The Green Office:

A company perspective about indoor plants in the work environment

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PREFACE

This thesis is written for my master's degree in Communication, Health and Life Sciences, specialisation Health and Society, at Wageningen University. Writing this thesis afforded me the opportunity to find scientific evidence for a subject that is particularly suited to my personal interests, namely indoor plants. I have been working in the indoor-plants department of a garden centre for eight years. My job entails advising clients and companies about which indoor plants are best suited to their home or offices, while considering factors such as costs and maintenance. I am thus very grateful for the opportunity to write my thesis about a subject that I enjoy.

Furthermore, I would like to take this opportunity to express my gratitude. First, I would like to thank my supervisor, Lenneke Vaandrager, for her guidance and support throughout the process. Thank you for your helpful feedback to improve my master's thesis. Second, I want to thank Tia Hermans and Sjerp de Vries, who gave me the opportunity to write this thesis and for their helpful feedback. Because of them, I could interview the companies. Lastly, I would like to thank the companies and respondents for their time and effort. You enabled me to collect the data I needed and gave me a look into your organisation.

I hope you enjoy reading!

Amanda Jansen,

Zundert, 19 March 2019

ABSTRACT

Background: Office workers spend most of their waking time in the office; therefore, it is important to create a work environment that contributes to the health of office workers. Indoor plants are part of this healthy work environment, since they have beneficial effects on employee health, well-being, and productivity. However, only 42 percent of all office workers report having indoor plants in their work environment.

Research aim: Since it is already known what the beneficial effects of indoor plants in the work environment are, but still little companies make use of it, the first aim of this study was to investigate the perspectives of different stakeholders within a company regarding indoor plants in the work environment. The second aim of this study was to explore how the decision-making process of a company looks like when it comes to incorporating indoor plants in the work environment. This was of importance, since finding out how this decision-making process goes, can make it easier to install indoor plants in companies which can lead to an improved health, well-being, and productivity.

Research methodology: Twenty-one semi-structured interviews were conducted in five companies, with top managers (5), managers of a functional unit (4), facility managers (3), human resource managers (5) and members of the works council (4). The analysis comprised a thematic analysis and interviews were coded by using Atlas.ti.

Results: The interviews revealed that perceived reasons for implementing indoor plants included the improved indoor climate, ambiance and pleasant feeling, decoration, health and well-being, and the image of the company. Perceived reasons for not implementing indoor plants comprised maintenance, costs, required space, incongruence with the architecture and the balance with a view outside. Perspectives of different stakeholder groups regarding indoor plants differed. Top managers perceive the image of the company as an important reason for using indoor plants. Managers of a functional unit mentioned many different reasons. Facility managers mentioned reasons related to the work environment. Human resource managers mentioned reasons related to the advantages and disadvantages for employees. Members of the works council gave greater consideration to reasons related to the office itself. The decision-making process for having indoor plants depends on company characteristics such as type of work, work environment, values and budget, but also on personal interest.

Recommendations: Companies aiming to install indoor plants in the work environment, but also companies aiming to create a healthy work environment should consider the following steps: 1) Examine the decision-making process of the company, 2) Approach decision makers of the company, 3) Support company characteristics such as values, work environment, budget, and type of work.

Key words: Indoor plants – Work environment – Office - Implementation – Decision-making process – Companies – Stakeholders – Perspectives.

INDEX

## LIST OF TABLES

LIST OF FIGURES

1. INTRODUCTION

People living in industrialized countries spend 90 percent of their time indoors (Allen, MacNaughton, Laurent, Flanigan, Eitland, & Spengler, 2015). Moreover, office workers spend most of their waking time inside the building in which they work (Schweizer et al., 2007; Veitch, 2011; Kamarulzaman, Saleh, Hashim, Hashim, & Abdul-Ghani, 2011). Therefore, it is important to create a work environment that contributes to the health of office workers (Kamarulzaman et al., 2011).

Characteristics of the work environment can have a significant effect on the productivity, perceptions, and behaviour of office workers (Kamarulzaman et al., 2011). Indoor plants are part of this work environment, and although many experimental studies have shown a positive relationship between indoor plants and people's health, only a few of these studies provide direct and strong evidence for the health benefits of indoor plants (Van den Berg & Van den Berg, 2012). In fact, in most research health-related outcome variables are used such as physical activity levels (Thompson Coon, Boddy, Stein, Whear, Barton, & Depledge, 2011) or psychophysiological responses (Van den Berg, Hartig, Staats, 2007; Bringslimark, Hartig, & Patil, 2009).

A significant amount of research acknowledges the positive relationship between nature and health (Coldwell & Evans, 2018; Dijkstra, Pieterse, & Pruyn, 2006; Dilani, 2008; Groenewegen, Van den Berg, De Vries, & Verheij, 2006; Hartig, Mitchell, De Vries, & Frumkin, 2014; Ulrich, 1984). However, the connection between nature and health has focussed primarily on the outdoor environment and not on the indoor work environment itself (Smith, Tucker, & Pitt, 2011). Recently, an increasing body of research aimed to determine the possibility of a (positive) relationship between indoor plants in the work environment and health. For example, a longitudinal cross-over study of Fjeld (2000) revealed that 12 symptoms, shown in Table 1, decreased by an average of 23 percent when indoor plants were placed in the office. An experimental study of Raanaas, Evensen, Rich, Sjøstrøm, and Patil (2011) proves that the symptom of extreme fatigue can be reduced, especially during attention-demanding work. The experimental study of Knight and Haslam (2010) showed that recorded levels of well-being were significantly higher in spaces with indoor plants. In this experiment, well-being was measured by the sick office syndrome, levels of job satisfaction, and feelings of comfort. Furthermore, it was proven that people working in an environment enriched by indoor plants and artwork were more productive than people working in an empty office (Knight & Haslam, 2010). This was confirmed by the experiment of Nieuwenhuis, Knight, Postmes, and Haslam (2014), which found in a study in the United Kingdom

Table 1: Reduction of health and discomfort symptoms with indoor plants in office (Fjeld, 2000)
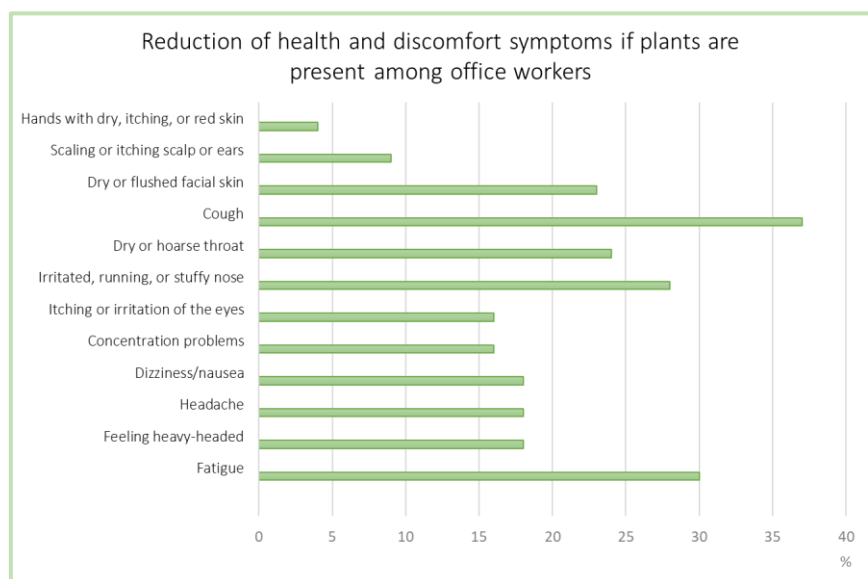
and the Netherlands that productivity increases by 15 percent with the use of indoor plants. Furthermore, this study revealed that enriching an office with indoor plants increased self-reported levels of concentration, perceived air quality, and workplace satisfaction. An experimental study of Smith and colleagues (2011) found a statistically significant result that employees with indoor plants in their office were less likely to report that the work environment contributed to work pressure. Furthermore, they were less concerned about their health at work. The study of Smith and colleagues (2011) also shows that indoor plants positively affect short-term sickness absence, which indicates that they can be a cost-effective method of improving health and well-being. By incorporating indoor plants in the office, a company would have a reduced sickness absence, which would save approximately $45,000 per annum. The costs incurred for the acquisition of indoor plants in this research amounted to approximately $6,300 per annum (for 64 large and small indoor plants). This means that incorporating indoor plants would result in a net saving for the company of approximately $38,7000 (Smith et al., 2011).

But why might indoor plants in the work environment have beneficial effects on employee health? According to Nieuwenhuis and colleagues (2014), three explanations can answer this question. Firstly, indoor plants have a beneficial effect on the indoor climate of the work environment (Nieuwenhuis et al., 2014). They improve the air quality of an office, which results in an improved health (Nieuwenhuis et al., 2014). The second explanation refers to the evolutionary principle that a green environment, consisting out of indoor plants, reflects the natural world and thereby supports human physiology (Nieuwenhuis et al., 2014). Indoor plants with their scents, forms, and colours can encourage people to forget about their everyday life (Dilani, 2008). The attention restoration theory (ART) of Kaplan (1995) supports this explanation, since according to this theory, natural environments restore people's capacity for directed attention (Kaplan, 1995). According to Dilani (2008), it is important that indoor plants are accessible at the workplace in order to restore attention at work. The last explanation examines the relational and managerial consequences of incorporating indoor plants. The premise of this explanation suggests that enriching the work environment with indoor plants on a company level indicates that the company aims to enhance staff well-being and environmental comfort (Nieuwenhuis et al., 2014). The introduction of indoor plants enhances employees perceived organisational support (Bjørnstad, Patil, & Raanaas, 2016).

This thesis is divided into several chapters. The next chapter covers the research aim and research questions. The two chapters thereafter explain the theoretical framework and the research methodology, followed by the results of the interviews. The discussion compares the interview results with previous studies, describes the strengths and limitations of the current study, and provides recommendations for further research and for practical application.

2. RESEARCH AIM AND QUESTIONS

2.1.   FIRST RESEARCH AIM AND RESEARCH QUESTION

The first aim of this study is to explore the perspectives of different stakeholders in a company regarding the use of indoor plants in the work environment. This is important, as extensive research acknowledges that indoor plants have beneficial effects on the health, wellbeing and productivity of office workers (Fjeld, 2000; Knight & Haslam, 2010; Nieuwenhuis et al., 2014). Furthermore, they also improve the indoor climate in the work environment (Nieuwenhuis et al., 2014). However, few companies incorporate indoor plants in their work environment. A study of Cooper and Browning (2015) demonstrated that 58 percent of all office workers around the world, reported having no indoor plants or greenery in their work environment and, of the 42 percent of office workers who have indoor plants, the quality and quantity is unknown. Additionally, it is not known whether these plants are brought by individuals or are installed by the company. This study addresses indoor plants on company level. A knowledge gap is found, since no scientific research is done regarding the perspectives of different stakeholders in companies and their perceived reasons whether to use indoor plants in the work environment. Once these perspectives are determined, this knowledge gap can be filled, which can then be used to ascertain how different stakeholders in a company view the implementation of indoor plants in the work environment. To reach the first aim, it is important to find an answer to the first research question, namely: *"What are the perspectives of different stakeholders within a company about indoor plants in the work environment?"*

To answer this research question, the following sub-questions were composed:

❖ What are, according to the five different stakeholder groups within a company, reasons to implement indoor plants in the work environment?

