifth, the themes are defined by identifying their essence or core statement. Finally, a report of the analysis is produced in relation to the research question.

For the analysis of the main study, interviews amounting to a total of 925 minutes and resulting in a transcript of 188 pages containing 92'617 words were produced and subsequently analyzed.

3.5 Quality of Research Design

Among the most prominent criteria for judging the quality of research designs are reliability and validity, the former granting the repeatability of a study and the latter being concerned with the integrity of the conclusions derived from the study (Bryman, 2012).

In order to achieve high reliability, several measures are conducted: (i) A transparent description of the research steps taken (*audit trail*) as well as the transcripts of all interviews are included in this article (Lincoln and Guba, 1985). (ii) Both authors analyzed the pre-study individually as well as coded the interview data separately before results were compared and consolidated. The results were also briefly discussed with experts (*external audit*). (iii) Both authors attended all interviews and had a brief discussion after each interview in order to check for objectivity standards and inter-observer consistency (Bryman, 2012).

Validity can be divided into three sub-categories: Internal-, external- and construct validity. Internal validity should be neglected, as this article is of an exploratory nature (Yin, 2009). External validity, concerning generalization, is increased by (i) a replication logic, which means that the same pre- and main study was conducted at two separate firms, (ii) a substantial amount of interviews as well as a strong foundation of theory applied in research design. Construct validity, the most challenging in case study research, is granted by (i) a clear research path (*chain of evidence*), (ii) a pre-study for an improved selection of interview partners and (iii) a prolonged engagement at the firms, meaning significant time spent at both institutions (Bryman, 2012; Yin, 2009).

4 EMPIRICAL FINDINGS & ANALYSIS

The following chapter presents the findings of the pre-study in section 4.1 and those of the main study in section 4.2. The purpose of the pre-study is (i) to capture the self-leadership capabilities of the employees (based on the ASLQ), (ii) to provide an overview of the structure of the workforces and (iii) to convince the authors of the representativeness and potential of the main study results. Therefore, the pre-study only presents the appropriateness of the environmental context and is not revisited in the main study. The purpose of the main study is to describe the three most important themes identified in the course of the thematic analysis. In the end, the research question is answered in section 4.3, which presents how self-leadership strategies can help employees to meet the rising demands in ABW, embedded in a provisional theory. Figure 7 provides an overview of the chapter in the context of the mixed research method applied, as outlined in section 3.1.

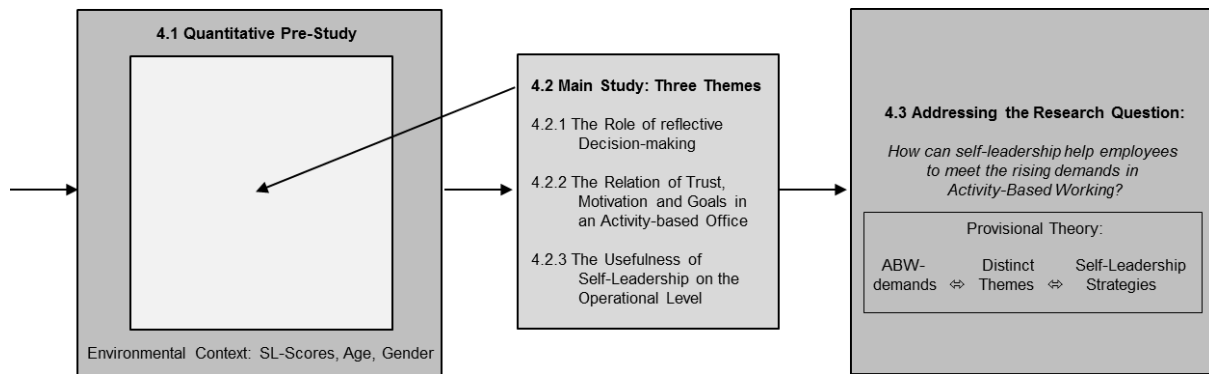


Figure 7: Overview of Chapter 4 in context of the Sequential Mixed Research Method

4.1 Pre-Study

The responses of the survey were entered into Excel and SPSS (Version 22.0), where the mean of the self-leadership scores by firm, the respective standard deviations (SD) and the split into the three sub-dimensions were calculated. The total score is the sum of its three sub-dimensions, which are (i) behavior awareness and volition, (ii) task motivation and (iii) constructive cognition. Behavior awareness and volition includes self-goal-setting and self-observation. Task motivation comprises visualizing (successful) performance and self-reward. Constructive cognition consists of evaluating beliefs and assumptions and self-talk. The results of the analysis are shown in Figure 8.

SELF-LEADERSHIP IN ACTIVITY-BASED WORKING

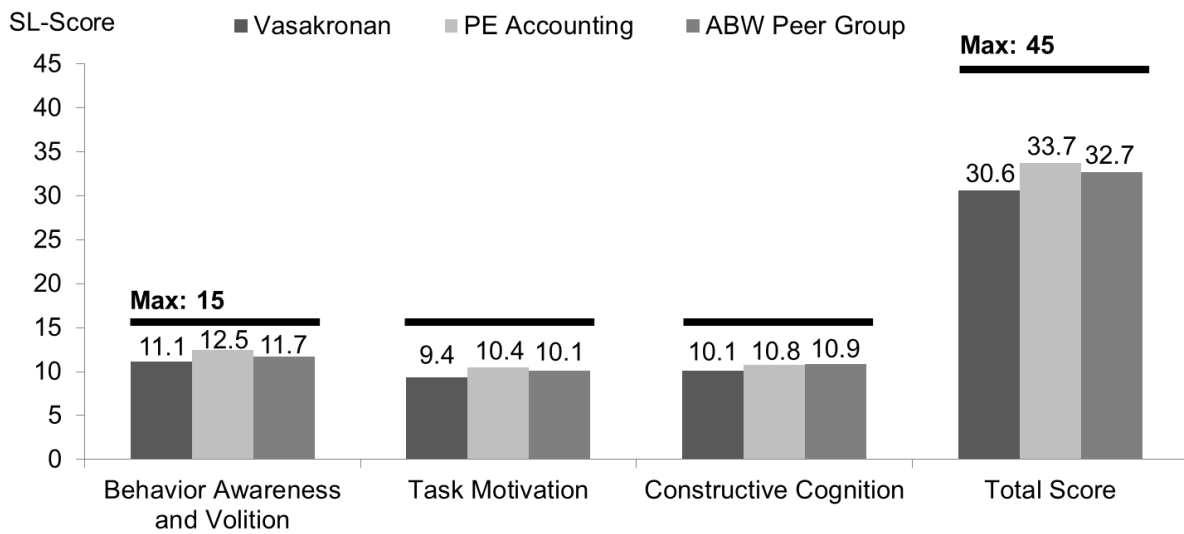


Figure 8: Mean SL-Scores and Split into Three Sub-Dimensions by Firm

PE Accounting reached 33.7 out of 45 possible points (SD: 5.5) and scored particularly well in behavior awareness and volition with 12.5 out of 15 points. Vasakronan achieved 30.6 out of 45 points (SD: 7.4) and ranks third behind PE and the ABW peer group (32.7, SD: 7.1) in terms of both total score as well as sub-dimensions. As mentioned before, the ABW peer group comprises the Swedish subsidiaries of Microsoft and Wise. Overall, it can be observed that there are significant self-leadership capabilities existent in both firms, Vasakronan and PE. However, there is also some upwards potential for both firms along all three dimensions.

Figure 8 shows that, in terms of distribution, Vasakronan and the ABW peer group exhibit a negatively skewed distribution with 47% and 35% of its employees obtaining a score of less than 30. Furthermore, 6% of Vasakronan's employees have a score of less than 18, which indicates that self-leadership strategies are not or just seldom applied. PE Accounting's employees all seem to have a quite regular use of the self-leadership strategies.

SELF-LEADERSHIP IN ACTIVITY-BASED WORKING

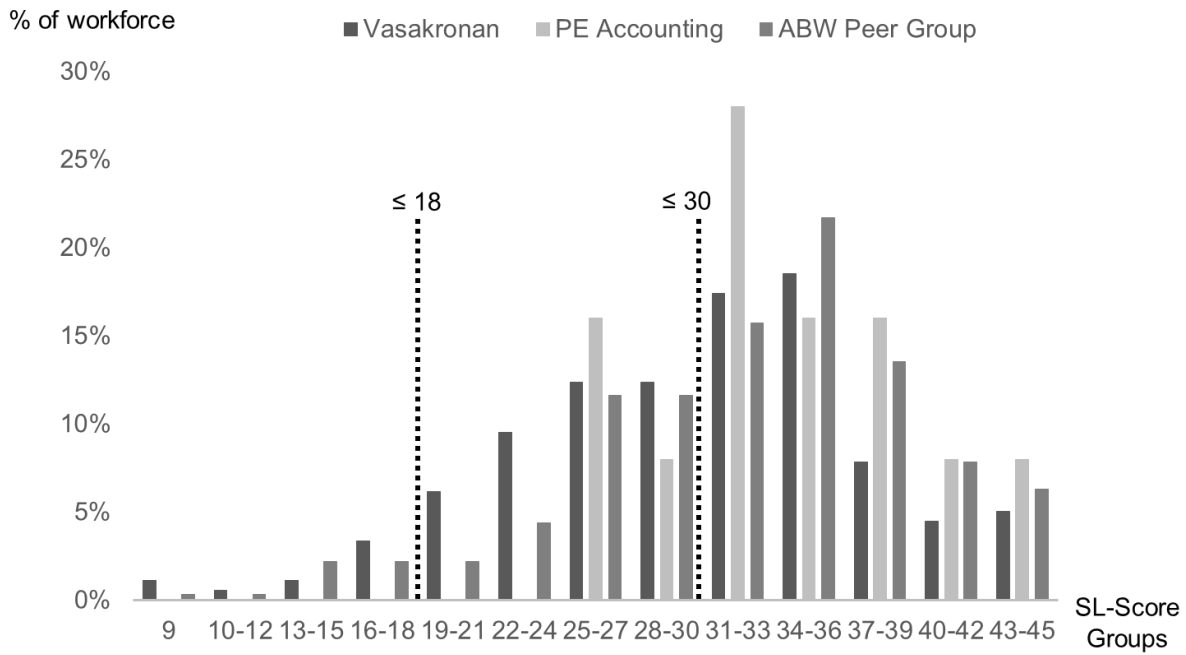


Figure 9: Distribution of SL-Scores by Firm

The structure of the workforce in terms of age and gender shows interesting findings, as shown in Figure 9. PE Accounting, representing a fast-growing and agile start-up firm, has a comparatively young workforce with 60% of its employees being between 25 and 34 years of age. Vasakronan, the experienced and formerly government-owned real estate firm, has a comparatively older workforce with close to 40% being between 45 and 55 years of age. The ABW peer group shows a bell-shaped distribution in terms of its age of the workforce. In regards to gender, PE Accounting as well as Vasakronan have a workforce that is to 40% composed of female employees, which is above the benchmark of the ABW peer group (37%).