❖ What are, according to the five different stakeholder groups within a company, reasons to not implement indoor plants in the work environment?

2.2.   SECOND RESEARCH AIM AND RESEARCH QUESTION

The second aim of this study examines the decision-making process of implementing indoor plants. A knowledge gap is found, since the decision-making process of indoor plants has never been investigated and it is possible that this decision-making process differs from the decision-making process for other facilities. It is vital to determine which stakeholder group in a company makes decisions about implementing indoor plants in the work environment and to clarify which stakeholder should be approached to make the work environment greener, since whether indoor plants are implemented depends on whose wants and needs are driving the decision-making process (Kok et al., 2015). The second research question addresses the decision-making process in a company, which is important when deciding on the implementation of indoor plants in the work environment. This research question is: *"What is the decision-making process of a company with regard to implementing indoor plants in the work environment?"*

2.3. SCIENTIFIC RELEVANCE

It is scientifically relevant to find answers on the two above-mentioned research questions, since such answers fill the knowledge gaps as described above. This will be the first study that explores a company perspective about indoor plants in the work environment by examining the perspectives of different stakeholder groups. No other scientific literature addresses the reasons for implementing or not implementing indoor plants according to the mentioned stakeholders. Lastly, this will be the first study that explores the decision-making process for purchasing indoor plants.

2.4. SOCIETAL RELEVANCE

The societal relevance of this study lies in investigating how different stakeholder groups should be approached and who is making decisions about implementing indoor plants. This can be used for the installation of more indoor plants in the work environment, since indoor plants enhance employee health, wellbeing, and productivity, which benefits the company and employees. For the company it can increase productivity (Nieuwenhuis et al., 2014) and reduce short-term sickness absence (Smith et al., 2011). For the employees it can lead to improved health (Fjeld, 2000) and improved wellbeing (Knight & Haslam, 2010).

3. THEORETICAL FRAMEWORK

This chapter explains the conceptual framework used for this study. In the first section of the chapter, the two theories used to set up the conceptual framework are explained. After that, the conceptual framework and all its concepts are elaborated.

3.1.   USED THEORIES

The first theory that is used to establish the conceptual framework is the framework for assessing health, well-being, and productivity by Alker, Malanca, Pottage and O'Brien (2014). The original framework is shown in Figure 1. This framework connects the physical features of the office itself, the perceptions of the workforce, and financial aspects. The office environment comprises several factors, namely indoor air quality and ventilation, thermal comfort, lighting and daylight, noise and acoustics, interior layout and active design, biophilia and views, look and feel, and lastly, location and access to amenities (Alker et al., 2014). According to Alker and colleagues (2014), these

Figure 1: Framework for assessing health, well-being, and productivity (Alker et al., 2014)

factors in the physical office environment influence the health of employees. Thereafter, perceptions of physical health, psychological health, productivity, work environment, and organisational culture can be important for employee well-being (Alker et al., 2014). Lastly, this framework includes financial aspects, which include absenteeism, presenteeism, staff turnover/ retention, revenue, medical costs, medical complaints, physical complaints, task efficiency, and deadlines met (Alker et al., 2014).

In addition, the Healthy Workplace Model of the WHO is used to establish the conceptual framework (Figure 2) (Burton, 2010). This Healthy Workplace Model includes four avenues of influence to create a workplace that protects, promotes, and supports the health and well-being of employees. The four avenues are the physical work environment, the psychosocial work environment, personal health resources in the workplace, and enterprise community involvement. The physical work environment is similar to the physical office environment of Alker and colleagues (2014), and in this model it is

> the part of the workplace facility that can be detected by human or electronic senses, including the structure, air, machines, furniture, products, chemicals, materials

Figure 2: Four avenues of influence (Burton, 2010)

and processes that are present or that occur in the workplace, and which can affect the physical or mental safety, health and well-being of workers (Burton, 2010, p. 84).

The psychosocial work environment involves the following:

the organisation of work and the organisational culture; the attitudes, values, beliefs, and practices that are demonstrated on a daily basis in the enterprise/ organisation, and which affect the mental and physical well-being of employees. These are sometimes generally referred to as workplace stressors, which may cause emotional or mental stress to workers (Burton, 2010, p. 85).

Personal health resources are not considered in the conceptual framework, since this definition partly overlaps other factors that influence perspectives of different stakeholders within an organisation to implement indoor plants in the work environment, for example, with the work environment and the company culture. The definition of personal health resources is:

the supportive environment, health services, information, resources, opportunities, and flexibility an enterprise provides to workers to support or motivate their efforts to improve or maintain healthy personal lifestyle practices, as well as to monitor and support their ongoing physical and mental health (Burton, 2010, p. 86).

Lastly, the enterprise community involvement is also not included in the conceptual framework, since this factor is not based on solid scientific evidence (Burton, 2010), and it does not appear to be important for classifying employees' motives to implement indoor plants. Enterprise community involvement comprises

the activities, expertise, and other resources an enterprise engages in or provides to the social and physical community or communities in which it operates; and which affect the physical and mental health, safety, and well-being of workers and their families. It includes activities, expertise, and resources provided to the immediate local environment, but also the broader global environment (Burton, 2010, p. 87/88).

3.2. CONCEPTUAL FRAMEWORK

By making use of the theories above, a conceptual framework is composed which can be used to determine the perspectives of different stakeholders in a company for implementing indoor plants in the work environment. This conceptual framework is shown in Figure 3. In this chapter, every element of the conceptual framework is explained.
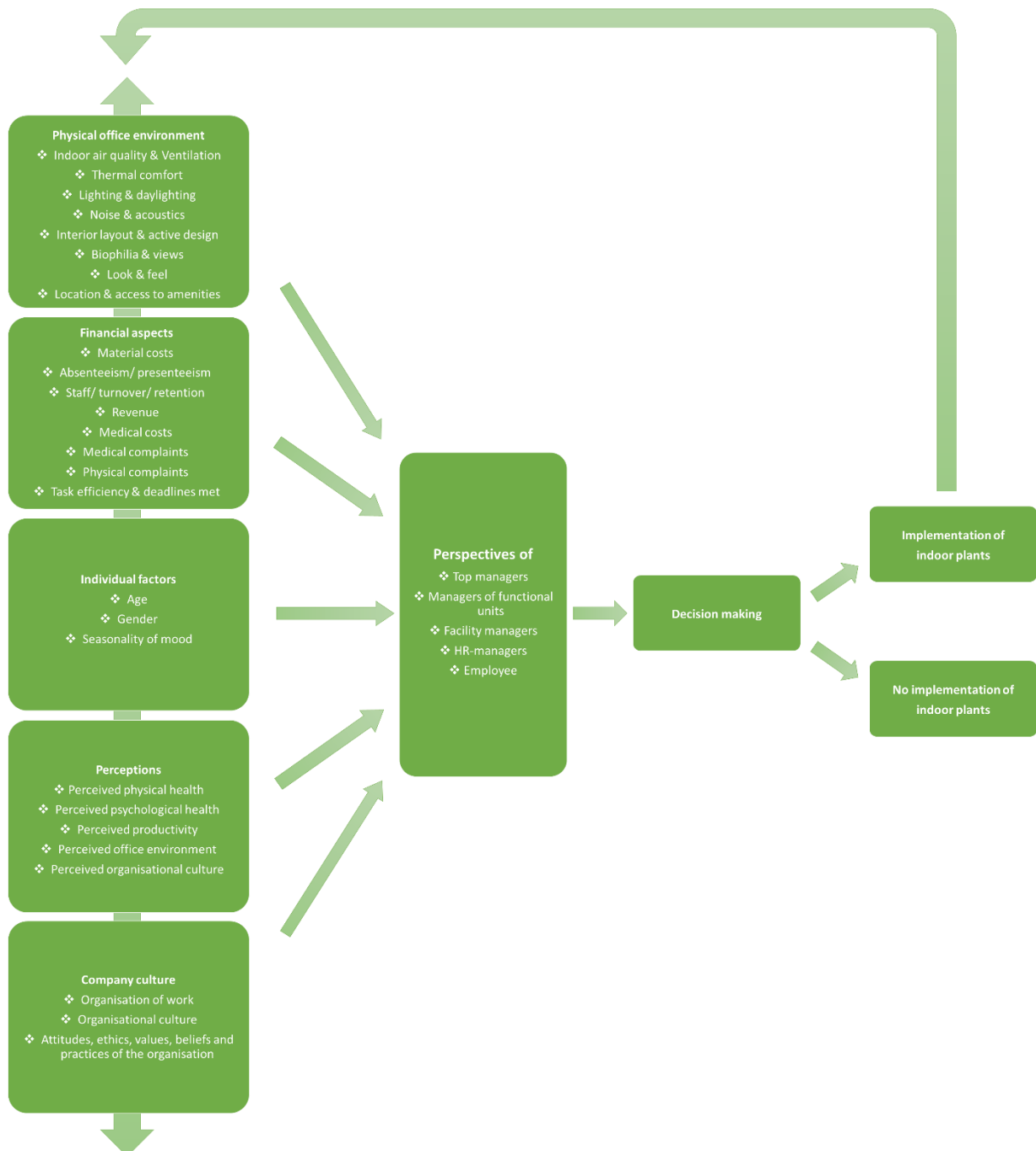

Figure 3: Conceptual framework for implementing indoor plants in the work environment

3.2.1. FACTORS INFLUENCING PERSPECTIVES

The conceptual framework consists of five factors that can influence employee perspectives regarding implementing indoor plants in the work environment.

❖ **Physical work environment:** Both mentioned theories refer to the physical work environment. In this study, the terms work environment and physical work environment are used interchangeably, but they both refer to the explanation of Alker and colleagues (2014). This definition is used, since it gives an extensive explanation of the different elements which are part of the physical work environment. In the conceptual framework, the physical work environment consists of the following factors: indoor air quality and ventilation, thermal comfort, lighting and daylight, noise and acoustics, interior layout and active design, biophilia and views, look and feel, and lastly, location and access to amenities (Alker et al., 2014). The physical work environment can influence perspectives of different stakeholders in a company, since it is possible that stakeholders may have little interest in indoor plants in their office when they have, for example, a natural view through the window. In addition, a study of Bringslimark, Hartig, and Patil (2011) showed that employees without windows were five times more likely to bring indoor plants into their office than employees with windows were.

❖ **Financial aspects:** Perspectives of different stakeholders in a company can also be influenced by financial aspects. Financial aspects in the conceptual framework, refer to the definition of financial aspects as mentioned by Alker and colleagues (2014), which include absenteeism, presenteeism, staff turnover/ retention, revenue, medical costs, medical complaints, physical complaints, task efficiency, and deadlines met (Alker et al., 2014). One factor is added to these financial aspects, which is the material costs, because it can be possible that employees consider the costs of purchasing and maintaining indoor plants in their physical work environment.

❖ **Individual factors:** Individual factors are not used in the theories as described above but may be important influencers of the perspectives of employees towards indoor plants. According to Hedge, Burge, Robertson, Wilson, and Harris-Bass (1989), individual factors are age and gender; however, Aries, Veitch, and Newsham (2010) also added seasonality of mood. According to Aries and colleagues (2010), individual factors can influence perceived environmental conditions. Thus, individual factors, such as age, gender, and seasonality of mood, can also influence employee perspectives in a company.

❖ **Perceptions:** The perceptions as used in the framework of Alker and colleagues (2014) are also added to the conceptual framework. Perceptions about the perceived physical health, psychological health, productivity, work environment, and organisational culture can influence the perspectives of stakeholders in companies about the use of indoor plants. These perceptions can influence the decision to use plants.

❖ **Company culture:** The last factor that can influence employee perspectives is the company culture. This is the equivalent of the psychosocial work environment of Burton (2010), but with a different and more all-encompassing name. The company culture includes the organisation of work, the organisational culture of a company, as well as the attitudes, ethics, values, beliefs, and practices of the organisation. This is the same explanation provided in the framework of Burton (2010), except that ethics of an organisation is added, since ethics and values are vital when implementing a healthy workplace (Burton, 2010).

As demonstrated in the conceptual framework (Figure 3), an up-down arrow connects the above-mentioned factors, as the different factors are interrelated with each other. For example, the physical work environment can influence employee perceptions and financial aspects (Alker et al., 2014), but it can also influence the company culture. On the other hand, all these factors can influence the physical work environment. The only exception in this is the individual factors. Individual factors can influence all other factors, but none of the other factors can influence the individual factors.

3.2.2. STAKEHOLDERS IN A COMPANY

In addition to the fact that perspectives can be influenced by the above-mentioned factors, employee perspectives can also differ between different stakeholders within a company, which means that different stakeholders can make different decisions about whether to implement indoor plants. This study examines the perspectives of five different stakeholders in a company. Earlier literature already mentions three organisational levels of decision making and tasks in a company (Kok, Mobach, & Omta, 2015). The first level of stakeholders is the strategic or corporate level, which comprises the top management of a company. The second level is the tactical level or middle management, which are the managers of functional units. The third level is the operational or functional level, which includes the general employees (Kok et al., 2015). These three levels will also form part of the stakeholder groups in this study. As this study examines a healthy workplace in companies, two other stakeholders are also included, since they can be important in the implementation of indoor plants and can have a different perspective on the implementation. The fourth stakeholder level is the facility manager, since a facility manager is responsible for translating the needs of different employees into a coherent facility design (Kok et al., 2015). The last stakeholder of a company included in this study is the human resource (HR) manager. The perspective of the HR manager is important since it can play a key role in workplace health promotion (Downey, 2000). HR managers are responsible for, among other things, planning and controlling the cost of employee benefit plans. They are often the leading factors in the incorporation of wellness programs, since they are most aware of the impact of employee health failure on absenteeism and turnover (Downey, 2000). Thus, five stakeholders of a company are used for this study, namely:

- ❖ Top managers
- ❖ Managers of functional units
- ❖ Facility managers
- ❖ HR managers
- ❖ General employees

3.2.3. DECISION-MAKING PROCESS

Another important aspect regarding the implementation of indoor plants is the decision-making process of a company. Within a company, it is possible that every stakeholder perceives the same facility design or environmental factor, such as indoor plants, differently (Kok et al., 2015). This perceptual process is influenced by many individual factors, such as experience, cognitive complexity, and personality (Gibson & Early, 2007), but also by many organisational characteristics (Watson & Baumler, 1975). Efficiency and marketing issues are important for top managers and facility managers, while general employees and their managers of a functional unit are more concerned with the effectiveness of the facility design for their primary process (Kok et al., 2015). Furthermore, top managers are more concerned with the long-term goals of the organisation (Kok, 2015). It is difficult to decide upon a commonly used service facility that is in everyone's interest. The choice made will depend on whose wants and needs are driving the decision-making process (Kok et al., 2015). Thus, it is important to determine which stakeholder of an organisation makes decisions about implementing indoor plants in a company to clarify which stakeholder can be approached best to make the work environment greener. This decision-making process can lead to the implementation of indoor plants in the work environment, but it can also lead to a rejection of the implementation of indoor plants.

3.2.4. INFLUENCER FACTORS

The final aspect of the conceptual framework that needs to be explained is the arrow between the implementation of indoor plants and the factors influencing perspectives. When the decision-making process leads to implementation of indoor plants, this can mean that the newly added indoor plants can influence the factors that determine the perspectives of the different company stakeholders. The implementation of indoor plants will, for example, influence the physical work environment since indoor plants are added to this environment, but it can also change the perceptions about indoor plants. Negative feelings can turn into positive feelings, and the other way around. Furthermore, the implementation of indoor plants can change the financial aspects positively (Smith et al., 2011). Finally, the company culture can be changed by using indoor plants, since indoor plants can have positive or negative effects on, for example, the attitudes of an organisation. As a result of this change in the factors influencing perspectives, the perspectives of the different stakeholders about indoor plants can also be changed. Decisions about the number, sizes and types of plants can still be adjusted in this second phase of decision-making.

4. RESEARCH METHODS

This chapter presents the methods that are used for this study. To adequately answer the research questions, an explorative qualitative research is performed by means of semi-structured interviews. This chapter elaborates the respondents and the sampling strategy, data collection, interview procedure, and data analysis of this study.

4.1. RESPONDENTS AND SAMPLING STRATEGY

The selection process of the companies is shown in Figure 4. This study is conducted with help of Wageningen Environmental Research. Companies are recruited via an internet request of Wageningen Environmental Research to companies to participate in a study about indoor plants in the workplace. This request is shown in Appendix 1. In addition, companies recruited by earlier research of Wageningen Environmental Research are included in the selection process for this study. A total of 94 companies could be included in this study. Since time restrictions must be taken into account, a selection is made from these companies. To be included in the selection, organisations had to meet the inclusion criteria for this study, which are shown in Table 2. Firstly, organisations willing to participate should have an office, since this study examines indoor plants in the office environment. In order to be able to interview the five different stakeholder groups of a company, companies should have more than 50 office workers, as it is assumed that small companies will not have all five stakeholder groups of the conceptual framework within their company. Secondly, the organisation should have an office in the Netherlands, which facilitates arranging the interviews. The last inclusion criteria for this study was that a company should not already promote the idea of a green office, since it was assumed that their office already consists of indoor plants and their perspectives will differ from the perspectives of most companies. After applying these inclusion criteria, 51 organisations remained in the selection.

Consequently, a random sample was taken from the 51 organisations, which resulted in 20 organisations that were approached for the interviews. Of the 20 approached companies, four did not respond. Twelve companies responded that they did not want to participate in the study, primarily because of time limitations. In total, five companies were willing
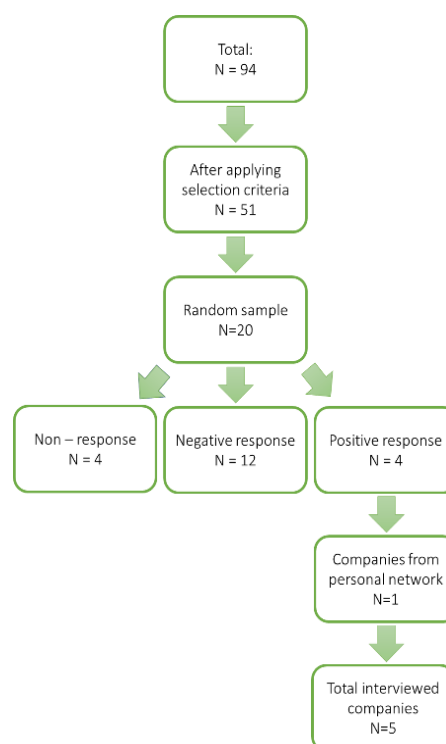
Figure 4: Selection process companies

Table 2: Inclusion criteria selection organisations

Inclusion criteria
The company should have an office
The company should have more than 50 office workers
The company should have an office in the Netherlands
The company should not be a green office promoter itself

to participate in the study. Four were taken from the random sample, and one company in the personal network of the researcher was willing to participate.

Within the selected companies, the attempt was made to arrange interviews with one person from each stakeholder group. The respondents for these interviews were reached via the contact person of the company. It is important to conduct interviews with each stakeholder group, since different stakeholders in a company can have different perceptions (Kok et al., 2015). Furthermore, it can be useful for the company that these perceptions are aligned (Kok et al., 2015). However, not in every company these five stakeholder groups were interviewed because of two reasons: 1) the company did not have all stakeholder groups, 2) not every stakeholder had time to participate. In total 21 interviews were conducted with five top managers, four managers of a functional unit, three facility managers, five HR managers, and four members of the works council were interviewed. This member of the works council is not one of the stakeholder groups as described in the conceptual framework, but it is assumed that this member represents the perspectives of the general employees.

4.2. DATA COLLECTION

Semi-structured interviews were conducted, since this method allows the respondents to develop their own narratives, while the interviewer maintains overall control of the interview. Different topic guides were composed (Appendix 2) for the interviews. All topic guides were in Dutch, since only companies with offices in the Netherlands were included in the selection and it was assumed that people working in these companies could speak Dutch. The topic guides consisted of different topics in addition to an example question that could support that topic. The topics for all five stakeholder groups were identical, but the example questions for the four different managers (Appendix 2.1.) were different from the example questions for the works council member (Appendix 2.2.), as questions for the works council member were divided into two parts: 1) What do you think about…?, and 2) What do you think the average employee thinks about….? The topics for the five stakeholder groups are thus the same, but different questions were formulated. The following topics were discussed during the interviews:

Background information: The first topic primarily discussed background information of the respondent. As shown in the conceptual framework, individual factors can influence the perspectives of different stakeholders. These individual factors are part of the background information that can be asked at the beginning to make the respondent feel more comfortable. In this topic, the gender of the respondent was noted. Thereafter, the respondent was asked to tell something about their function within the company in which they work.

Health: The second set of questions examined health in general. These questions were asked to clarify what the company does to improve employee health. For example: *"Does your company do something to improve the health of employees? If so, what? Who/ which stakeholder group within your company is responsible?"*

Work environment: The next set of questions examines the work environment, since this can help to comprehend how important the work environment in general is for the company and for the different stakeholders. This set of questions examines what the company does to improve the work environment, how the different stakeholder groups perceive the work environment, and whether the respondents

have contact with colleagues regarding the work environment. Furthermore, the respondents were asked what they think is an important and less important aspect of the work environment.

Indoor plants within the company: In this topic it was intended to elaborate the opinions of the different stakeholder groups regarding indoor plants in general. In addition, it aimed to determine whether employees in the company are amenable to indoor plants. Furthermore, this topic also elaborates whether every employee receives the same benefits from indoor plants. All questions help to answer the first research question about the perspectives of different stakeholder groups regarding the possible implementation of indoor plants. Important questions in this topic were: *"What are the possible reasons to make use of indoor plants in the company? Can you explain this?"* and *"What possible reasons would preclude the use of indoor plants in the company? Can you explain this?"*

Decision-making process: The final set of questions addresses the decision-making process within a company and will help answering the second research question. The first questions in this topic were formulated to determine which stakeholder group is responsible for the purchase and maintenance of indoor plants. The other questions in this topic were helpful to examine the decision-making process, for example, with questions such as: *"Which considerations are made during this decision-making process?"* and *"Are other stakeholder groups within the company involved in this decision? Who/ which department, why and in what way?"*

Before the data collection phase started, a company was selected to test the interview guides. This ensured that every question was clear to the respondents and that all information needed to answer the research questions was covered during the interview. Since there were no significant changes in the topic guides, the data of this company is also included in the data-analysis.