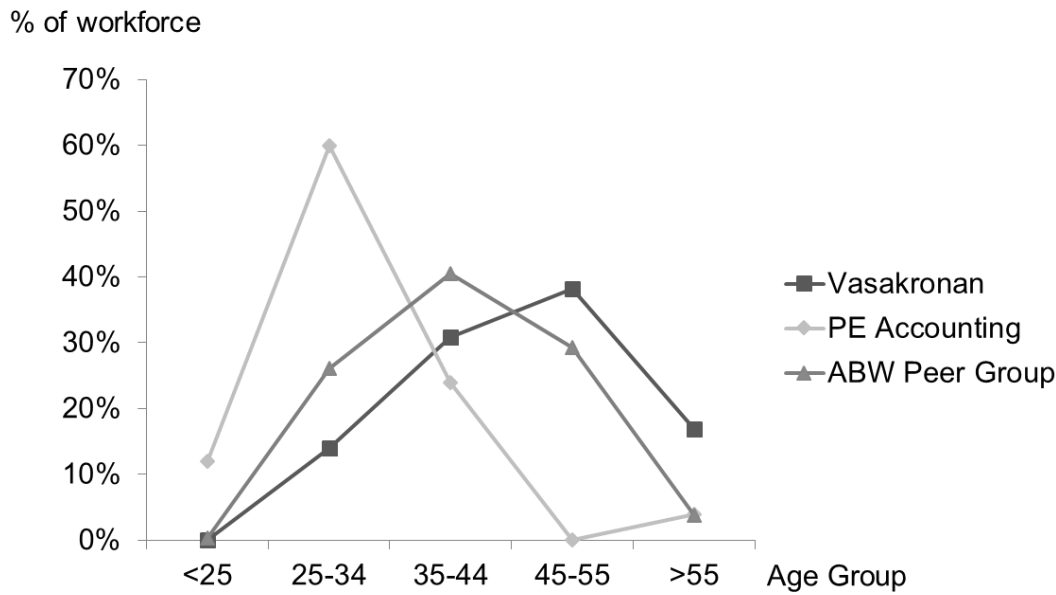


Figure 10: Split of Workforce into Age Groups (in %) and Gender

Additionally, bivariate Pearson correlation coefficients were calculated in order to investigate the relationships between self-leadership scores and age for Vasakronan and the ABW peer group. The results show for Vasakronan a small negative correlation ($r: -0.027$) and for the ABW peer group no correlation ($r: 0.004$) (See Appendix H). Even though not statistically significant in this study, the findings seem to be in line with that of other scholars, who found in more extensive studies that the older employees get, the fewer their use of the self-leadership strategies, i.e. they observed a low negative association (Ricketts et al., 2012; Ugurluoglu et al., 2013). Furthermore, it can be seen that female employees in this study reached slightly higher self-leadership scores (female: 32.14, SD: 6.9 and male: 31.99, SD: 7.4), which is in line with the findings of other scholars, who found that female employees are more inclined towards self-leadership strategies and reached higher scores particularly in self-goal setting and self-observation (Ricketts et al., 2012; Ugurluoglu et al., 2013; Norris, 2008).

The findings show existent self-leadership capabilities in both firms, but also differences in the self-leadership scores and in the structure of the workforces. Overall, the authors deem the environmental context appropriate, promising and representative for the findings of the main study.

4.2 Main Study

The following section will introduce and analyze the three major themes that emerged from the thematic analysis of the interviews at Vasakronan and PE Accounting. As recommended by Braun & Clarke (2006) the three themes identified are not congruent with the ABW-related

demands mentioned beforehand – they have emerged out of the data and have been analyzed in the context of the relevant literature. First, the role of reflective decision-making will be explored (4.2.1). Second, the relation of trust, motivation and goal setting in the organizational setting will be analyzed (4.2.2) before finally addressing the application of self-leadership on the operational level (4.2.3).

4.2.1 The Role of reflective Decision-making

The first theme derived from the interview analysis is the role of decision-making in an activity-based work environment. The interviewees confirmed the initial inference that the increased freedom of choice in regards to the place of work represents a major challenge in Activity-Based Working and stressed the complexity that this choice entails. Since employees are expected to change their workplace and make full use of the variation of areas, they face difficult decisions every day (Interviewee [2, 18], 2016). On the one hand, the high amount of choices presents a great opportunity for employees to adjust their environment to their individual needs, but on the other hand, it requires the ability to make effective use of it, otherwise it can lead to a lack of productivity (Interviewee [3], 2016). The interviews depicted that employees at Vasakronan and PE Accounting react positively to the possibility to choose their workspace, which is in line with other scholars (Interviewee [1, 2, 3, 18], 2016; De Been & Beijer, 2014; De Been & Beijer, 2015; Seddigh, 2015). However, not everyone exploits this possibility in an effective manner but rather decides on the place of work unconsciously. This is reflected by random, impulsive, biased or superficial decisions, such as designating a favorite spot or picking a seat by chance (Interviewee [1, 4, 16, 17, 20], 2016). Interviewees have pointed out the importance of making conscious decisions in this regard since all employees differ in their preference for the respective work space (Interviewee [2, 5], 2016). Consequently, the assessment of specific characteristics of the work environment also differs regarding the appropriateness for particular tasks (Interviewee [2, 9, 12, 15], 2016).

In order to explore how decision-making concerning the workspace in ABW can be improved, the individual decision-making process will be further elaborated on. According to Jost (2001), the process can be divided into three main phases: problem identification, situational analysis and action (See Figure 11).

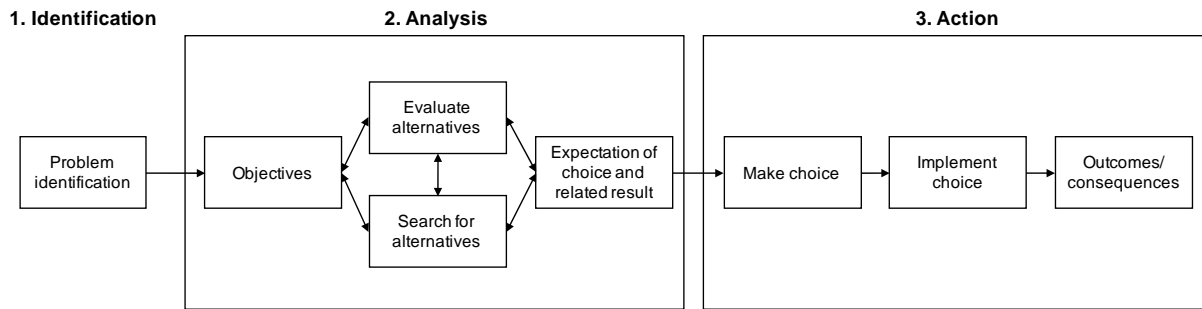


Figure 11: Individual Decision-Making Process (Based on Jost (2001) & Harrison (1996))

In the problem identification phase, the individual perceives a specific situation and formulates a problem that requires a decision to solve it. The analysis phase does not take place in a sequential manner but the components are interrelated. The individual sets a desired outcome as an objective to the decision-making process and searches for different alternatives that could accomplish it. At the same time, the alternatives are evaluated based on individual criteria. More specifically, the expected consequences of the respective choices are evaluated in regards to their benefit to the individual. The evaluation is dependent on personal factors such as priorities and preferences and can take two forms, (i) explicit, which implies the conscious assessment of the consequences and (ii) implicit, meaning that the individual evaluates the consequences based on experiences and predefined patterns. This results in an expectation of the relationship between choice and result. In the third phase, the individual subsequently makes a choice based on this assessment and implements it. This results in certain outcomes and consequences.

Based on the cognitive effort that an individual invests in making a decision, two main types of decisions can be identified (Svenson, 1990). First, programmed decisions, are characterized by a low cognitive effort. The evaluation of the expected consequences is implicit and the choice of an alternative occurs automatically or based on prior experiences. Second, non-programmed or reflective decisions, require a high cognitive effort and individual reflection capacity. It is possible that the objective of the decision is vague and needs to be defined by the individual. The focus of this decision type is the explicit assessment of the expected results of the various choices.

The interviews at Vasakronan and PE Accounting revealed a slightly higher amount of employees that make programmed decisions compared to the ones that make reflective decisions. Notably, that the majority of the interviewed executives engaged in reflective decision-making (Interviewee [2, 10, 18, 19], 2016). All employees classified as reflective decision makers show a relatively high level of self-awareness and consciously reflect about their alternatives (Interviewee [2, 9, 10, 12, 13, 18, 19], 2016). This implies that reflective decision makers in ABW consciously take personal factors, such as reactions to different environments or preferences of work style, into account and explicitly assess the possible work space choices (Interviewee [2, 9, 12, 18], 2016). This results in more effective decisions regarding their workspace, which are in line with their personal needs.

Programmed decision makers on the other hand, put less thought into their decisions and only pay little or no attention reflecting on them (Interviewee [1, 4-7, 11, 14-17, 20], 2016). This leads to an insufficient exploitation of opportunities in ABW.

‘Be aware of how you react in different situations and how you react when you sit at different locations in the office. [...] If you are not aware, then maybe you end up not feeling good some days and you don’t know why.’ (Interviewee [9], 2016)

It becomes evident that it is desirable to increase the amount of reflective decisions in order to use ABW more effectively when choosing a workspace. Interviewees mentioned that decision-making could be improved by employing the self-leadership technique of self-observation in order to raise self-awareness (Interviewee [1-3, 5, 9, 15, 18], 2016). The employees have different preferences and react to certain environments in different ways (Interviewee [5, 9, 10, 15], 2016). If employees become aware of their behavior in different situations and spaces, they are likely to make a better assessment of the most effective choice.

Using self-observation as a means to become aware of interrelations between behavior and environment has two effects on the individual decision-making process in ABW. First, it leads to a more explicit and thus conscious evaluation of the alternatives in regards to their expected outcome. If the individual is aware of personal factors, such as reactions to a work environment, due to self-observation, the evaluation becomes more conscious thus leading to a reflective decision. Second, self-observation also helps to examine behavior from an ex-post perspective and thereby reassesses the choice regarding the workspace. Reflecting on the decision based on its outcome is an important component for an effective use of ABW (Interviewee [3, 18], 2016)

‘Ten minutes later I realized that I can’t work concentrated here. Then I moved. I realized that this was not the best place today.’ (Interviewee [18], 2016)

The reassessment can be conceptualized as a learning process, which can be integrated in the outlined decision-making process. The individual perceives the outcome of a decision and compares it to its initial expectations (Argyris, 1982). Depending on the discrepancy between perception and expectation of the outcome, the individual engages in a single or double loop learning process. Single loop learning refers to the individual adjusting its expectations and leads to a modification of the decision. Double loop learning suggests that the individual first adjusts its

objectives, which in turn leads to an adjustment of expectations and ultimately of the decision (See Figure 12 for the learning process in the context of the decision-making process). The learning based on experienced outcomes then renders the evaluation of alternatives and their expected outcomes more conscious, taking into account personal factors observed in the reassessment.