4.3.   INTERVIEW PROCEDURE

At the commencement of the interview, respondents were told that the interview was about indoor plants in the workplace. The actual aim of this study was not divulged, since it was expected that it could result in bias or socially desired answers. Thereafter, respondents were informed that the interview would take a maximum of 30 minutes, so they knew how long it would take. Next, respondents were informed that the interview would be voluntary and that they were free to withdraw at any point during the interview. Furthermore, the respondents were told that the information would be processed in a confidential manner and that it was not possible to trace back the information. Lastly, the respondents were asked whether they gave permission for the interviews to be audio-recorded.

4.4. DATA ANALYSIS

For the analysis of the interviews, a thematic analysis was performed. A thematic analysis is a method for identifying, analysing, organising, describing, and reporting themes found within a qualitative data set (Braun & Clarke, 2006). This thematic analysis was conducted in six steps, derived from Creswell (2009) (Figure 5). The first step was to organise and prepare the data for the analysis. In this step, the interviews were transcribed. In the second step, transcriptions were read and re-read in order to obtain a general sense of the information and to reflect on its overall meaning. In the third step, the data was coded. Sentences or paragraphs were segmented into categories, and these categories were labelled with a term. This coding was performed by using Atlas.ti which is a software for qualitative and mixed methods data analysis. In the fourth step, themes were generated for the codes. These themes appear as major findings in the qualitative studies. In the fifth step, themes of codes were presented in a narrative story. This is primarily part of the result section, in which patterns of data are found by using the quotes of the interviews. In the final step, interpretation or meaning was derived from the data. It summarizes the lessons learned from the qualitative data. To impart meaning to the data, the themes were placed in the conceptual framework. This is primarily part of the discussion section.

Figure 5: Six steps for a thematic data analysis (Creswell, 2009)

5. RESULTS

This chapter describes the results of this study. First, an overview of the characteristics of participating companies and the stakeholders in each company is provided. Next, interviewees' general perceptions about indoor plants in the work environment are given. Thereafter, reasons to implement and not implement indoor plants are provided, which is followed by the differences in perception between different stakeholder groups. Finally, the decision-making process of companies regarding the implementation of indoor plants is detailed.

5.1.   OVERVIEW OF COMPANIES

In total, five companies were included in this study. The description of each company and interviewed stakeholders are shown in Table 3. Two of the companies are medium-sized companies with between 50 and 250 employees. Three companies are large-sized companies with more than 250 employees.

Table 3: Overview of companies

Company	Company description	Stakeholder within company
Company 1	A relatively small company with about 50 employees, which advises customers about the physical environment. The work environment is recently renovated and makes use of several indoor plants. Additionally, they use different lights during the day and invest substantially in the decoration of the building.	- Top manager - HR manager - Member of the works council
Company 2	An insurance company with approximately 4,000 employees. The work environment is recently renovated and has some indoor gardens. Furthermore, most offices have a view on green outside. It provides a variable work environment with health-promoting equipment such as standing-up desks, desk bikes, and Swoppers.	- Top manager - Manager of a functional unit - Facility manager - HR manager - Member of the works council
Company 3	A construction company with about 340 employees. Of those employees, 250-270 are desk employees. The work environment is recently renovated and utilises some indoor plants. It provides a variable work environment with health-promoting equipment such as standing-up desks and desk bikes.	- Top manager - Manager of a functional unit - Facility manager - HR manager - Member of the works council
Company 4	A University of Applied Sciences with different locations and a total of 26,000 students and 2,800 employees. The work environment differs per functional unit, since managers of a functional unit are responsible for the budget of facilities. Some utilise indoor plants, while others do not.	- Top manager - Manager of a functional unit - Facility manager - HR manager
Company 5	A company with approximately 170 employees. The company aims to make buildings and homes more sustainable. The work environment will be renovated, which, according to the employees, really needs to be improved. The meeting rooms and lobby have some indoor plants.	- Top manager - Manager of a functional unit - HR manager - Member of the works council

5.2. GENERAL PERCEPTIONS ABOUT INDOOR PLANTS

After conducting the interviews, it appeared that every company has some indoor plants, although not or only a few in the offices themselves. Most of the interviewees are positive about indoor plants in the office. Some interviewees stated that they would like to see more indoor plants in their office:

"I think, but that is my opinion, that it [indoor plants in the office] is minimal. There are two indoor plants, but I think more would be welcome.
(Member of the works council – Company 1)

"That [indoor plants in the office] should be promoted. As you can see, we have two beautiful plants here. These are the places where visitors come, those places are nicely decorated. But if you have a look at other floors, it is a bit pathetic."
(Manager of a functional unit – Company 5)

Additionally, several respondents are positive towards indoor plants, but only under certain conditions. For example, they must be sustainably cultivated, or they must be well maintained. However, some other respondents have a more negative view towards indoor plants, because they do not miss them in their office or because they prefer to not have indoor plants:

"But if there is a choice, it would, in general, not have my preference."
(Manager of a functional unit – Company 2)

Interviewees mentioned that there are always employees in a company who like indoor plants and others who dislike indoor plants. Overall, respondents reported that employees would be open to having more indoor plants. However, several interviewees perceive that others are not in favour of indoor plants, for example, because they are worried about losing space. In addition, respondents reported few requests from employees for more indoor plants:

"Well, the question itself [for having more indoor plants] has never come to the works council, so I do not think there is really a need for it [indoor plants in the office]. Also, just because you do not really miss it, because there is just abundant green, either outside or in such a courtyard."
(Member of the works council – Company 2)

The respondents perceive the benefits of indoor plants for employees differently. Some mention that the benefits are the same for every employee, since indoor plants have a positive effect on every individual, for example by improving air quality. Others think that the benefits of indoor plants can differ between employees. They say that benefits of indoor plants depend on company characteristics such as job pressure and work environment, and individual characteristics such as personality type and health complaints. The following reaction demonstrates that job characteristics can determine the perceived benefits:

"I do think that this [benefits from indoor plants] has to do with how variable your work environment is. If you come in a different environment five times a day, then that already gives you enough diversity. If you are always stuck in your workplace, that workplace must be interesting enough to be able to stay there all day."
(Top manager – Company 1)

5.3. REASONS FOR IMPLEMENTING OR NOT IMPLEMENTING INDOOR PLANTS

Interviewees mention a wide variety of reasons for implementing or not implementing indoor plants in the work environment. Table 4 shows the reasons for implementing indoor plants and Table 5 shows the reasons for not implementing indoor plants.

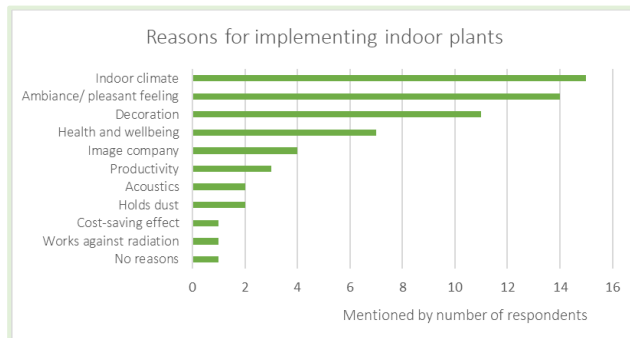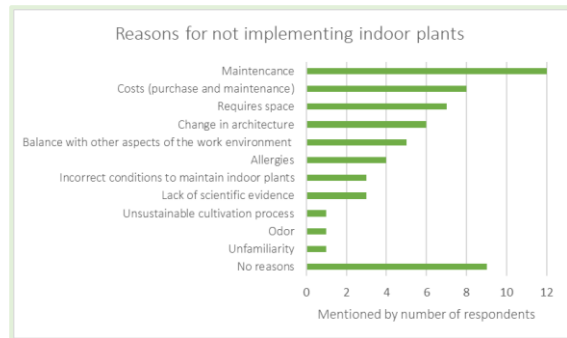*Table 4: Reasons for implementing indoor plants*

Table 5: Reasons for not implementing indoor plants

Initially, employees thought that it was difficult to find any reason for having or not having indoor plants, which can give a wrong premise. One interviewee had a negative view towards indoor plants and could not offer any reason for implementing indoor plants. For many respondents, it was initially difficult coming up with reasons for not implementing indoor plants, because they all were positive about indoor plants:

"Good question. But I do not actually have one [reason for not making use of indoor plants]. I could not think of any reason not to do it."
(Manager of a functional unit – Company 3)

However, during the conversation, some reasons emerged. The main reasons given for implementing indoor plants were that they improve the indoor climate, they provide an ambiance and pleasant feeling, and they are a means to decorate the office. Interviewees associated indoor climate to improved oxygen and improved humidity in the air. The following reaction indicates the need for indoor plants to improve indoor climate:

"I really hope that the indoor climate [because of more indoor plants] will be a lot healthier. So, less dust, more oxygen in the air. I hope so."
(Manager of a functional unit – Company 3)

Many respondents report that indoor plants provide an ambiance and pleasant feeling. They feel as though indoor plants impart a domestic feeling and make employees feel happier:

"People who work in a department surrounded with green might feel better, might feel happier."
(Top manager – Company 2)

Another reason mentioned by many interviewees for having indoor plants in the office is that they decorate the building. The interviewees state this is an enrichment of the building. Next, according to the respondents, indoor plants improve employees' health and well-being. Furthermore, several respondents view the image of the company as a reason for incorporating indoor plants:

"And also, if you are a sustainable company, I think it [indoor plants] really contributes to a sustainable appearance."
(Top manager – Company 3)

Costs were perceived both as a reason for implementing and as a reason for not implementing indoor plants. On the one hand, indoor plants are perceived as cost saving, while on the other hand, many respondents mention costs as reason for not incorporating indoor plants. They state that costs of purchasing and maintaining such indoor plants are too high. The following two quotes demonstrate these differences in opinion:

"I read studies from our customers who turn it [indoor plants in the work environment] into absenteeism and then just save half a percent of absenteeism if you monitor it long enough. And half a percent sick leave on, what is it, 90 percent of your office costs are your people. Then Bingo, the investment is justified."
(Top manager – Company 5)

"So, you need quite a few indoor plants if you want to make it conspicuous. And then I think, the investment you must make, costs a substantial amount of money."
(Top manager – Company 2)

Additionally, most interviewees perceive maintenance as a reason for not having indoor plants. Some respondents say that it is an unpleasant experience when indoor plants are purchased and then soon thereafter die. Other respondents think it is preferable to have no plants if you cannot maintain them:

"I think the maintenance [is a reason for not making use of indoor plants]. There must be someone. What I said, a plant is beautiful, but there must be someone who can keep it alive."
(HR manager – Company 1)

However, regarding maintenance, it appeared that every company has people employed to maintain indoor plants. In two companies, maintenance is carried out by an external company, in another two companies maintenance is done by people with a distance to the labour market, and in one company maintenance is provided by an intern employee together with an external company in which people work with a distance to the labour market.

According to the respondents, another reason for not acquiring indoor plants is that plants require space. The following reaction shows an employee response to having indoor plants:

"I think that some departments that are crowded will complain about the lack of space, since these [indoor plants] are too big."
(Member of the works council – Company 5)

In addition, some interviewees say that the architect did not consider indoor plants when designing the interior of the buildings and that indoor plants could cause incongruence with the architecture:

"Well, [a reason for not making use of indoor plants is] that you change a certain design. It [the work environment] is now designed with winter gardens, roof gardens, and vertical plant walls on the inside – that is all."

(Facility manager – Company 2)

Other reasons for not installing indoor plants include that people may be allergic and that the building does not have the right conditions to grow indoor plants, for example there is not enough light or too much draught. Moreover, the balance with other aspects of the work environment is important. Some of the interviewees prefer a view outside instead of indoor plants in the company:

"Just being able to look outside is really 1000 times more important for me than having indoor plants."

(Manager of a functional unit – Company 2)

5.4.   DIFFERENCES IN PERCEPTION BETWEEN STAKEHOLDERS

Table 6 provides an overview of the most commonly mentioned reasons for implementing and not implementing indoor plants by the different stakeholder groups. It is noticeable that employees with different functions, also have different perspectives towards indoor plants. It appears that the top managers mentioned the greatest number of reasons, but they are particularly engaged with the image of the company. No specific pattern is found for the perspectives of the managers of a functional unit, since they had considerably different reasons regarding the incorporation of indoor plants. The facility managers mainly mentioned reasons related to the work environment in general. They, for example, saw indoor climate as the most important reason for having indoor plants, and incongruence with the architecture and the presence of compensating factors, such as a view on green outside, as reasons for not having indoor plants. Next, the reasons of the HR managers are mostly related to the advantages and disadvantages indoor plants have on the employees themselves. They for example mention that ambiance and pleasant feeling, productivity, health and well-being are important reasons for the purchase of indoor plants, whereas allergies and the required space of indoor plants were perceived as reasons for not purchasing indoor plants. Finally, the members of the works council had reasons regarding the implementation of indoor plants related to the office itself. For example, they say that the space requirement of indoor plants is a reason for not incorporating them, and decoration and indoor climate are reasons for having them.

Table 6: Reasons for implementation or no implementation for each stakeholder group

	Top manager	Manager of a functional unit	Facility manager	HR manager	Member of the works council
Reasons for implementing	- Indoor climate - Ambiance and pleasant feeling - Decoration - Health and well-being - Image company	- Indoor climate - Ambiance and pleasant feeling	- Indoor climate - Ambiance and pleasant feeling - Decoration	- Indoor climate - Ambiance and pleasant feeling - Decoration - Health and well-being - Productivity	- Indoor climate - Decoration
Reasons for not implementing	- No reason - Maintenance - Costs - Incongruence with architecture - Incorrect conditions	- No reason - Maintenance	- Incongruence with architecture - Balance with other aspects	- No reason - Maintenance - Requires space - Allergies	- Maintenance - Costs - Requires Space

5.5. DECISION-MAKING PROCESS

According to the respondents, there is no procedure for the purchase of indoor plants, but it is possible to request indoor plants. The decision-making process for implementing indoor plants in the work environment can start at the level of the general employees, as well as at one of the other stakeholder groups. They request indoor plants from the person who is responsible for the housing budget – often the manager of a functional unit or the facility manager:

"So basically, the facility manager [is responsible for the purchase of indoor plants]. As a facility manager, he is also responsible for the housing budget and of course he wants to consider what we are going to invest now and what it will return later."
(Manager of a functional unit – Company 2)

"We not have a procedure for purchasing indoor plants. But of course, there are many things that you are purchasing, and you could also include an indoor plant there; that is how it works. We need something or we want something, and then you usually discuss this with the manager of a functional unit who is responsible for the budget."
(HR manager – Company 1)

Respondents reported that the managers of a functional unit and facility managers can ask advice from other stakeholder groups, such as facility management (in case that the manager of a functional unit is deciding), HR management, and top management. According to the respondents, the decision-making process depends on the level of the decision. Smaller decisions will be made by one of those two stakeholder groups. For more significant decisions that influence the appearance and the finances of the company, the top manager is also an important stakeholder in the decision-making process. Since interviewees perceive the acquisition of indoor plants as a big decision, it is thus likely that the top manager will also be involved in the decision making. In this decision-making process, the reasons for implementing and not implementing indoor plants play a significant role, since the stakeholders who are involved in the decision-making process of indoor plants, will take these into consideration when deciding. However, costs and returns are perceived as the most important considerations when deciding.

The decision-making process of having indoor plants depends on several factors. Firstly, it depends on the characteristics of the company, such as type of work, work environment, values, and budget. Table 7 provides an overview of the most commonly mentioned reasons per company for implementing or not implementing indoor plants. Differences between companies can be dedicated to the different types of work in each company. For example, in meeting rooms more indoor plants were installed than in employee's offices. Furthermore, employees who need a fix workplace because of their type of work, are generally more open towards indoor plants in the work environment than employees with a more variable workplace. In addition, whether it will be decided to have indoor plants, is dependent on the work field:

"I find it very logical that it [indoor plants] is installed sometimes, and sometimes it is not installed. It depends on the work field."
(Facility manager – Company 4)

Next, the decision-making process depends on the work environment of the company. According to the respondents, companies do not make use of indoor plants, because indoor plants require space. In addition, companies with recently renovated offices would not make use of indoor plants, because it

could change the design of the architect (company 2 and 3). Furthermore, respondents of company 2 say that they do not need more indoor plants, because they already have a view on green outside.

Additionally, values of a company are part of these characteristics. For instance, especially respondents of company 5 would like to see more indoor plants because they contribute to the image of the company. Sustainability is an important factor in this company, and respondents say that indoor plants can contribute to the image of the company.

Lastly, differences between companies can depend on the money a company has available for having indoor plants. Especially company 4 and 5, which are non-renovated offices, would not make use of indoor plants, because they cost a substantial amount of money. In addition, according to the respondents some companies rather spend their budget on good equipment or new technology than on indoor plants:

"Because they often think about other things, such as a tablet to make the work process easier or think about a new office chair, then an indoor plant."
(Top manager – Company 1)

Moreover, the decision-making process depends on the personal interest of the decision makers. Respondents say that perspectives towards indoor plants depend on personal interest. According to the interviewees, having indoor plants at home is a good predictor for this decision. They say that if you have indoor plants at home, you are more likely to implement them in the workplace; if you do not have indoor plants at home, you also do not need them in the workplace. This personal interest is important in the decision-making process of indoor plants, as a decision-maker who is opposed to indoor plants will be less likely to make use of them and vice versa. The following quotes show that personal interest is an important predictor for the decision to make use of indoor plants or not:

"I really like indoor plants very much. It really has to do with your personal interests that you find it sooner important."
(Facility manager – Company 4)

"And yes, some people do not have that much with plants, you understand that as well."
(HR manager – Company 3)

Table 7: Most commonly mentioned reasons for implementation or no implementation for each company

	Company 1	Company 2	Company 3	Company 4	Company 5
Reasons for implementing	- Indoor climate - Ambiance and pleasant feeling - Decoration	- Indoor climate - Health and well-being	- Indoor climate - Ambiance and pleasant feeling - Decoration	- Indoor climate - Ambiance and Pleasant feeling - Decoration - Health and well-being	- Indoor climate - Ambiance and pleasant feeling - Decoration - Health and well-being - Image company
Reasons for not implementing	- Maintenance	- Maintenance - Incongruence with architecture - Balance with other aspects	- Incongruence with architecture - Requires space - No reasons	- Maintenance - Costs - Allergy	- Maintenance - Costs - No reasons

6. DISCUSSION

In this chapter the results of this study will be interpreted by using existing literature and by integrate the results into the conceptual framework. After that, strengths and limitations of this study will be given. Lastly, recommendations for future research and for practical application will be provided.

6.1. INTERPRETATION OF RESULTS

The first aim of this study was to explore what the perspectives of different stakeholders in a company are about having indoor plants in the work environment or not. Evidence was found for the positive effect of indoor plants on employee health, wellbeing, and productivity (Fjeld, 2000; Knight & Haslam, 2010; Nieuwenhuis et al., 2014). However, it was not known how different stakeholders in a company think about using or not using indoor plants in the work environment. To reach this aim, it was the intention to find out what reasons for implementing indoor plants and reasons for not implementing indoor plants were according to the five different stakeholder groups. The second aim of this study was to explore how the decision-making process of implementing indoor plants looks like, which was important because the decision-making process of incorporating indoor plants in the work environment depends on whose wants and needs are driving this decision (Kok et al., 2015).

6.1.1. PERCEIVED REASONS FOR IMPLEMENTING INDOOR PLANTS

Out of the interviews it appeared that almost all respondents know about the advantages of indoor plants, but still they do not have many indoor plants in the work environment. The interviews showed that most commonly mentioned reasons for having indoor plants were the improved indoor climate, ambiance and pleasant feeling, decoration, health and well-being, and image of the company.

Especially the reasons that indoor plants improve indoor climate, health and well-being are commonly supported by the literature. For instance, the study of Nieuwenhuis and colleagues (2014) mentions that indoor plants affect the indoor climate in an objective and in a subjective way. In an objective way, indoor plants have been shown to remove most types of air-borne pollutants, but they also clean the air by absorbing carbon dioxide [CO_2] (Nieuwenhuis et al., 2014; Wood, Orwell, Tarran, Torpy, Burchett, 2002). In a subjective way, different studies showed that perceived indoor climate improves when adding indoor plants (Fjeld, 2000; Khan, Younis, Riaz, & Abbas, 2005; Nieuwenhuis et al., 2014), because indoor plants in the office lead to greater engagement among employees, which positively affects perceptions of air quality (Nieuwenhuis et al., 2014). The study of Fjeld (2000) showed that 12 health complaints decreased by an average of 23 percent when adding indoor plants in the office. As respondents reported in this study, the study of Knight and Haslam (2010) and Nieuwenhuis and colleagues (2014) also revealed that perceived well-being improves with the addition of indoor plants.

Previous literature paid less attention to the reasons that indoor plants improve ambiance and pleasant feeling, decoration, and the company's image. The contribution to an ambiance and pleasant feeling can be supported by a study of Lohr (2009) who states that indoor plants make our surroundings more pleasant and they make us feel calmer. Furthermore, an office is rated the most attractive when indoor plants are present (Larsen, Adams, Deal, Kweon, and Tyler, 1998). In contrast, having too many indoor plants can evoke negative feelings about the work environment (Larsen et al., 1998). The use of indoor

plants as decoration is supported by the study of Bringslimark and colleagues (2009), which found that indoor plants can be effective as a visual feature of the work environment that evokes aesthetic experiences. Furthermore, the respondents said that indoor plants could be added to the offices to improve company's image. This is supported by several studies that reported that indoor plants can positively influence a company's green image (Chen, 2008; Thomsen, Sønderstrup-Andersen, and Müller 2011; Weinmaster, 2009) and can therefore be used as a marketing tool to promote such image (Weinmaster, 2009).

6.1.2. PERCEIVED REASONS FOR NOT IMPLEMENTING INDOOR PLANTS

Reasons for not having indoor plants included maintenance, costs, required space, incongruence with architecture, and the view outside. In contrast to the reasons for implementing indoor plants, it was more difficult to find supporting literature for the reasons to not implement indoor plants.