Based on the synthesis of theory and interviews, an ideal decision-making process in an Activity-Based Working environment (See Figure 12) could thus be conceptualized as follows.

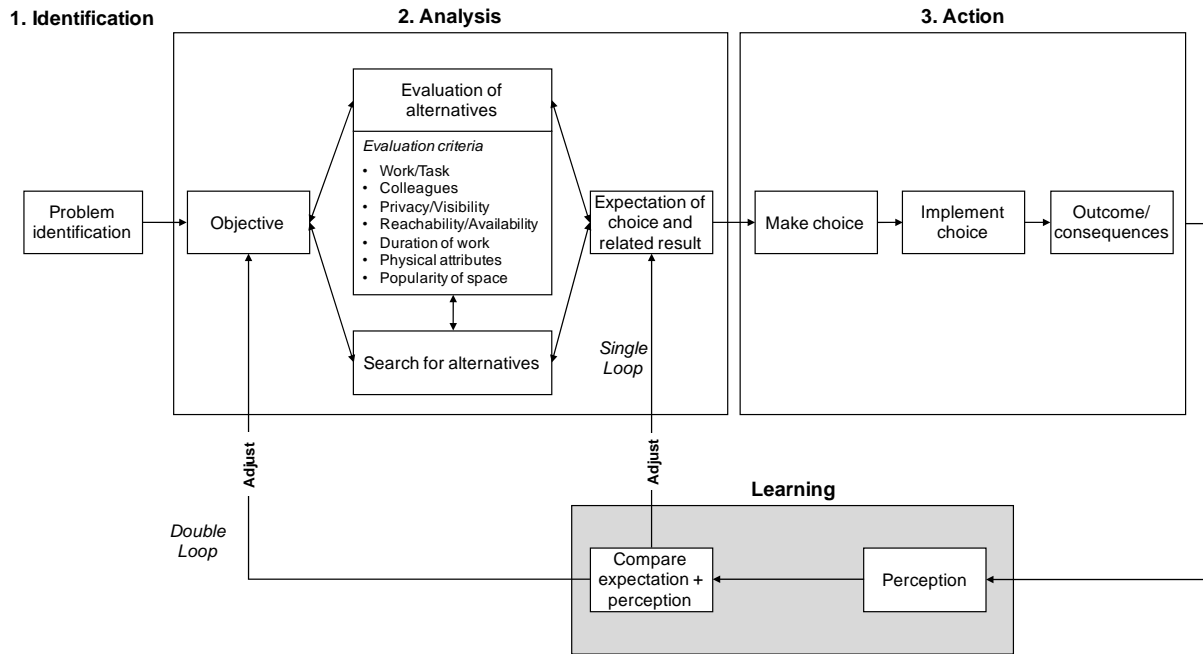


Figure 12: Integrated Individual ABW Decision-Making Process

The problem of no assigned seats is predefined and thus phase one of the process is insignificant. In phase two, employees set an objective, which is most likely to find a workspace that is most effective and productive for the tasks to be accomplished. At this stage, it is already important for employees to be aware that this is the purpose of the workspace and to define their objective accordingly. Subsequently, employees search for alternatives, which are represented by the different office areas and the included seats. The evaluation of the alternatives is then based on various criteria. All interviewees mentioned criteria that are considered when looking for a place to work. They can be categorized in seven groups: work/task, colleagues, privacy/visibility, reachability/availability, duration of work, physical attributes and popularity of space. For instance, an individual takes into account that it has to complete a task that requires concentration (work/task), the help of co-workers (colleagues) and the employee works best in quiet environments (privacy/visibility) (Interviewee [1, 12], 2016). All the different alternatives will then be evaluated according to these factors. By using self-observation in this phase, the individual is able to make a conscious and reflected evaluation based on personal preferences and needs

(Interviewee [1-3, 5, 9, 15, 18], 2016). This leads to an expectation regarding the relationship between choice of a seat and work behavior or performance. Based on the analysis phase, the employee then chooses a seat, starts working and ideally achieves an effective result in the third phase. Entering the reassessment or learning phase, the employee observes its behavior in the chosen workspace and compares it to the expected behavior. Based on the discrepancy, the employee adapts the evaluation and expectations, i.e. chooses another seat taking into account newly observed personal factors (single loop). Alternatively, the individual adjusts the objective, i.e. alters the assumptions that were made regarding the purpose of the seat (double loop). The next time the employee faces the decision where to sit, this reassessment will help to make a more reflected choice.

Consequently, employees working in an activity-based office can use the self-leadership strategy of self-observation in order to become more self-aware of personal factors that influence their behavior in a certain work environment. Including a reassessment or learning phase in which employees consciously reflect upon their behavior, enables them to learn about the personal factors influencing them from an ex-post perspective. These factors immediately influence the decision-making process at the stage of the explicit evaluation of alternatives and their expected outcome. Thus, a higher self-awareness leads to a more reflective decision. The iteration of the decision-making and learning process gradually optimizes the decision.

4.2.2 The Relation of Trust, Motivation and Goals in an Activity-based Office

The second major theme in the interviews has been the role of trust in the organizational setting of an activity-based office. When asked about their source of motivation and use of self-leadership strategies in an output-driven environment, almost every interviewee mentioned trust as a crucial factor for working in an activity-based office (Interviewee [1-5, 7-15, 17, 18], 2016). In the interviews, trust was described as a reciprocal social construct: Since implementing ABW, management has granted employees more trust, which is perceived as motivational and empowering. However, in turn, employees put high trust into management, which is considered as a supportive, knowledgeable and reachable, yet sometimes invisible, instance. It was mentioned that trust is one of five core principles for the internal environment at Vasakronan and an essential tool to deal with contingent complexities and diverse situations arising in an activity-based office (Interviewee [3, 10], 2016). In general, the interviewees saw trust as the beneficial alternative to control and instructions.

In a more negative light have been some aspects of motivation and distrust. Some interviewees observed colleagues who feel less motivated since the implementation of ABW and even somewhat 'lost' in the new system (Interviewee [1, 7, 10, 17, 18], 2016). Executives of Vasakronan mentioned that a lack of intrinsic motivation seems to become more evident in the new

environment, where employees are not told anymore on *how* to reach a certain goal (Interviewee [17, 18], 2016). The effects of the former system, characterized by more control, instructions and hierarchy, have not been shaken off by all employees yet. This also includes facets of distrust, for instance, employees still seem to think about the signal that they send when they arrive late to the office, even though they might have worked from home in the morning (Interviewee [2], 2016). Furthermore, although many interviewees stress the importance of feedback and other forms of recognition, the non-visibility and partial absence of the management seems to trigger a feeling of disconnection and isolation, which is generally observed to have a negative effect on intrinsic motivation (McDonald, 2012; Interviewee [1, 6, 10, 17, 18], 2016).

Before relating trust to motivation, the concept of trust is elaborated in more detail: Rousseau et al. (1998, p. 395) define trust as ‘a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another’. Factors such as honesty, benevolence and competence are usually regarded as indicators of trustworthiness (Langfred, 2004). The creation and existence of trust is shown to have extensive benefits to individuals and their organizations, as shown in a review of 43 empirical studies by Dirks and Ferrin (2001). The mechanics seem simple: The better an individual’s beliefs about another person’s honesty, benevolence and competence are, the more likely that individual is willing to take on risk (e.g. cooperate, sharing information) (Mayer et al., 1995). This risk-taking behavior is expected to lead to higher returns in the form of positive outcomes for the individual and increased organizational performance (Dirk & Ferrin, 2001).

Trust and motivation have the following connection, as observed in the context of groups and organizations: The more an individual develops trust towards other members of the group, the more likely the individual is to direct its resources towards the group goal (Dirk & Ferrin, 2001). In contrast, if trust is not developed, the individual will begin to divert resources away from the group goal as an act of self-protection. Bradach and Eccles (1989, p.107) wrote that ‘trust processes a self-fulfilling quality: the existence of trust gives one reason to trust (for both social and transactional cost reasons), just as distrust begets distrust’. In ABW, employees are provided with the control over themselves and their environment, which is a major factor for increasing intrinsic motivation; however, if there is low-trust environment within the firm, employees will use this motivation to strive for individual goals (McDonald, 2012; Dirk & Ferrin, 2001). Therefore, companies with an activity-based office design, which naturally center on trust, have an effective tool at hand to motivate their workforce and, by creating a high-trust environment, align the efforts of their employees towards the group goal.

However, in order to mitigate any motivational problems by trust, trust needs to be built-up to a sufficient amount. In order to examine sufficiency, it is drawn on a model by Shapiro et al. (1992) that describes three types of trust, which emerge sequentially in the development of a business

relationship (See Figure 13). A business relationship starts with deterrence-based trust, which is trust based on the consistency of behavior (Lewicki & Bunker, 1995). An individual calculates the costs and benefits of staying and cheating in a relationship and in order for the deterrence to be effective, the short-term benefits to cheat must be outweighed by the long-term costs. Thereafter, knowledge-based trust emerges, i.e. an individual has enough information about another to accurately predict his/her behavior. In this case, one must understand the actions, thoughts and intentions of another. However, in its strongest form trust is termed identification-based, that means full internalization of the other one's intentions and desires, i.e. it allows one to act as an agent for another and no surveillance of the other party is necessary (Lewicki & Bunker, 1995).

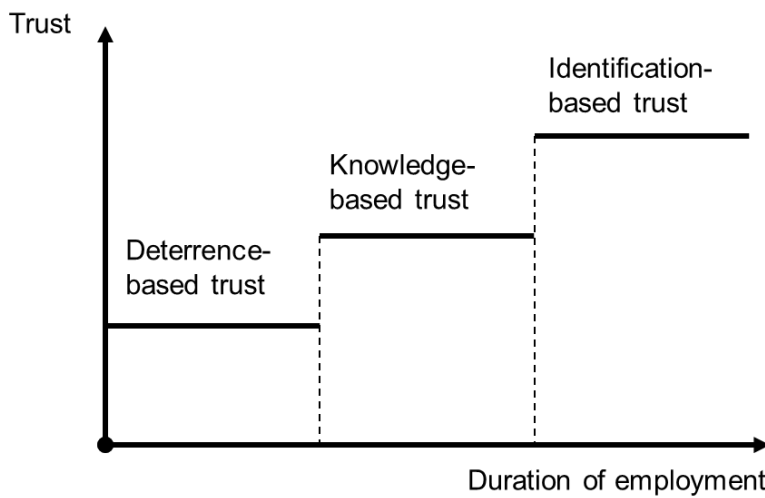


Figure 13: Development of Trust in a Professional Relationship (Jost (2001) based on Shapiro et al. (1992))

In order to reach an identification-based trust for mitigation of motivational problems in ABW measures can be undertaken, which involve the self-leadership of its employees. However, the activity-based office design first seems to impede the built-up of this highest form of trust: Signs of disconnection and isolation, few visibility of management and some colleagues, lower recognition and by hiring new employees, the dealing with unfamiliar actors, among others. How can identification-based trust be reached in ABW if ‘personal trust develops through repeated interactions with others and is based on familiarity, inter-dependence and continuity’ (Lewicki & Bunker, 1995, p. 137)? Certainly by taking time, i.e. the duration of employment – however it is not sure whether this is enough in ABW due to the low amount of repeated interactions with others. A better form to built-up trust and reach an identification-based trust is seen by the authors in reciprocity and goal setting, a mechanism explained as follows:

Identification-based trust means that employees identify themselves with the organizational goal, while the organization takes the self-set goals (private and business) of its employees into account

(Jost, 2001). This form of goal harmony can be reached if employees first use the self-leadership strategy of self-goal setting, on a private and business level, then write the goals down and finally discuss these with their supervisor in a separate meeting. Thus, potential divergences of goals can be identified, e.g. individual goals that might take up resources can be discussed, and private and business goals can be taken into account by the organization. Hereby, the employee has to open up towards his or her supervisor, but it provides the opportunity to move on to building an identification-based trust, which in turn results in more motivated employees. This mechanism is backed by former research already suggesting that behavior-focused self-leadership strategies lead to the creation of trust (Bligh et al., 2006).