In some cases, contradictory literature was found compared to respondents perceived reasons for not having indoor plants. For example, it has been proven that installing indoor plants in offices would have a positive effect on short-term sickness absence, which makes installing indoor plants a cost-effective method for improving health and well-being (Smith et al., 2011; Burchett, Torpy, & Tarran, 2008). Even though indoor plants must be purchased, their benefits are great enough to result in a net saving for the company (Smith et al., 2011, Burchett et al., 2008). This is in contrast with the perspectives of the respondents who think installing indoor plants would be expensive, and for that reason they would not do it. Furthermore, respondents perceive that indoor plants require considerably space, which is supported by a study of Thomsen and colleagues (2011) which reported that the availability of space can determine how indoor plants are used. According to this study, the space availability influences the appropriate size and number of indoor plants in a room (Thomsen et al., 2011). However, more research is contradictory to this view, since installing indoor plants do not require much space, when using green or living walls (Dunnett & Kingsbury, 2008; Tan, Wang, & Sia, 2013). Such living walls, with hanging plants, can be used to decorate walls while saving office space (Yan, Yajing, & Rui, 2015). Another way to make full use of the space in the office is by hanging plants from the ceilings, which can also be aesthetically appealing (Li, 2016). These contradictory views between literature and respondents, can mean that there is a lack of knowledge among the respondents for example about the cost benefits of indoor plants and the alternatives on using indoor plants.

Next, some reasons for having indoor plants were more in line with the literature. First, even though companies employ people to maintain indoor plants, they still perceive maintenance as most important reason for not implementing indoor plants. The importance of maintenance is supported by the study of Thomsen and colleagues (2011), which suggests that being surrounded by unhealthy indoor plants can invoke negative feelings, such as slight irritation. Plants in a bad condition have opposite effects than plants in good condition (Thomsen et al., 2011). In addition, according to Smith, Fsadni, and Hold (2017), indoor plants must be in optimal condition to successfully regulate indoor climate, in which case, maintenance is vital. Furthermore, the reason that employees prefer a view on nature outside instead of indoor plants in the company is supported by the literature. The connection between indoor plants and a view outside can be supported by the study of Bringslimark and colleagues (2011) which demonstrated that employees without windows were five times more likely to bring indoor plants into their offices than employees with windows were. However, a study of Dravigne, Waliczek, Lineberger,

and Zajicek (2008) suggests that people with indoor plants in their office reported feeling "content" or "very happy" more often than people who only have a view on green spaces outside.

Finally, that indoor plants do not fit the design of the architect as a reason for not implementing indoor plants is not commonly found in the literature. However, the literature shows that architects and designers are particularly influential as high-level advisors in the work environment (Duffy, 2000) and changing the design of the architect could lead to the undermining of strong design concepts which could lead to demotivation of the architect (Oyedele, 2013).

6.1.3. DIFFERENCES BETWEEN STAKEHOLDER GROUPS

The results section indicated different perspectives between different stakeholder groups. This was already expected, since the study of Kok and colleagues (2015), which was elaborated in the theoretical framework of this study, stated that every stakeholder perceives the same facility design or environmental factor differently. These differences in perceptions can be influenced by organisational characteristics (Stauss, 1995; Watson & Baumler, 1975), such as membership of different departments and of different hierarchical layers (Stauss, 1995). Regardless to the managers of a functional unit, the stakeholder groups of this study all involved different hierarchical layers, but they were all involved in comparable departments. While the managers of a functional unit were all in the same hierarchical layer of each company, they all led different departments. These differences in department can explain why no specific pattern was found for the perspectives of the managers of a functional unit.

On the other hand, specific patterns were found in the other stakeholder groups. Top managers view image as an important reason for having indoor plants, which is supported by the study of Jo Hatch and Schultz (1997) who contend that organisational identity and image are primarily associated with top management strategy. Facility managers reasons regarding the use of indoor plants were related to the work environment in general, which is logical, since this is part of the job description of the facility manager. A facility manager is responsible for translating the needs of different employees into a coherent facility design (Kok et al., 2015). In addition, the study of Duffy (2000) reported that facility managers are responsible for the design of the work environment in collaboration with architects and designers. The responses of the HR managers regarding the use of indoor plants were primarily related to the employee advantages and disadvantages, as the HR managers are often the leading factors in the incorporation of wellness programs, since they are most aware of the impact of employee health failure on absenteeism and turnover (Downey, 2000). Finally, the reasons provided by members of the works council, could be related to the office itself. This is supported by the study of Hartman and Wang (2004), which reported that the work environment will affect primarily the employees at the lower hierarchy levels of a company. Space requirement might be a reason for not implementing indoor plants as these employees, such as members of the works council, work among many people in an office.

6.1.4. DECISION-MAKING PROCESS OF COMPANIES

As the results of this study indicate, the decision-making process for implementing indoor plants depends on the characteristics of the company itself and the personal interest of the decision makers. This study indicates that company characteristics such as type of work, work environment, values, and budget play a role in the decision-making process regarding indoor plants. First, that type of work influences the decision-making process is supported by the study of Thomsen and colleagues (2011) which reported that organisational structures such as the type of work influences the presence of indoor plants. Thomsen and colleagues (2011) also reported that for example meeting rooms are enriched with flowers to make the room comfortable. Additionally, Thomsen and colleagues (2011) reported that characteristics of the work environment play a significant role in deciding whether to incorporate indoor plants. These characteristics of the work environment, such as income of light, space availability and the layout of rooms structure the way indoor plants are used (Thomsen et al., 2011). The current study indicates that having a view on green outside is a compensating factor to preclude the use of indoor plants, which is supported by the study of Bringslimark and colleagues (2011). That values influence the decision-making process, is also supported by literature (Gregory, Failing, Harstone, Long, McDaniels, Ohlson, 2012; Thomsen et al., 2011). According to Gregory and colleagues (2012) it is good to consider relevant values in the decision-making process, and Thomson and colleagues (2011) also reported that indoor plants could be implemented to express workplace values. The last company characteristic influencing the presence of indoor plants, is the budget. Budget can influence the decision-making process, since budgeting systems play a key role in companies (Libby & Lindsay, 2010). In the study of Libby and Lindsay (2010), budgeting is reported to play a useful role in implementing strategies, and thus also in the purchase of indoor plants. Budgets are used by managers to ensure that their costs do not exceed their income or revenue (Wiggins, 2010). A limited budget is more likely to be spent on other facilities such as good equipment.

Next, personal interest also appeared to be an important factor influencing the decision-making process for having indoor plants. Earlier literature supports that having facilities, such as indoor plants, is influenced by personal interest and personal characteristics (Adkins, Samaras, Gilfillan, & McWee, 2013; Gibson & Early, 2007; Thomsen et al., 2011). A study of Thomsen and colleagues (2011) reported that whether indoor plants are perceived in a positive or in a negative way can depend on the characteristics of the individual employee. In their research, they divide these characteristics into personal experiences, preferences, and values, of which the preferences are the most important factor influencing indoor plant implementation (Thomsen et al., 2011). Personal experiences and preferences guide the preferences for certain species, since certain species are related to emotions and mood (Thomsen et al., 2011). However, this was not found to be the case in the current study. In addition, according to Gibson and Early (2007), individual factors such as experience, cognitive complexity, and personality, can influence the perceptual process. In the current study, several respondents said that implementation depends on personal interest. If an individual has many plants at home, they are more likely to be a proponent of indoor plants. This view is supported by the study of Munster and Schrader (2011), which states that such attitudes and behaviour are not learned exclusively at the workplace but are also learned in private life.

6.2.   REFLECTION ON THEORETICAL FRAMEWORK

In general, the original conceptual framework as mentioned in chapter 3.2. was useful for this study. Out of this study, it appeared that company culture, financial aspects and the physical work environment influence the decision-making process as was stated in the original conceptual framework. However, three adaptations can be made to render the framework more suited to this study. These adaptations are coloured light green in Figure 6. First, in the original conceptual framework, five different factors were mentioned which could influence the perspectives of the different stakeholder groups. However, since this study only examines the perspectives of different stakeholder groups, the factors of the framework are based on perspectives as well. Because of that, in the adapted conceptual framework, the factors directly influence the decision-making process, and not the perspectives anymore. A second adaptation in the adapted conceptual framework, is that type of work is added. It appeared that type of work influences the decision-making process, since indoor plants fit one job activity more than another. Additionally, employees who need a fix workplace because of their type of work, are generally more open towards indoor plants in the work environment than employees with a more variable workplace. The last adaptation in this conceptual framework is that individual factors and perceptions are replaced by personal interest, since the individual factors as described in the original conceptual framework did not play a role in the decision-making process in this study. In addition, perceptions are removed, since every factor mentioned in this study are perceptions. Instead, personal interest is added, since this appeared to be an important influencer for having indoor plants or not.

However, it should be borne in mind that the original conceptual framework aimed to determine how different factors can be related to the decision-making process, whereas this study investigated stakeholders' thoughts regarding indoor plants and this decision-making process in the work environment.
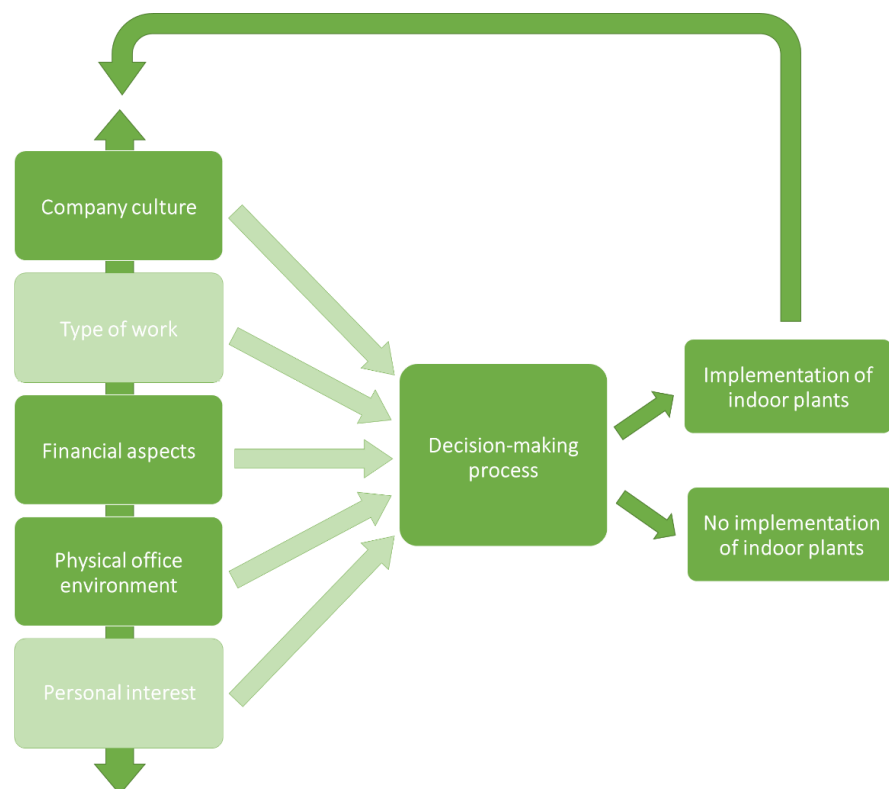

Figure 6: Adapted conceptual framework for the decision-making process of indoor plants

6.3. STRENGTHS AND LIMITATIONS

The present study was the first to explore how different stakeholders in a company think about indoor plants in the work environment and to explore reasons for implementing or not implementing indoor plants. Additionally, the present study was also the first to examine the decision-making process for purchasing indoor plants. This decision-making process can be different from the purchase of other facilities, since indoor plants need to be maintained and are not seen as necessary for proper functioning. The interviews were exploratory and facilitated the collection of detailed and in-depth data about the reasons for implementing or not implementing indoor plants.