When it comes to setting goals, 17 out of 20 interviewees felt connected to some sort of goals, even if not set by themselves (e.g. department- or group goals) (Interviewee [1-4, 6-8, 10-18, 20], 2016). In cases where goals were set by themselves (i.e. self-goal setting), they were usually not written down nor discussed with their supervisor. The reasons for not writing down goals were manifold: Some mentioned being scared of not reaching goals or being unhappy pursuing them. Others described writing down self-set goals as some form of social stigma, i.e. ‘not being that type of person who writes down goals’ (Interviewee [11-13, 17], 2016). Interestingly, most interviewees agree on the importance of self-goal setting.

‘Every half year (...) I reinvent and ask myself ‘Why am I doing this?’ and ‘How am I doing this?’ and I put up a list of all the activities I’m currently doing and I should do. On a paper. And I tell the guy that I’m working with ‘Hey, are we still agreeing that this is my purpose?’, ‘Yeah, good.’. (Interviewee [3], 2016)

This section described the role of trust in an ABW firm, how trust is linked to motivation and how, via self-leadership (here: self-goal setting), the highest form of trust in a professional relationship can be reached. By conducting separate meetings with employees discussing individual (private and business) goals, the organization can identify potential divergences and can take individual goals into account when forming the organizational goal. In return, the organization obtains employees, who identify themselves with the organizational goals and are able to act as agents for the supervisor. The management can be confident that the organizational interest will be protected without monitoring or surveillance of the respective actors (Lewicki & Bunker, 1995).

4.2.3 The Usefulness of Self-Leadership on the Operational Level

The third significant ABW related challenge brought forward by the analysis, is the increased level of autonomy and freedom in the employee's work itself, which is now accompanied by higher levels of responsibility. While it is considered a performance enhancing characteristic of the work environment when exploited efficiently, autonomy poses a great challenge in the daily work to employees who are not comfortable or experienced with this kind of freedom (Interviewee [1, 3, 12, 17], 2016)

Activity-based workplaces naturally create an autonomous environment, as employees are free to choose where they want to work which in turn reduces the level of supervision and thus the relationship of supervisor and employee is not based on specific instructions anymore. Every employee acts as its own entity within the larger organization with own responsibilities and the possibility to steer him- or herself in the right direction (Interviewee [1, 3, 12, 17], 2016).

'So I almost see myself as a small company, because I'm more or less myself. You have a mission or a project or a task and a goal and [...] it's your responsibility to achieve this, but how you do it, when you do it - it doesn't matter. As long as you deliver before deadline.' (Interviewee [1], 2016)

It becomes crucial for employees to engage in the new environment, to take on responsibility and to find ways to attend to daily work in an efficient manner (Interviewee [17], 2016). Thus, three questions arise in regards to the employee's daily work and are at risk of remaining unanswered in absence of instructions and supervision. First, it is important to consider *why* one is actually doing the work, is working for the respective company and the individual's role within the organization (Interviewee [3, 10, 18]. Second, it is helpful to find orientation by addressing *what* the task or work is that one should complete (Interviewee [7, 8, 11, 12], 2016). Finally, the question arises *how* one is supposed to do the task (Interviewee [1, 2, 3, 10, 17, 18].

The notion that high levels of autonomy and freedom in the work environment are not exclusively promoting better performance but can pose a great challenge to some individuals is confirmed by theory. Roberts & Foti (1998) address how different individuals react to certain levels of structure in the work environment. Thus, they take on a person-situation interactional perspective by looking not only at situational factors but also at individual dispositions and how these influence individual's work attitudes and behaviors. Choosing self-leadership as the dispositional determinant and autonomy and supervisory structure as the situational factors, Roberts & Foti (1998) find that individuals with a high ability of self-leadership favor autonomous work environments. On the other hand, individuals with low self-leadership scores were dissatisfied

with their job in an autonomous environment and preferred to have defined responsibilities and instructions. These findings suggest that self-leadership can be an effective approach in order to deal with the highly unstructured work environment in an activity-based office. This is moreover substantiated by Breevaart et al. (2014) who recommends behavior-focused self-leadership strategies as a tool set to address daily challenges that arise from high autonomy and thus increase work engagement.

In fact, the very definition of self-leadership by Charles Manz addresses the three questions relevant in the daily work in an activity-based office. Manz (1991) describes self-leadership as ‘a self-influence process and set of strategies that address *what* is to be done [...] and *why* [...] as well as *how* it is to be done...’ (p.17)

The various interviews revealed similar results. Many of the interviewed employees either already use or suggest self-leadership strategies and related activities in order to facilitate the challenge of autonomy in ABW.

The question of *why* one is doing the work is related to the previous section of this study, however, also needs to be addressed on a daily operational level. Employees can do that in various ways. A first step is to take time to reflect and more specifically use self-observation in order to understand the purpose of the work and the environment (Interviewee [18], 2016). This provides employees with the big picture and it is important to be aware of that in the workaday life. Another component is to find inherent motivation in the daily work. If employees find their work activity naturally rewarding, the question of why they are engaging in it can be answered (Interviewee [3, 17], 2016). This explicit self-leadership strategy of finding natural rewards in work tasks was depicted by employees in different ways. It ranges from enjoying characteristics inherent to the work as especially enjoyable, such as customer interaction (Interviewee [2], 2016) or collaboration with colleagues (Interviewee [5, 6], 2016), to savoring the office environment itself (Interviewee [4], 2016).

‘You have to find those little things that get you going. And I am good at that. I know how to make a day a fun day. You will not be successful in this role if you don’t like what you are doing.’ (Interviewee [17], 2016)

The above quote moreover indicates that natural rewards are closely linked to the theoretical concept of job crafting. Job crafting refers to changing the (cognitive) task boundaries or relational boundaries of a job by, for instance, altering the type of task or the area of responsibility of one’s individual work (Wrzesniewski & Dutton, 2001). This is done on a daily basis and increases work engagement (Petrout et al., 2012). Thus, it is very closely related and perhaps even incorporated

in the natural rewards strategy of building more enjoyable features into a task, which in turn encompasses self-redesign of tasks (Manz & Sims, 2001). This can serve as a good tool to find purpose in the daily work (Interviewee [3], 2016).

In terms of finding out *what* work to attend to every day as no clear instructions are available, several self-leadership strategies are proposed. The most frequently mentioned and most applicable strategy is self-goal setting. Employees need to reflect upon the desired direction of the work, the current situation and the necessary short-term steps to be taken in order to get there (Interviewee [7, 11, 17], 2016). Self-goal setting is essential in ABW and helps to find orientation in an autonomous work environment (Interviewee [7, 17], 2016). However, it is not sufficient to set long-term goals as it risks a lack of clarity in regards to everyday tasks to be completed in order to reach these goals. Thus, setting intermediate goals on a regular basis will help to steer in the right direction (Interviewee [1], 2016; Neck & Manz, 2013).

‘That is extremely important. You have to do that. If you don’t set goals, I don’t know how to get forward’ (Interviewee [17], 2016)

To make effective use of the goal setting strategy, employees need to organize themselves in a structured manner (Interviewee [2], 2016). This includes appropriate prioritization of tasks as well as using different practical organization tools, which ultimately leads to a feeling of control of the situation (Interviewee [18], 2016). The practical tools can take various forms, such as to-do-lists, Outlook reminders or Microsoft OneNote (Interviewee [1, 2, 3, 18], 2016). Using these kinds of reminders and attention focusers also refers to the self-leadership strategy self-cueing (Neck & Manz, 2013). Self-cueing is especially applicable on an operational level and helps employees to approach daily problems and tasks in a structured way and keep track of their progress.

Once the employees determined the purpose and the content of their daily work, it is crucial to address *how* this task or work should be done. Again, self-observation proves to be an effective strategy. Becoming aware of their own behaviors will help employees to find their individual work style (Interviewee [5], 2016). It is important to be aware of the individual differences in order to find an effective way of working for oneself. This lays the groundwork to how individual employees approach their daily tasks. Furthermore, the self-leadership strategy of mental imagery and rehearsal can be employed to support coping with particularly difficult tasks. It was found that employees use mental imagery by visualizing a successful performance in advance very frequently prior to important meetings, presentations or even phone calls (Interviewee [4, 7, 11, 14], 2016). Related to that, employees use the behavior-focused strategy of mental rehearsal, carefully analyzing possible scenarios they may encounter during the performance of the task

(Interviewee [3, 5, 14, 18], 2016). These strategies provide significant help regarding how to complete different tasks.

'I do picture myself, e.g. before a speech, and I picture of what I want the audience to feel when I am done. And I think that's good.' (Interviewee [18], 2016)

Moreover, innovative behavior is not only a main reason to implement Activity-Based Working, but is also encouraged and expected from employees (Interviewee [2, 10], 2016). The way of working shifts from following instructions to innovative problem solving. Innovative behavior refers to a process in which individuals recognize a problem and generate new or novel solutions to it (Carmeli et al., 2006). Research suggests that self-leadership strategies foster innovative behavior of employees (Carmeli et al., 2006). In particular, creative mental imagery, which employees frequently use, has a great impact on individual's innovative behavior. However, all self-leadership strategies were found to have a positive impact and thus it becomes evident that self-leadership is crucial in an activity-based office in order to work in an innovative way.

'I think that the big thing that we have got from working like this is that we are more focused on innovation and doing new things.' (Interviewee [10], 2016)

The findings of the use of self-leadership in operational work are conceptualized in Figure 14. In the context of a long-term goal and the direction towards it, it depicts the questions that an employee needs to address on a regular basis in everyday work life. The self-leadership strategies of self-observation and natural rewards can help employees to find the purpose in their everyday work and how it contributes to the overall organization. Self-goal setting and self-cueing were found to be effective measures to identify what tasks need to be accomplished and prioritize. Again self-observation, mental imagery as well as rehearsal support employees in answering how the work should be conducted. Addressing these questions and performing the tasks accordingly will lead to the accomplishment of intermediate goals. Subsequently, the process iterates and the same questions are posed, reaching further intermediate goals until the employee eventually reaches the long-term goal.