A strength of this study is that the interviews were analysed by means of a thematic analysis. An advantage of this method is that interpretation of themes is supported by data (Guest, MacQueen, & Namey, 2011). Data was coded by one person, but this coding was approved by the supervisor. That the data is coded by one person is a limitation, as reliability is a concern since different researchers can have different interpretations (Guest et al., 2011). In addition, this study did not utilise environmental triangulation. Environmental triangulation uses a range of environmental factors such as different locations and different periods (Nidanu & Syombua, 2015). It is possible that respondents had different views on indoor plants when being interviewed in another room, for example in the presence of many indoor plants, or at another time. It can be assumed that employees like indoor plants more when it is raining than when it is sunny. For that reason, a limitation of this study is that respondents were only interviewed at one location and at one time.

A further strength of this study is that different stakeholders in one company were interviewed, because interviewing only one person per company could lead to different results solely based on the perceptions of one person. However, not in every company all stakeholder groups were interviewed. For example, in total, only three facility managers were interviewed while top managers and HR managers were interviewed in all five companies. This may provide a biased view, because different stakeholders have a different view towards the work environment and indoor plants of the company. Additionally, stakeholders in only five different companies were interviewed.

Furthermore, as mentioned in the methods section of this study, all companies except one were recruited by an internet request and it was company's choice to sign up to participate in a study about indoor plants in the work environment. This can cause self-selection bias, since it is possible that companies with a more positive view towards indoor plants were more likely to sign up for the study. In this case, self-selection bias can mean that the participating companies of this study have a different view from companies that do not participate. It thus can be assumed that the companies in this study are more positive towards indoor plants than companies not involved in this study. However, that fact that one person of a company signed up for the research does not imply that all the respondents had a positive attitude towards indoor plants. It can mean that this person particularly is positive towards indoor plants, but the other respondents can still have a negative view. In addition, in two of the companies, the person who signed up did not fit one of the stakeholder groups themselves, so they were not interviewed for this study. The fact that a company signed up themselves can thus lead to a more positive perspective towards indoor plants, but it not necessarily is the case, because that one person in a company is positive regarding indoor plants does not guarantee that the other four respondents in a company are also positive towards indoor plants.

Lastly, the semi-structured interviews were performed by using topic guides, which means that the interview and line of questioning is guided by the interviewee's responses (Bowling & Ebrahim, 2005). An advantage of this method is that the respondent can develop their own narratives while the researcher maintains overall control via the topic guide (Bowling & Ebrahim, 2005). However, small changes in words and actions may affect responses (Johannes, Crawford, McKinlav, 1997). Since questions in the interviews were posed differently many times, this could therefore also influence the responses of the respondent, which is a disadvantage of this method. Additionally, respondents might have given socially desirable answers, because they were aware that the research was about indoor plants in the work environment. They might have thought about it beforehand, which could influence the responses.

6.4. RECOMMENDATIONS

In this chapter, recommendations are provided which are supported by the results of this study. First, recommendations are given for future research. Thereafter, recommendations are given for practical application, thus for implementing indoor plants in offices.

6.4.1. RECOMMENDATIONS FOR FUTURE RESEARCH

Out of this study it appeared that personal interest and several company characteristics play a role in the decision-making process for having indoor plants or not. By using this information, a questionnaire among employees can be set up to see whether these patterns are also visible on a larger scale.

When performing interviews at more companies, it can be investigated whether the decision-making process as described in this study is also suited to the decision-making process of other companies. It can be determined whether a distinction needs to be made between, for example, larger and smaller companies, or companies at different locations. Clarity in this regard will facilitate determining whether the decision-making process as depicted here is generalisable to every company.

Furthermore, it can be investigated what makes the switch to implementing indoor plants instead of not implementing indoor plants. This is important since the advantages of having indoor plants are well known but few companies utilise indoor plants. When the factors that lead to the transition point for implementing indoor plants are identified, they can be considered.

6.4.2. RECOMMENDATIONS FOR PRACTICAL APPLICATION

After conducting this research, some recommendations can be made that can help in the implementation of indoor plants in offices where it has not yet been decided whether to incorporate indoor plants. These recommendations can be used by companies planning to install indoor plants in the work environment, as well as by companies intending to create a healthy work environment.

1. Examine the decision-making process. It is recommended to first examine the company itself and its decision-making process. This is important, since it appeared that the decision-making process differs between companies. In this step, one must determine who is responsible for the housing budget, since this person is probably also responsible for the decision regarding the utilisation of indoor plants.
2. Approach decision makers. In the second step, it is imperative to contact the decision-makers. It is recommended to consider the advantages and disadvantages of indoor plants as perceived by the decision-maker. These objections need to be considered and the not mentioned benefits of indoor plants need to be explained to make sure that the company is informed well.
3. Support company characteristics. The final step in this process is to find a way to support company characteristics by implementing indoor plants. Indoor plants should be suited to the type of work, work environment, values, and budget of a company. For example, if the decor and architecture of the building are important to the company, indoor plants must be used in a way to enhance the building. If the indoor climate and employee health and well-being are important, indoor plants should be selected that offer the greatest support for these goals.

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8. APPENDICES

8.1.   APPENDIX 1: INTERNET REQUEST

Partners gezocht: Groen in de bedrijfsbinnentuin

Bent u een ondernemer of gemeente die het fysiek en mentaal welbevinden van uw werknemers op een goede manier wil oppakken? En die overweegt om daarvoor (meer) groen aan te brengen in de kantoorruimte? Maar die tegelijkertijd wel wil weten of de investering zich terugbetaalt? Doen uw werknemers veel zittend of mentaal inspannend werk zonder zicht op groen? Dan is uw bedrijf wellicht geschikt om deel te nemen aan ons vervolgproject.

In het project 'Planten voor prima binnenklimaat' hebben we de effecten van planten op de luchtkwaliteit in kantoren en verzorgingshuizen gemeten met sensoren, en hebben we de effecten op gezondheid en welbevinden geïnventariseerd via vragenlijsten onder werknemers. Ook hebben we concentratietesten uitgevoerd als maat voor productiviteit. Daaruit blijkt dat planten een positief effect hebben op de relatieve luchtvochtigheid (meer dan 5%), en dat planten bijdragen aan een hoger privacy-gevoel van werknemers waardoor ze minder last hebben van stress, zich beter kunnen concentreren en een kortere herstelbehoefte hebben. Op basis van expertkennis en informatie uit literatuur zijn besparingen berekend in energiekosten voor klimaatbeheersing, besparingen in ziekteverzuimkosten en een beter bedrijfsresultaat door de verbeterde productiviteit van de werknemers, en is de terugverdientijd van de investering in groen uitgerekend.

Potentie

"Dit zijn allemaal nog voorlopige resultaten," zegt projectleider Tia Hermans van Wageningen Environmental Research. "Uit ons nu lopende project blijkt wel duidelijk dat vergroening van de binnenruimtes veel potentie heeft. In een vervolgproject willen we de gevonden resultaten toetsen op hun toepasbaarheid en robuustheid door uitgebreidere metingen op meer locaties. Bovendien willen we kijken naar elementen waar we tot nu toe nog niet naar gekeken hebben, zoals geluidwering, decoratie en het energieverbruik (het 'PARISproof' maken van het kantoor, dat wil zeggen maximaal 50 kWh aan energieverbruik per m2). Daardoor zouden de maatregelen binnen korte tijd kunnen worden terugverdiend."

Deadline

Heeft u interesse om deel te nemen aan dit project?

Neem contact op met Tia Hermans

8.2.1. APPENDIX 2.1: TOPIC GUIDE FOUR MANAGERS

Topic guide: top manager, manager of a functional unit, facility manager, HR manager	
Introductie: Mijn naam is Amanda Jansen en ik ben een masterstudente Gezondheid en Maatschappij aan Wageningen Universiteit. Op dit moment ben ik, in het kader van mijn masterthesis, bezig met een onderzoek over kamerplanten op het werk. Het interview zal ongeveer 30 minuten duren. Meedoen aan het onderzoek is geheel vrijwillig, dus u bent niet verplicht tot het beantwoorden van de vragen. Ook kunt u elk gewenst moment stoppen met het interview. Er zal vertrouwelijk omgegaan worden met uw antwoorden en de antwoorden zijn niet naar u terug te herleiden. Vindt u het goed dat ik het interview opneem?	
Topic	**Voorbeeldvragen**
Achtergrondinformatie	
Gender	Man of vrouw (kruis het juiste antwoord aan)
Functie	Kunt u me in het kort iets vertellen over de inhoud van uw functie binnen dit bedrijf?
Gezondheid	
Belang gezondheid werknemers	Hoe belangrijk is de gezondheid van werknemers voor uw bedrijf?
Bevordering gezondheid in bedrijf	Doet uw bedrijf iets om de gezondheid van werknemers te bevorderen? Zo ja, wat? Wie/ welke afdeling binnen dit bedrijf is hier verantwoordelijk voor?
Gezondheidsbeleid in bedrijf	Heeft uw bedrijf een beleid om gezondheid van werknemers te bevorderen? Zo ja, waaruit bestaat dat beleid?
Werkomgeving	
Werkomgeving binnen bedrijf	Wordt er binnen het bedrijf iets gedaan aan de werkomgeving van werknemers? - Wat? - Hoeveel? - Wie/ welke afdeling binnen het bedrijf speelt hier een rol bij? Wat voor rol? - Denkt u dat dit gedaan wordt met het oog op de gezondheid?
Perceptie inrichting werkomgeving	Hoe ervaart u de inrichting van uw werkomgeving?
Belang gezonde werkomgeving	Hoe belangrijk vindt u de inrichting van de fysieke werkomgeving als het gaat om de gezondheid van werknemers? Kunt u dit toelichten?
Belangrijk aspect	Welk aspect van de werkomgeving vindt u belangrijk? En met het oog op gezondheid? Kunt u dit toelichten?
Minder belangrijk aspect	Welk aspect van de werkomgeving vindt u minder belangrijk? En met het oog op gezondheid? Kunt u dit toelichten?
Contact met andere mensen in uw organisatie	Praat u met andere werknemers over de inrichting van het kantoor? Met wie/ welke afdeling binnen het bedrijf vooral?

Kamerplanten binnen het bedrijf	
Mening kamerplanten op de werkplek/ in de werkomgeving	Wat vindt u van kamerplanten op de werkplek?
Aanwezigheid kamerplanten op de werkplek	Heeft u op bedrijfsniveau kamerplanten op de werkplek? Wat is hier de reden voor?
Beleid voor kamerplanten	Is er binnen uw bedrijf een beleid voor kamerplanten op de werkplek? Zo ja, waaruit bestaat dat beleid?
Behoefte aan kamerplanten	Hebben u/ andere werknemers behoefte aan kamerplanten in hun werkomgeving? Kunt u dit toelichten?
Open voor aanschaf van kamerplanten	- Staat u open voor de aanschaf van kamerplanten in de werkomgeving? - Staat uw bedrijf open voor de aanschaf van kamerplanten in de werkomgeving? Wie/ welke afdeling staat hier het meest voor open? Wie/ welke afdeling staat hier het minst voor open?
Meeste baat	Welke afdeling binnen het bedrijf heeft de meeste baat bij de aanschaf van kamerplanten in de werkomgeving?
Minste baat	Welke afdeling binnen het bedrijf heeft de minste baat bij de aanschaf van kamerplanten in de werkomgeving?
Redenen implementatie	Wat zouden redenen kunnen zijn om geen gebruik te maken van kamerplanten in het bedrijf? Kunt u dit toelichten?
Redenen geen implementatie	Wat zouden redenen kunnen zijn om wel gebruik te maken van kamerplanten in het bedrijf? Kunt u dit toelichten?
Beslissingsproces	
Verantwoordelijkheid aanschaf	Als er planten op de werkplek komen, welke afdeling binnen het bedrijf is dan verantwoordelijk voor de aanschaf van deze planten?
Verantwoordelijkheid onderhoud	Als er planten op de werkplek komen, welke afdeling binnen het bedrijf is dan verantwoordelijk voor het onderhoud van deze planten?
Afdeling	Wie/ welke afdeling in uw bedrijf maakt de beslissingen?
Andere afdelingen	Worden er andere afdelingen binnen het bedrijf betrokken bij deze beslissing? Wie/ welke afdeling, waarom en op welke manier?
Proces voor kamerplanten	Zou dit proces hetzelfde gaan voor de aanschaf van kamerplanten? - Wat zou hetzelfde gaan? - Wat zou anders gaan?

Topic guide: Member of the works council	
Introductie:	
Mijn naam is Amanda Jansen en ik ben een masterstudente Gezondheid en Maatschappij aan Wageningen Universiteit. Op dit moment ben ik, in het kader van mijn masterthesis, bezig met een onderzoek over kamerplanten op het werk. Het interview zal ongeveer 30 minuten duren. Meedoen aan het onderzoek is geheel vrijwillig, dus u bent niet verplicht tot het beantwoorden van de vragen. Ook kunt u elk gewenst moment stoppen met het interview. Er zal vertrouwelijk omgegaan worden met uw antwoorden en de antwoorden zijn niet naar u terug te herleiden. Vindt u het goed dat ik het interview opneem?	
Topic	Voorbeeldvragen
Achtergrondinformatie	
Gender	Man of vrouw (kruis het juiste antwoord aan)
Functie	Kunt u me in het kort iets vertellen over de inhoud van uw functie binnen dit bedrijf?
Ondernemingsraad	Kunt u me in het kort iets vertellen over de ondernemingsraad van uw bedrijf?
Gezondheid	
Belang gezondheid werknemers	Hoe belangrijk is de gezondheid van de werknemers voor uw bedrijf?
Bevordering gezondheid in bedrijf	Doet uw bedrijf iets om de gezondheid van werknemers te bevorderen? Zo ja, wat? Wie/ welke afdeling binnen dit bedrijf is hier verantwoordelijk voor?
Gezondheidsbeleid in bedrijf	Heeft uw bedrijf een beleid om gezondheid van werknemers te bevorderen? Zo ja, waaruit bestaat dat beleid?
Werkomgeving	
Werkomgeving binnen bedrijf	Wordt er binnen het bedrijf iets gedaan aan de fysieke werkomgeving van werknemers? - Wat? - Hoeveel? - Wie/ welke afdeling binnen het bedrijf speelt hier een rol bij? Wat voor rol? - Denkt u dat dit gedaan wordt met het oog op de gezondheid?
Perceptie inrichting werkomgeving	Hoe ervaart u/ de ondernemingsraad de inrichting van uw werkomgeving? Denkt u dat de meeste werknemers hier hetzelfde over denken?
Belangrijk aspect	Welk aspect van de werkomgeving vindt u/ de ondernemingsraad belangrijk? Denkt u dat de meeste werknemers hier hetzelfde over denken? En met het oog op gezondheid? Kunt u dit toelichten?
Minder belangrijk aspect	Welk aspect van de werkomgeving vindt u/ de ondernemingsraad minder belangrijk? Denkt u dat de meeste werknemers hier hetzelfde over denken? En met het oog op gezondheid? Kunt u dit toelichten?
Contact met andere mensen in uw organisatie	- Praat de ondernemingsraad met werknemers over de inrichting van het kantoor? Met wie/ welke afdeling binnen het bedrijf vooral?

	- Praten de meeste werknemers met andere werknemers over de inrichting van het kantoor? Met wie/ welke afdeling binnen het bedrijf vooral?
Kamerplanten binnen het bedrijf	
Mening kamerplanten op de werkplek/ in de werkomgeving	Wat vindt u van kamerplanten op de werkplek?
Aanwezigheid kamerplanten op de werkplek	Heeft u op bedrijfsniveau kamerplanten op de werkplek? Wat is hier de reden voor?
Beleid voor kamerplanten	Is er binnen uw bedrijf een beleid voor kamerplanten op de werkplek? Zo ja, waaruit bestaat dat beleid?
Behoefte aan kamerplanten	Hebben u/ de meeste werknemers behoefte aan kamerplanten in hun werkomgeving? Kunt u dit toelichten?
Open voor aanschaf van kamerplanten	- Staat u open voor de aanschaf van kamerplanten in de werkomgeving? - Staat uw bedrijf open voor de aanschaf van kamerplanten in de werkomgeving? Wie/ welke afdeling staat hier het meest voor open? Wie/ welke afdeling staat hier het minst voor open?
Meeste baat	Welke afdeling binnen het bedrijf heeft de meeste baat bij de aanschaf van kamerplanten in de werkomgeving?
Minste baat	Welke afdeling binnen het bedrijf heeft de minste baat bij de aanschaf van kamerplanten in de werkomgeving?
Redenen implementatie	Wat zouden redenen kunnen zijn om geen gebruik te maken van kamerplanten in het bedrijf? Denkt u dat de meeste werknemers hier hetzelfde over denken? Kunt u dit toelichten?
Redenen geen implementatie	Wat zouden redenen kunnen zijn om wel gebruik te maken van kamerplanten in het bedrijf? Denkt u dat de meeste werknemers hier hetzelfde over denken? Kunt u dit toelichten?
Beslissingsproces	
Verantwoordelijkheid aanschaf	Als er planten op de werkplek komen, welke afdeling binnen het bedrijf is dan verantwoordelijk voor de aanschaf van deze planten?
Verantwoordelijkheid onderhoud	Als er planten op de werkplek komen, welke afdeling binnen het bedrijf is dan verantwoordelijk voor het onderhoud van deze planten?
Afdeling	Wie/ welke afdeling in uw bedrijf maakt de beslissingen?
Andere afdelingen	Worden er andere afdelingen binnen het bedrijf betrokken bij deze beslissing? Wie/ welke afdeling, waarom en op welke manier?
Proces voor kamerplanten	Zou dit proces hetzelfde gaan voor de aanschaf van kamerplanten? - Wat zou hetzelfde gaan? - Wat zou anders gaan?

1. "Ik vind wel, maar dat is mijn mening, dat het minimaal is. Er staan 2 planten, maar ik vind dat er wel wat meer mogen staan." (Member of the works council – Company 1)

2. "Dat mag wel bevorderd worden. Zoals je hier ziet, we hebben hier 2 mooie planten. Dit zijn ruimtes waar ook externe komen, die hebben we mooi aangekleed. Maar als je kijkt op de verdiepingen dan is dat wel een beetje zielig." (Manager of a functional unit – Company 5)

3. "Maar als je de keuze hebt om het wel of niet te doen, heeft het niet mijn voorkeur in het geheel." (Manager of a functional unit – Company 2)

4. "Nouja, de vraag an sich is zegmaar nog nooit bij OR of OC binnen gekomen, dus ik denk niet dat er echt behoefte aan is. Ook gewoon omdat je het niet echt mist, omdat er gewoon veel groen zit, hetzij buiten, hetzij in zo'n binnentuin." (Member of the works council – Company 2)

5. "Ik denk wel dat dat ermee te maken heeft van hoe variërend is jouw werkomgeving. En als jij vijf keer per dag ergens in een andere omgeving komt, dan geeft jou dat al voldoende diversiteit. En zit jij altijd vast op jouw werkplek, dan moet jouw werkplek interessant genoeg zijn om er de hele dag te kunnen verblijven." (Top manager – Company 5)

6. "Goede vraag. Maar die heb ik eigenlijk niet. Ik zou geen reden kunnen bedenken om het niet te doen." (Manager of a functional unit – Company 3)

7. "Ik hoop wel echt dat het klimaat er een stuk gezonder wordt. Dus minder stof, meer zuurstof in de lucht. Dat hoop ik wel." (Manager of a functional unit – Company 3)

8. "Mensen die werken op een afdeling waar veel groen om hun heen is zouden misschien zich prettiger kunnen voelen, zich blijer kunnen voelen." (Top manager – Company 2)

9. "En ook als je een duurzaam bedrijf bent vind ik dat het echt bijdraagt aan een duurzame uitstraling." (Top manager – Company 3)

10. "Ik lees studies van klanten van ons die dat ook weer vertalen in ziekteverzuim. En dan gewoon een half procent ziekteverzuim besparen, als je dat lang genoeg monitort. En een half procent ziekteverzuim op wat is het, 90 procent van je kantoorkosten zijn je mensen. Dan bingo. Dan is de investering verantwoord." (Top manager – Company 5)

11. "Dus je hebt daar best wel wat planten nodig wil je dat op laten vallen. En dan denk ik van ja dan is dat de investering die je moet doen een hoop geld." (Top manager – Company 2)

12. "Ik denk het onderhoud. Er moet toch iemand zijn, wat ik zei een plant is mooi, maar er moet wel iemand zijn die hem in leven kan houden." (HR manager – Company 1)

13. "Ik denk dat sommige afdelingen waar veel bureaus staan dat ze dan eerder gaan lopen klagen dat dit te groot is en dat ze er geen plek voor hebben." (Member of the works council – Company 5)

14. "Nouja dat je een bepaald ontwerp veranderd. Het is nu ontworpen door wintertuinen, daktuinen en verticale plantenwanden aan de binnenzijde, dan heb je het wel een beetje." (Facility manager – Company 2)

15. "Gewoon naar buiten kunnen kijken weegt voor mij echt 1000 keer zwaarder dan dat er planten staan." (Manager of a functional unit – Company 2)

16. "Dus eigenlijk de facility manager voornamelijk. Die zit, als facilitair manager is hij ook verantwoordelijk voor het huisvestingsbudget en die wil natuurlijk ook eens kijken van nou wat gaan we nu eens investeren en wat gaan we er nu eens uithalen." (Manager of a functional unit – Company 3)

17. Maar we hebben geen procedure aankoop kamerplant. Maar er zijn natuurlijk heel veel dingetjes die je inkoopt en daar zou je een plant ook onder kunnen scharen en zo verloopt dat. We hebben iets nodig of we willen iets graag. En dan overleg je dat meestal met de clustercoördinator die ook budgetverantwoordelijke is. (HR manager – Company 1)

18. "Ik houd zelf ook heel erg van planten. Heeft ook echt met je persoonlijke interesses te maken, dat je dat zelf ook sneller belangrijk vindt." (Facility manager – Company 4)

19. "En ja sommige mensen hebben niet zo veel met planten, dat snap je ook wel." (HR manager – Company 3)

20. "Want die denken vaak aan andere dingen. Bijvoorbeeld een tablet om het werkproces makkelijker te maken of die denken aan een nieuwe bureaustoel, dan aan een plant." (Top manager – Company 1)

21. "Ik vind het soms ook heel erg logisch dat het soms wel staat en soms niet staat, is ook wel afhankelijk van welk werkveld men opleid." (Facility manager – Company 4)