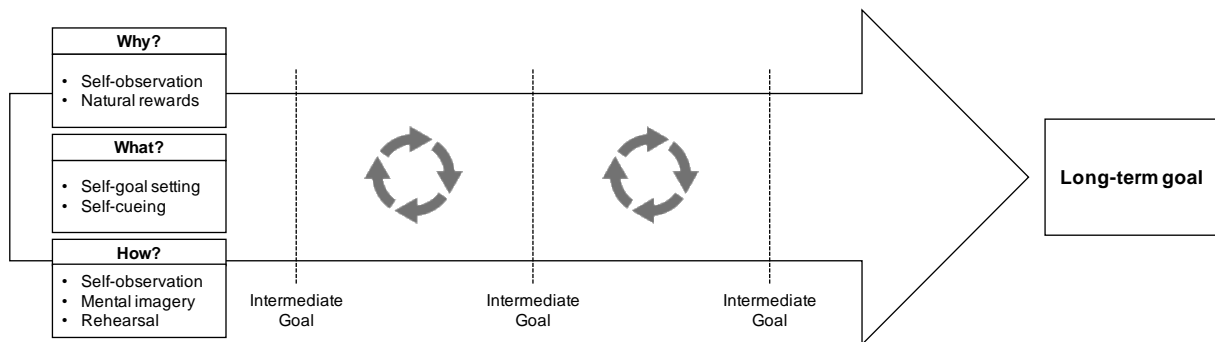


Figure 14: Model of the Use of Self-Leadership Strategies in Operational Work

4.3 Addressing the Research Question

In this section, the findings across the three major themes are summarized in order to answer the research question:

How can self-leadership help employees to meet the rising demands in Activity-Based Working?

In order to meet the rising demands in an activity-based office, the employee is advised, based on the findings of this article, to apply the following:

Leveraging reflective decision-making: Employees in an activity-based office should make use of the self-leadership strategy self-observation in order to become more self-aware of personal factors that influence their behavior in a certain environment. They should include a reassessment or learning phase in which they consciously reflect upon their behavior and learn about the personal factors influencing them. The higher self-awareness will lead to a more reflective decision in regards to choosing the most effective workspace. Consequently, reflective decision-making addresses the complexity of everyday decision-making and can simultaneously help employees to avoid environmental stressors when choosing a work space. (facilitates: *complexity of everyday decision-making, environmental stressors*)

Increasing the level of trust: Management should encourage employees to apply self-goal setting and discuss these goals in separate meetings with the respective employee. Thus, potential goal divergences can be identified and individual goals can be taken into account when forming the organizational goal. Thereby the relationship between an employee and the supervisor has the potential to reach the highest form of trust. In return, the organization obtains motivated employees, who identify themselves with the organizational goals and are able to act as agents for the supervisor. Thus, if conducted correctly, the employee will gain motivation and find it easier to navigate in an outcome-oriented office such as ABW. (facilitates: *output-driven environment*)

Applying operational self-leadership: Employees should use self-observation and natural rewards to find purpose in their daily work. Furthermore, they should engage in self-goal setting and self-cueing in order to find orientation in regards to what tasks they need to accomplish. Finally, they need to use self-observation, rehearsal and mental imagery to address how they should complete the tasks. Applying these sets of strategies in their daily work will in turn help the employees to cope with the output-driven environment, characterized by high autonomy and responsibility, in an activity-based office. (facilitates: *output-driven environment*)

The three themes present the provisional theory, which is the main outcome of this article. It is theorized that by applying the strategies, the individual employee obtains a valuable tool to meet the rising demands of an activity-based workplace. Table 3 provides an overview of the demands, themes addressed and self-leadership strategies to be applied.

Demand	Theme	Self-Leadership Strategies
Complexity of everyday decision-making & environmental stressors	Reflective decision-making	Self-Observation
Output-driven environment	Increasing trust	Self-Goal Setting
Output-driven environment	Operational Self-Leadership	Self-Observation, Natural Rewards, Self-Goal Setting, Self-Cueing, Mental Imagery, Rehearsal

Table 3: Overview of the Provisional Theory

On a further note, the conducted interviews at both firms resulted in the understanding that the demand *environmental stressors*, i.e. noise, distraction and crowding, has been of less importance than previously expected. While research depicted environmental stressors as an important factor in ABW, this could not be observed in the interviews (See 2.1.2). The only theme overlapping with environmental stressors as a specific demand is reflective decision-making. This finding could be caused by the trend of using work space as a strategic tool rather than to save costs and hence sufficient space per employee was provided by both firms. Furthermore, especially Vasakronan tries to actively counter environmental stressors by installing technological solutions that, among others, improve office acoustics.

5 DISCUSSION

This chapter discusses the theoretical and practical implications of this study (section 5.1 and 5.2). It moreover illustrates the limitations of the research applied in section 5.3 and proposes future fields of research in section 5.4.

5.1 Theoretical Implications

The empirical findings explored self-leadership's role within an Activity-Based Working environment in regards to decision-making, trust and motivation as well as its operational usefulness. The analysis has two main theoretical contributions, which will be elaborated in the following. First, the initial derivation of self-leadership and ABW as complementary concepts can be substantiated (5.1.1). Second, the research reveals shortcomings and possible improvements of the traditional definition of self-leadership in the contemporary context (5.1.2).

5.1.1 Appropriate Leadership in Activity-Based Offices

The topic of leadership in relation to different office spaces has not been researched sufficiently. Especially in ABW the nature of leadership undergoes significant changes (See 2.3). The research in this study has revealed complementary features within the concepts of Activity-Based Working and self-leadership, which led to the assumption that self-leadership is an appropriate leadership approach in an ABW context. Linking the interviews with the developed theoretical framework, the findings can corroborate this assumption. The assessment of the three contingency factors concluding that self-leadership is appropriate in ABW can be found in Table 4 (Houghton & Yoho, 2005).

Contingency Factor	Assessment in ABW	Attributes
Situational Urgency	Low	No crisis, long-term orientation no specific, directed and task-oriented instructions necessary
Follower Development	High	Enhancement of follower capabilities in long-term, delegation of responsibility
Task Structure	Unstructured	Unspecified task processes, creative, analytical and intellectual task nature

Table 4: Contingency Factor Assessment in ABW

First, situational urgency, referring to the level of crisis of a situation or environment, was confirmed to be low in ABW. The work is usually long-term oriented and the everyday activities are far from resembling a crisis situation (Interviewee [1, 2, 13], 2016).

Second, it is important to assess the level of follower development. This refers to the extent to which a leader intends to develop followers' capabilities in the long-term as well as factors such as assigned responsibility (Houghton & Yoho, 2005). The interviews revealed a high level of follower development. An ABW environment requires a leadership approach that gives employees more responsibilities for their work to face departmental challenges (Interviewee [5], 2016). The leader needs to provide an environment that each individual can use according to its needs but at the same time the management has to develop employees by providing advice and setting a direction (Interviewee [2, 3, 9], 2016).

Third, from an employee perspective, the task structure is relevant to determine the appropriate leadership approach (Houghton & Yoho, 2005). While a structured task environment has clearly specified and routine processes, work in ABW was characterized by unstructured tasks. This implies a high level of uncertainty in regards to task processes and oftentimes a creative or analytical nature of the tasks (Houghton & Yoho, 2005; Interviewee [2, 7, 10], 2016). Furthermore, as already discussed in the section before, instructions are almost absent in ABW and pose a challenge to employees (Interviewee [1, 3, 12, 17], 2016). This is an explicit indicator of a highly unstructured task environment.

Therefore, the interviews substantiated a low situational urgency, a high level of follower development and an unstructured task environment. According to Houghton & Yoho (2005), this combination indicates empowering leadership as the most appropriate leadership style. In fact, most interviewees mentioned or implied features of empowering leadership, such as empowerment, personal responsibility and autonomy, to be necessary in an ABW environment (Manz & Sims, 1991; Manz & Sims, 2001; Interviewee [1-3, 5-13, 15, 17-20], 2016). One

interviewee, in particular, described empowering leadership as crucial in activity-based offices (Interviewee [10], 2016). He depicted that the first step needs to be the management team taking action. They need to be able to manage the challenges of ABW and become self-leaders in order to set an example for the remaining workforce. At the same time, the executives have to create a culture that facilitates ABW and empowering leadership in order to succeed. This is in line with the process of becoming an empowering leader as depicted by Manz & Sims (1991).

It becomes evident that empowering leadership is a suitable leadership approach for an ABW environment. Managers need to empower their employees to take on more personal accountability and autonomy and encourage self-leadership as an essential aspect of empowering leadership. This leads to the conclusion that self-leadership is appropriate in an Activity-Based Working context (Manz & Sims, 2001; Houghton & Yoho, 2005). Therefore, the findings of this study not only contribute to establish empowering and self-leadership as suitable leadership approaches in Activity-Based Working but also represent an input to leadership theory in regards to office spaces. Leadership has been pointed out to be affected by this but little research has been done regarding the nature of leadership in relation to different office designs. Hence, this study provides a starting point for research in this field.

5.1.2 Manz' Self-Leadership Definition in a contemporary Context

The concept of self-leadership was developed by Charles Manz in the 1980s and has since been developed in many ways. However, no advancements in regards to the self-leadership strategies have been universalized and thus the definition of the main strategies remain the same. The empirical findings showed that many of the strategies are applicable in a contemporary office context but it also revealed restrictions and untapped potential of the strategies and hence the self-leadership definition itself. In the following three critiques of the traditional definition are outlined.

Unspecified and static nature of natural rewards

It was mentioned by employees that intrinsic motivation for the work is crucial in an ABW environment in order to find purpose in one's daily work and the work of the organization (Interviewee [3, 14, 17], 2016). It is important that employees enjoy their tasks and have an internal drive to accomplish them to be able to work effectively in ABW (Interviewee [17], 2016). Once this is not granted anymore, it is suggested to change the work or return to a traditional office environment. The self-leadership strategies of natural rewards were proposed to make tasks more inherently motivating. When examining the definition of natural rewards strategies, however, it becomes evident that it adopts a rather static view. It includes building natural rewards

into the task, finding enjoyable features within the task itself or finding them in the context of the work (Manz & Sims, 2001). This indicates that the task remains the same and hence the employee needs to find the task at least fairly appealing in order to find natural rewards within it. Manz & Sims (2001) also suggest a long-term perspective of finding natural rewards by redesigning the task or work itself to something more enjoyable which represents a more dynamic view. Still, both perspectives are rather unspecific in terms of application.

The concept of job crafting has some overlaps with natural rewards, however, it depicts more specific ways to make a task or work enjoyable and takes a dynamic perspective by altering tasks (Wrzesniewski & Dutton, 2001; Berg et al., 2007; Petrou et al., 2012). Thus, it represents the potential to add value to natural rewards strategies. Job crafting can take three forms: altering the number, type or nature of a task, altering the cognitive perception of a task and altering interactions with others. The first is similar to the natural rewards strategies, as it suggests emphasizing task features that are enjoyable (Berg et al., 2007). However, it also proposes to change tasks or take on more tasks to increase enjoyment and meaning of work. It hence adds a more dynamic view and specifics of implementation. Furthermore, the second form of job crafting suggests a cognitive component. Though natural rewards strategies include shifting cognitive focus to the positive parts of a task, altering the cognitive perception of a task occurs on a higher level (Wrzesniewski & Dutton, 2001). It proposes to reframe the social purposes of work in order to make it more rewarding. For instance, a cleaner in a hospital seeing his work as a means to help ill people rather than just cleaning. The last form of job crafting adds the relational perspective of the work, which is not present in the natural rewards strategies. It refers to altering interaction with others in order to make a task more enjoyable and meaningful e.g. building energizing relationships with others. All three perspectives contribute valuable components that could be used in the context of natural rewards strategies. They render them more applicable and relevant in the contemporary office and ultimately increase employee's intrinsic motivation.

Lack of interpersonal perspective in self-leadership

The relational aspect of job crafting leads to another restriction of self-leadership strategies. Besides the natural rewards strategies, the behavior-focused and constructive thought pattern strategies also lack an interpersonal perspective. This is characterized as a restriction as employees mentioned the importance of interaction with colleagues in order to work effectively in ABW (Interviewee [7, 8], 2016). They mentioned that finding the right way of working goes beyond an individual's self and includes the cooperation with others. This can take the form of asking for help or getting inspiration from the way colleagues conduct their work. Self-leadership does not incorporate any strategy that aims to leverage other people's knowledge or behavior but is truly focused on the individual practicing it. However, the original definition of self-leadership

describes it as a ‘self-influence process through which people achieve the self-direction and self-motivation necessary to perform’ (Neck & Houghton, 2006, p.271). This suggests that it is the individual itself that is acting but the ultimate goal is to perform a task. As interviewees indicated, it is sometimes necessary to seek outside help in order to perform a task effectively. Doing so would still be in line with the definition as the personal interaction only provides necessary information that the individual can use in order to engage in the self-influence process and direct and motivate itself. Furthermore, the most widely recognized definition of leadership acknowledges an interpersonal process as part of the nature of leadership (Stogdill, 1974). Hence, it is reasonable to argue that self-leadership would benefit from an interpersonal perspective even though it is focused on the actions of one individual.

This is substantiated by the relationship between self-leadership and emotional intelligence (D’Intino et al., 2002). D’Intino and his colleagues argue that emotional intelligence and self-leadership are reciprocally related, i.e. high emotional intelligence increases an individual’s self-leadership capability and vice versa. Emotional intelligence encompasses the two external dimensions of social awareness and relationship management, which address interpersonal competences. Therefore, self-leadership has an effect on an interpersonal level. Along the same line, Furtner et al. (2010) suggest that self-leaders need to be socio-emotionally intelligent in order to develop and work effectively. Consequently, there are several indications that self-leadership should have a relational perspective and that it would be beneficial in a contemporary office context. However, no strategy incorporates this perspective, which could aim to increase personal performance by leveraging on colleagues’ knowledge and behavior.

Potential of digitalization for self-leadership

A final remark in regards to Manz’ traditional self-leadership definition is concerned with the strategies’ untapped potential of digitalization. Self-leadership to date does not consider possibilities to leverage on digitalization in order to influence oneself and perform more effectively. In particular, self-cueing strategies are concerned with using physical objects to remind oneself or focus one’s attention (Neck & Manz, 2013). This can take many forms, for instance writing to-do-lists or placing the highest priority project in the center of the desk. These things are still relevant but mostly not in the form of physical objects but rather on a digital device such as a laptop or a tablet. Interviewees explained that they work paperless and are highly digital and mobile in activity-based offices (Interviewee [2, 5, 12, 13, 15, 18-20], 2016). Due to this and different work spaces each day, physical cues become increasingly hard to set up. Hence, cues such as to-do-lists, reminders and the like become more digital as well. The interviewees described several digital tools that they use to organize themselves and focus attention such as Microsoft OneNote, Outlook or mobile phone reminders (Interviewee [1-3, 18], 2016). This

does not only apply to self-cueing strategies but digital tools can also be used to improve other self-leadership strategies. Among other things, an employee could use organizing software to set long-term and short-term goals and keep track of them or use video technology to improve the rehearsal strategy for presentations. It becomes evident that digitalization brings forth many opportunities to enhance self-leadership strategies which benefit employees greatly in an ABW environment and generally in a contemporary context.

To summarize, the three discussed shortcomings and potentials derived from the empirical findings contribute to the improvement of self-leadership theory in several ways. First, the definition of natural rewards can be enhanced and made more applicable by adopting or incorporating aspects of job crafting theory. Second, the self-leadership definition could be extended by a strategy that addresses an interpersonal perspective thereby rendering self-leadership more complete and effective. Finally, the self-leadership theory should be updated by including digital means that help individuals improve their performance.

5.2 Practical Implications

The outcome of this article is a provisional theory of how self-leadership can help employees to meet the rising demands of ABW. As a next step, future research will have to confirm its validity and generalizability to a sufficient extent, e.g. in a longitudinal study. In case of a proof of concept, the practical implications are as explained in Chapter 4.3.

While the three themes of the provisional theory are aimed at supporting an individual employee, management's role should be to encourage employees to apply these strategies to the best of their abilities. In the end, it is in their interest to obtain satisfied and productive employees.

An additional practical implication from this research is the challenge to identify talented self-leaders in the recruitment process. This article argues that self-leadership can facilitate meeting the rising demands for an employee working in an activity-based office. However, this results in the challenge of recognizing talented self-leaders in the recruitment process – a problem that has been mentioned several times during the interviews (Interviewee [9-14, 17], 2016). Even if the ASLQ, a scientifically proven tool, is applied, the interviewed person would assume what answers are expected from him/her in the questionnaire, resulting in information asymmetries. The self-leadership skills of an employee, among other skills, are therefore currently observed during the usual 6-month trial period – however, in this period the new hire mostly has some sort of mentor (close supervisor), which in turn reduces the possibility to recognize the existent self-leadership skills. Overall, an adequate problem to this implication has not yet been found.

However, the authors (i) consider the ASLQ as an adequate starting point for a recruiter, (ii) recommend to not identify it as a test to the interviewee and (iii) recommend to not conduct it in

a written form but rather in an oral format. This consideration is of preliminary nature and based on the interviews conducted by the authors at Vasakronan and PE Accounting.

5.3 Limitations of the Research

There have been three major limitations to the contribution of this study.

First, the thematic analysis has often been criticized due to its abundant flexibility. Even though Braun and Clarke (2006) provide a clear demarcation in order to assure theoretical and methodological soundness, the ‘anything goes’ critique has not been warded off completely (p.5). As a result, the thematic analysis itself tries to reach scientific representativeness by finding what Llewellyn and Nortcott (2007) call the ‘common view’ among interviewees (p.195). However, looking for the common view among a workforce (as opposed to single views) is not necessarily a productive research strategy, especially in organizations that underwent a political and cultural change (Llewellyn and Nortcott, 2007). In these cases, there might be great ideas mentioned by single individuals (single views), which are more perceptive and/or experienced. The thematic analysis, in its 6-phases as described by Braun and Clarke (2006), tends to underweight these single views in the process. Given an ABW implementation representing a larger political and cultural change within the firm, the thematic analysis itself provides a limitation to this study.

Second, the provisional theory developed in this article is not yet generalizable beyond this case study. The aim of this research has been to inductively develop a provisional theory and pattern of meaning (Creswell, 2009). Due to the limited period of time, a longitudinal study of an application of the provisional theory was not yet possible. Therefore, while extensive measures were undertaken to reach for maximum reliability and validity of the study (See Chapter 3.), the findings demand further research and are not yet entitled to full generalization.

Finally, the interviews held at Vasakronan and PE Accounting were conducted in a non-native tongue for all parties involved (English). This resulted in two different limitations: Firstly, as Bryman (2012) described, circumstances like these lead to misunderstandings due to different linguistic and cultural perceptions and understandings. Secondly, this study aimed at relatively private matters of individuals, such as motivation, goals, trust and relationships. Therefore, the quality of the data gathered highly depended on the level of trust awarded by the individuals to the authors as interviewers.

5.4 Future Research

Based on the findings of this article, the following future research is suggested:

First of all, the outcome of this study has been a provisional theory of how self-leadership can help employees to meet the rising demands in ABW. In order to generalize and validate this provisional theory, a longitudinal study in an ABW environment would be necessary. Thereby management and employees should apply the different strategies of the provisional theory as described and changes in terms of the ABW issues should be measured. Since the three themes of the provisional theory are mutually exclusive, they could also be isolated and examined. In case of a successful proof of concept, the findings represent a valuable tool for improvement for every firm using ABW and a potential benefit for all stakeholders involved.

Second, this study made the assumption that empowering and thus self-leadership are suitable leadership approaches in an ABW environment and the assumption was substantiated by interviewees. Though not the main purpose of the study, this finding can serve as a starting point for further research to validate the notion that empowering leadership is an appropriate leadership style in ABW. Moreover, this implies further research on the general relationship of leadership and office space, which has been explored scarcely. As office design increasingly becomes a strategic tool, these findings would help managers to align their leadership approach to the chosen office space.

Third, even though the activity-based office design, i.e. the shared floor sections, can be adjusted to the nature of the firm, the concept itself has to treat every employee equally, irrespective of its respective personality. Therefore, research should explore how employees, based on their personality traits (e.g. five factor model of personality psychology), are affected by an ABW implementation. Two interesting aspects of this research would be to explore how productivity of employees with different levels of extroversion differ – before and after the ABW implementation – as well as how management should approach the rising feeling of disconnection and/or isolation among its workforce (given different personalities), which was identified during the interviews for this study.

Finally, as research showed, emotional processes (or *affect*) can be contagious within groups, i.e. a group tends to share an emotional state over time (Stewart et al. 2011b). The interviews for this study indicated a shift in this ‘collective emotional response’ within ABW, because employees now have the freedom to avoid each other in the workplace (Stewart et al., 2011, p.204). In addition to that, employees mentioned to actively look for colleagues that are ‘energy-providers’ (as opposed to being ‘energy-thieves’) in the workplace. Research has the possibility to explore how affective concepts work in activity-based offices, which might have a significant effect on job satisfaction.

6 CONCLUSION

The purpose of this article was to contribute to research by analyzing how self-leadership can help employees to meet the rising demands of ABW. This chapter intends to summarize the answer to our research question and thereby to conclude the study:

How can self-leadership help employees to meet the rising demands in Activity-Based Working?

At the beginning, based on Houghton and Yoho's (2005) *Contingency Model of Leadership and Psychological Empowerment*, this study assumed that self-leadership is an appropriate leadership style for an activity-based workplace. Simultaneously, complexity of everyday decision-making, an output-driven environment and environmental stressors were identified as the most significant characteristics of an activity-based office, which represent the rising demands for the employees.

In order to answer the research question, an embedded multiple-case study has been conducted at two different companies, Vasakronan and PE Accounting. Before the main study took place, a quantitative pre-study was applied, which (i) captured the self-leadership capabilities of the employees (based on the ASLQ), (ii) provided an overview of the structure of the workforces and (iii) convinced the authors of the representativeness and potential of the main study.

Thereafter, the main study, consisting of semi-structured interviews and the application of the thematic analysis (based on Braun & Clarke, 2006) identified three different themes, which, if combined, represent the provisional theory of this article. It is theorized that by applying the following strategies, the individual employee obtains a valuable tool to meet the rising demands of an activity-based workplace:

Leveraging reflective decision-making: Employees in an activity-based office should make use of the self-leadership strategy self-observation in order to become more self-aware of personal factors that influence their behavior in a certain environment. They should include a reassessment or learning phase in which they consciously reflect upon their behavior and learn about the personal factors influencing them. The higher self-awareness will lead to a more reflective decision in regards to choosing the most effective workspace. Consequently, reflective decision-making addresses the complexity of everyday decision-making and can simultaneously help employees to avoid environmental stressors when choosing a work space. (facilitates: *complexity of everyday decision-making, environmental stressors*)

Increasing the level of trust: Management should encourage employees to apply self-goal setting and discuss these goals in separate meetings with the respective employee. Thus, potential goal divergences can be identified and individual goals can be taken into account when forming the organizational goal. Thereby the relationship between an employee and the supervisor has the

potential to reach the highest form of trust. In return, the organization obtains motivated employees, who identify themselves with the organizational goals and are able to act as agents for the supervisor. Thus, if conducted correctly, the employee will gain motivation and find it easier to navigate in an outcome-oriented office such as ABW. (facilitates: *output-driven environment*)

Applying operational self-leadership: Employees should use self-observation and natural rewards to find purpose in their daily work. Furthermore, they should engage in self-goal setting and self-cueing in order to find orientation in regards to what tasks they need to accomplish. Finally, they need to use self-observation, rehearsal and mental imagery to address how they should complete the tasks. Applying these sets of strategies in their daily work will in turn help the employees to cope with the output-driven environment, characterized by high autonomy and responsibility, in an activity-based office. (facilitates: *output-driven environment*)

In conclusion, assuming that self-leadership is an appropriate leadership style for an activity-based workplace, employees can meet the rising demands of ABW by applying specific self-leadership strategies in order to (i) leverage reflective decision-making, (ii) increase the level of trust and (iii) improve their operational self-leadership.

While the research question is answered by the provisional theory, the following additional observations have been made and discussed: First, the interviews contribute to substantiate the assumption that empowering and thus self-leadership are appropriate leadership styles for an activity-based workplace. Second, the study revealed shortcomings and improvement potentials of the self-leadership definition by Charles Manz (1986) in a contemporary context, leading to a critique in terms of the unspecified and static nature of natural rewards, its lack of interpersonal perspective and its limits towards digitalization. Finally, the question arises of how to identify and hire talented self-leaders – a problem that is currently not solved to a sufficient extent.

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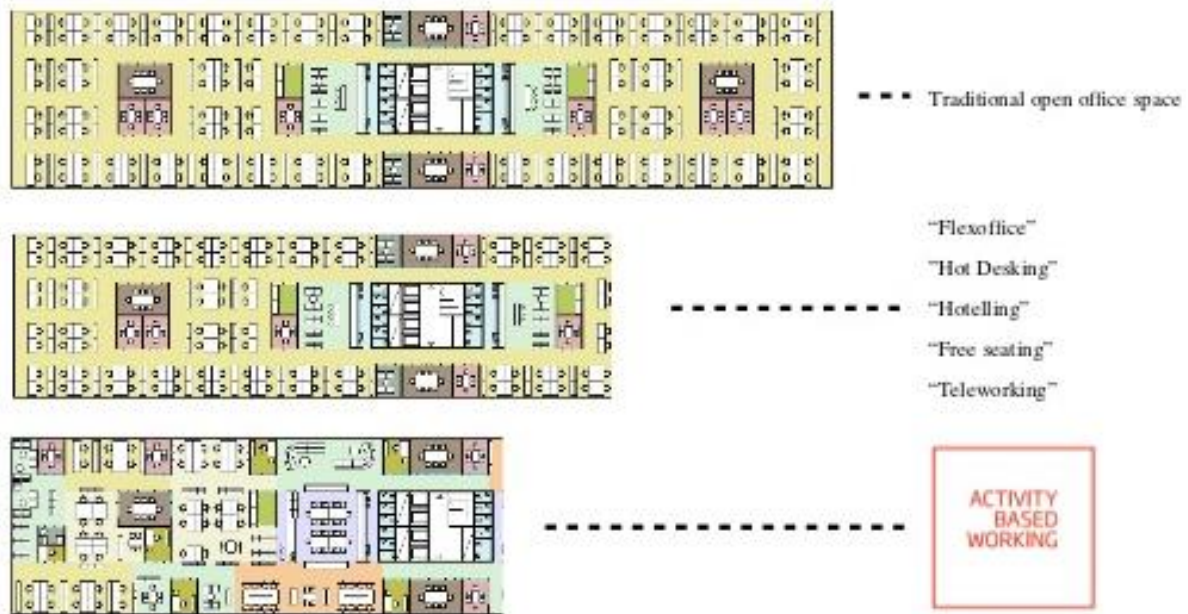
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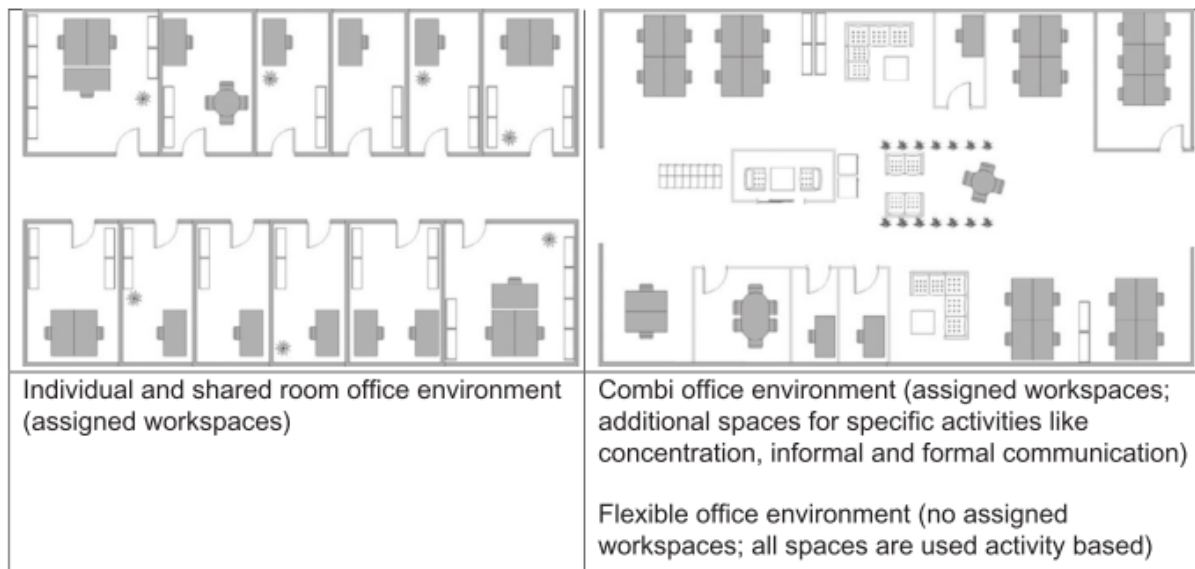
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APPENDIX

Appendix A: ABW Office Design Examples

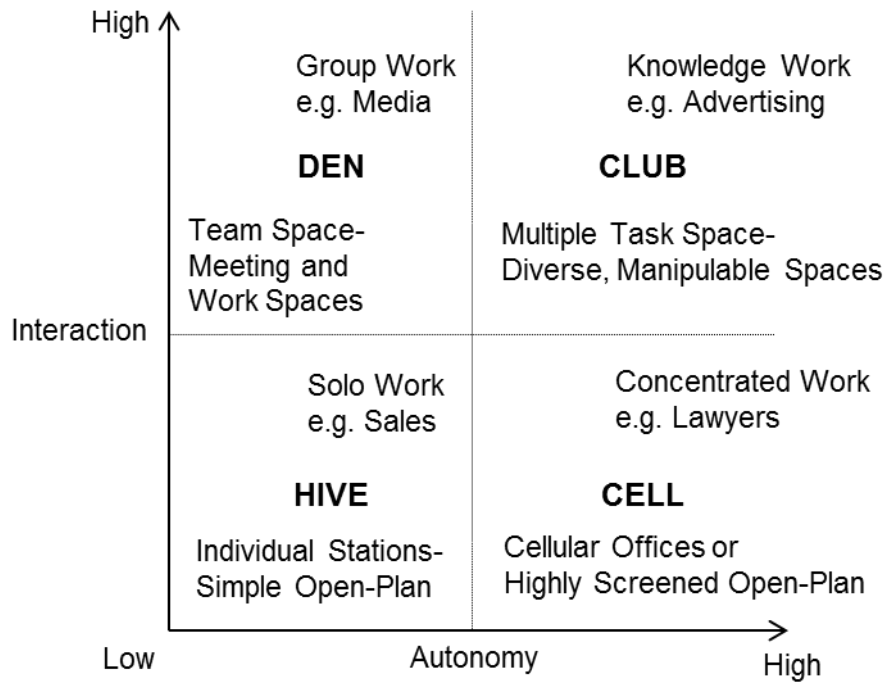


(Report “The Art of Working”, Veldhoen + Company, 2005)



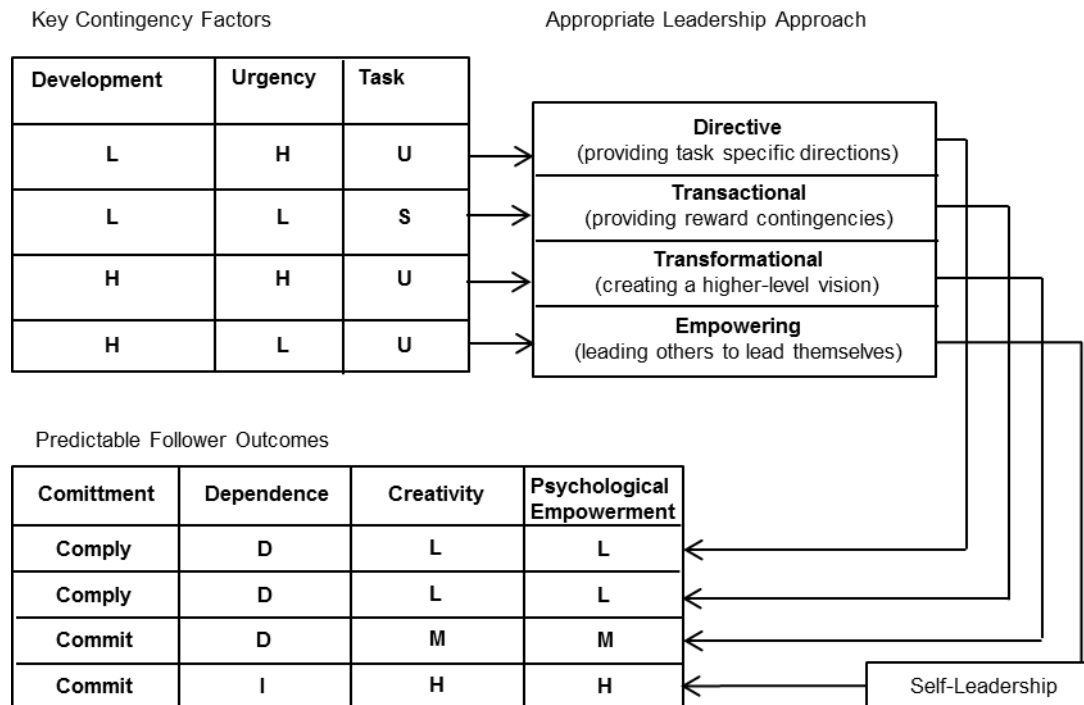
(De Been & Beijer, 2014)

Appendix B: Different Office Designs based on Autonomy and Interaction



(Duffys, 1997)

Appendix C: Contingency Model of Leadership and Empowerment



A contingency model of leadership and psychological empowerment

Note: L=Low, H=High, U=Unstructured, S=Structured, D=Dependence, I=Independence, M=Mixed or Moderate

(Houghton & Yoho, 2005)

Appendix D: Revised Self-Leadership Questionnaire

INSTRUCTIONS: Read each of the following items carefully and try to decide how true the statement is in describing you.

- 1) I use my imagination to picture myself performing well on important tasks.
- 2) I establish specific goals for my own performance.
- 3) Sometimes I find I'm talking to myself (out loud or in my head) to help me deal with difficult problems I face.
- 4) When I do an assignment especially well, I like to treat myself to some thing or activity I especially enjoy.
- 5) I think about my own beliefs and assumptions whenever I encounter a difficult situation.
- 6) I tend to get down on myself in my mind when I have performed poorly.
- 7) I make a point to keep track of how well I'm doing at work (school).
- 8) I focus my thinking on the pleasant rather than the unpleasant aspects of my job (school) activities.
- 9) I use written notes to remind myself of what I need to accomplish.
- 10) I visualize myself successfully performing a task before I do it.
- 11) I consciously have goals in mind for my work efforts.
- 12) Sometimes I talk to myself (out loud or in my head) to work through difficult situations.
- 13) When I do something well, I reward myself with a special event such as a good dinner, movie, shopping trip, etc.
- 14) I try to mentally evaluate the accuracy of my own beliefs about situations I am having problems with.
- 15) I tend to be tough on myself in my thinking when I have not done well on a task.
- 16) I usually am aware of how well I'm doing as I perform an activity.
- 17) I try to surround myself with objects and people that bring out my desirable behaviors.
- 18) I use concrete reminders (e.g., notes and lists) to help me focus on things I need to accomplish.
- 19) Sometimes I picture in my mind a successful performance before I actually do a task.
- 20) I work toward specific goals I have set for myself.
- 21) When I'm in difficult situations I will sometimes talk to myself (out loud or in my head) to help me get through it.

- 22) When I have successfully completed a task, I often reward myself with something I like.
- 23) I openly articulate and evaluate my own assumptions when I have a disagreement with someone else.
- 24) I feel guilt when I perform a task poorly.
- 25) I pay attention to how well I'm doing in my work.
- 26) When I have a choice, I try to do my work in ways that I enjoy rather than just trying to get it over with.
- 27) I purposefully visualize myself overcoming the challenges I face.
- 28) I think about the goals that I intend to achieve in the future.
- 29) I think about and evaluate the beliefs and assumptions I hold.
- 30) I sometimes openly express displeasure with myself when I have not done well.
- 31) I keep track of my progress on projects I'm working on.
- 32) I seek out activities in my work that I enjoy doing.
- 33) I often mentally rehearse the way I plan to deal with a challenge before I actually face the challenge.
- 34) I write specific goals for my own performance.
- 35) I find my own favorite ways to get things done.

(Houghton & Neck, 2002)

Appendix E: Abbreviated Self-Leadership Questionnaire

- 1) I establish specific goals for my own performance. *(self-goal setting)*
- 2) I make a point to keep track of how well I'm doing at work. *(self-observation)*
- 3) I work toward specific goals I have set for myself. *(self-goal setting)*
- 4) I visualize myself successfully performing a task before I do it. *(visualizing successful performance)*
- 5) Sometimes I picture in my mind a successful performance before I actually do a task. *(visualizing performance)*
- 6) When I have successfully completed a task, I often reward myself with something I like. *(self-reward)*
- 7) Sometimes I talk to myself (out loud or in my head) to work through difficult situations. *(evaluating beliefs and assumptions)*
- 8) I try to mentally evaluate the accuracy of my own beliefs about situations I am having problems with. *(self-talk)*
- 9) I think about my own beliefs and assumptions whenever I encounter a difficult situation. *(evaluating beliefs and assumptions)*

(Houghton et al., 2012)

Appendix F: Interview Guide

Name:	Date:
Age:	Department:
Position:	Time at Vasakronan:
Type of interview:	Time/Duration:

1. Introduction to the topic and introductory questions

- Presentation of ourselves
- Presentation of the topic
- Formalities
- Ask if time frame is ok? Is it ok to record?

2. Complexity of everyday decision-making

Sub-research question I: How can self-leadership help to cope with making daily decisions on an array of choices given by the flexibility of an ABW environment? (Issues: flexibility, freedom)

- Could you lead us through an average day of yours ('maybe start in the morning') with a focus on how you chose a place to work in the office?
 - i. Factors of influence (pre-assess)
 - ii. Intra-day (-week) changes (re-assess)
 - Self-correcting feedback loops (self-punishment)
 - iii. Personal reactions to certain areas (re-assess)
- Could you describe to us how you structure your daily work, that means how do you know what there is to do and how do you prioritize tasks?
 - i. Sources of information/instruction
 - ii. Tools for organizing (e.g. to-do-list)
 - iii. Personal reactions to certain daytimes (e.g. active/non-active, re-assess)

3. Output-driven environment

Sub-research question II: How can self-leadership help to cope with a long-term oriented and output-driven environment? (Issues: motivation, lack of supervision, autonomy, accountability, responsibility, independence, finding help)

- *The survey has suggested that with ABW work at Vasakronan/PE Accounting has changed towards a more output-driven environment and some employees might have trouble with the implications that come along with this.*

SELF-LEADERSHIP IN ACTIVITY-BASED WORKING

- Could you describe how you stay motivated until you have to hand in the output of your work?
 - i. Factors of motivation (extrinsic/intrinsic)
 - ii. Goal-setting and Rewards
 - iii. Visualizing a successful performance
 - iv. Positive self-talk
 - v. Personal reflection on which strategies work out best
- Could you describe how the relationship is (and might have changed) between you and your superior in the ABW setting?
 - i. Level of supervision
 - ii. Feeling of increased responsibility and accountability
 - How do you deal with this feeling?

4. Environmental stressors

Sub-research question III: How can self-leadership help to cope with environmental stressors in an ABW environment? (Issues: noise level, visual distraction, crowding, availability of workstations, personalization)

- *Studies show that working in an ABW environment goes along with an increase in environmental stressors such as noise, distraction or crowding.*
- Could you describe to if and how you are experiencing these factors? What are your strategies to counteract those?
 - i. Importance of single factor?
 - ii. Self-observation/natural rewards?
 - iii. Contagion within teams?
- How do you feel about the loss of a personal workdesk?
 - i. If fine – how do you explain that it doesn't matter that much?
 - ii. If not fine, is there something that would make up for the loss?

5. Post-interview notes

- How did the interview go? (interviewee was talkative, nervous, cooperative, etc.)
- Setting (busy/quiet, many/few people around, etc.)
- Other comments and thoughts

Appendix G: Interview Sample

	Company	Office	Department	Position	Date	Length
1	Vasakronan	Stockholm	Business Development	Project Leader	07/04/16	35 min
2	Vasakronan	Stockholm	Business Development	Department Head	07/04/16	45 min
3	Vasakronan	Stockholm	Region Stockholm	Workplace Strategist, Tenant Advisor	07/04/16	50 min
4	Vasakronan	Stockholm	Sales	Sales Manager	08 /04/16	40 min
5	Vasakronan	Stockholm	Region Stockholm	Property Manager	08 /04/16	55 min
6	Vasakronan	Stockholm	Corporate Communications	Communication Manager	08 /04/16	50 min
7	Vasakronan	Stockholm	Region Stockholm	Business Developer	08 /04/16	40 min
8	Vasakronan	Stockholm	Sales	Sales Manager	11/04/16	60 min
9	Vasakronan	Stockholm	Business Development	Asset Manager	11/04/16	35 min
10	Vasakronan	Stockholm	Corporate Communications	Senior Vice President	11/04/16	60 min
11	Vasakronan	Stockholm	Region Stockholm	Property Manager	11/04/16	40 min
12	Vasakronan	Stockholm	Human Resources	Business Partner	11/04/16	50 min
13	PE Accounting	Stockholm	Consulting	Jr. Accountant	14/04/16	45 min
14	PE Accounting	Stockholm	Development	Project Manager	14/04/16	45 min

SELF-LEADERSHIP IN ACTIVITY-BASED WORKING

15	PE Accounting	Stockholm	Consulting	Jr. Accountant	14/04/16	35 min
16	PE Accounting	Stockholm	Development	Developer	14/04/16	35 min
17	Vasakronan	Uppsala	Uppsala - Retail	Property Manager	15/04/16	60 min
18	Vasakronan	Uppsala	Region Uppsala	Regional Head	15/04/16	65 min
19	Vasakronan	Uppsala	Uppsala - Retail	Department Head	15/04/16	35min
20	Vasakronan	Uppsala	Uppsala - Office	Property Manager	15/04/16	45 min
Total						925 min

Appendix H: SPSS Bivariate Pearson Correlation Coefficients**CORRELATIONS**

/VARIABLES=VKSLSCORE VKAGE
 /PRINT=TWOTAIL NOSIG
 /MISSING=PAIRWISE

Korrelationen

		VKSLSCORE	VKAGE
VKSLSCORE	Pearson-Korrelation	1	-.027
	Sig. (2-seitig)		.721
	N	178	178
VKAGE	Pearson-Korrelation	-.027	1
	Sig. (2-seitig)	.721	
	N	178	178

CORRELATIONS

/VARIABLES=PGSLSCORE PGAGE
 /PRINT=TWOTAIL NOSIG
 /MISSING=PAIRWISE

Korrelationen

		PGSLSCORE	PGAGE
PGSLSCORE	Pearson-Korrelation	1	.004
	Sig. (2-seitig)		.937
	N	318	318
PGAGE	Pearson-Korrelation	.004	1
	Sig. (2-seitig)	.937	
	N	318	318