Reducing sickness absenteeism

Research how the sickness absenteeism rate at an organisation can be reduced with measures at organisational level which are in line with the existing way of working.

- Master Thesis –
(anonymous version)

Jacqueline Aalbers
(s0163791)

Human Resource Management
Business Administration
University of Twente

Graduation committee:
Dr. A.A.M. Wognum
Prof. Dr. J. C. Looise

August 09, 2013

Summary

The organisation in this research is an interactive multimedia company with its expertise in the field of web portals, sites and shops, digital business development, hosting acceleration and mobile devices. According to the management of the organisation it is a problem of the last few years that the sickness absenteeism is too high in their organisation. In the perception of the management it seems that the sickness absenteeism at the organisation is higher than at other comparable organisations in the industry of interactive multimedia. This high absenteeism is not perceived as very logically, because the organisation adapts the work as closely as possible to the needs of the employees. They also make use of various measures to monitor and reduce the sickness absenteeism. Therefore, the management of the organisation wants to investigate how this sickness absenteeism can be reduced. As a result, the following research question is central in this study: "*How can the sickness absenteeism rate at the organisation be reduced with measures at organisational level which are in line with the existing way of working?*"

To start this research, a literature study was carried out to investigate what sickness absenteeism is, what possible causes for sickness absenteeism may be and what organisational factors can reduce the sickness absenteeism in an organisation. Based on this literature study, three (sub) research questions were formulated. First, the (sub) research question was investigated: "*What is the sickness absenteeism at the organisation?*" To answer this question the current state of affairs concerning the sickness absenteeism in the organisation was examined by analysing the sickness absenteeism statistics of the organisation. Also an interview with the occupational health physician of the organisation was conducted to get more insight into the sickness absenteeism at the organisation.

The second (sub) research question was: "*What is the difference between the actual and the perceived absenteeism opportunity at the organisation?*" To answer this question the actual absenteeism opportunity was examined by analysing the sickness absenteeism policy documents of the organisation. With this document analysis it was investigated what the organisation already performs to reduce the sickness absenteeism. In addition, the perceived absenteeism opportunity was examined with an online questionnaire for all employees of the organisation (n=64; 88.89%) and an additional online questionnaire for the frequently and long-term sick employees (n=11; 68.75%). These additional questions were completed by the frequently and long-term sick employees to get a deeper understanding of how the sickness absenteeism procedure of the organisation is experienced. In this way it is examined what aspects concerning the sickness absenteeism procedure the organisation may improve to reduce the sickness absenteeism.

In addition a third (sub) research question was examined: "*How do employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation?*" This question is about the organisational factors that may influence sickness absenteeism which emerged from the literature study. The perception of employees about these factors was investigated in the same questionnaires as for the second (sub) research question: an online questionnaire for all employees in the organisation and an additional online questionnaire for the long-term and frequently sick employees. This way it is investigated which organisational factors the organisation may improve to reduce the sickness absenteeism.

The results of this study showed that the sickness absenteeism at the organisation is indeed higher than the national percentage for organisations of similar size. The sickness absenteeism at the organisation turns out to be 4.56% in the year 2012/2013 compared to the national average of 3.5% for companies of similar size (CBS, 2013). It emerged that the largest part of the sickness absenteeism rate at the organisation can be explained by the long-

term sickness absenteeism. However, it also turned out that the organisation can have little impact on the earlier return of these current long-term sick employees. In addition, the short-term sickness absenteeism also appeared to be an important part of the sickness absenteeism rate. It turned out that the organisation might realise improvements concerning this short-term sickness absenteeism and that reducing the short-term absenteeism is also beneficial for reducing the long-term absenteeism. Therefore, it is concluded that the organisation should focus on reducing the short-term sickness absenteeism consisting of both the physical and mental health complaints.

In addition, the results showed that the organisation should focus on two key aspects in reducing the short-term sickness absenteeism. The organisation should focus on measures at organisational level concerning the compliance with the existing absenteeism policy and the high (cognitive) work load in reducing the short-term sickness absenteeism. Regarding a greater compliance with the existing absenteeism policy, it is advisable that the organisation communicates their sickness absenteeism policy more clearly and creates more awareness about the existence and importance of their sickness absenteeism policy. Also a stricter enforcement of the sickness absenteeism policy is recommended to raise the sickness absenteeism threshold and to stimulate an absenteeism culture where reporting sick is not too easy.

For lowering the (cognitive) work load, it turned out that it is advisable that the organisation ensures that more alternation and movement between the work activities occurs. Also it is recommended that employees have the possibility to use small enclosed working spaces when they prefer to work in such a working climate. In addition it is advisable that the organisation pays more attention to the monitoring of the (cognitive) work load and the work-life balance of employees by discussing this on a regular basis with employees. It is also recommended that the organisation increases the number of moments for employees to receive feedback on their work. Finally, it is advisable that the organisation makes the career perspective for employees more insightful.

These measures at organisational level concerning a greater compliance with the existing absenteeism policy and lowering the high (cognitive) work load may cause that fewer employees report sick. With these measures the organisation may reduce the sickness absenteeism in the organisation. At the end of this study some general recommendations for in practice and recommendations for further research are given.

Nederlandse samenvatting

De organisatie is een interactief multimediabedrijf met expertises op het gebied van web portals, websites en webwinkels, digitale bedrijfsontwikkeling, hosting acceleration en mobiele apparatuur. Volgens het management van de organisatie is het een probleem van de laatste paar jaren dat het ziekteverzuim in de organisatie te hoog is. In de perceptie van het management is het ziekteverzuim de organisatie hoger dan bij vergelijkbare bedrijven op het gebied van interactieve multimedia. Dit hoge ziekteverzuim wordt niet als erg logisch bevonden, aangezien de organisatie het werk zo goed mogelijk aanpast op de behoeften van de werknemers. Ook maken ze gebruik van diverse maatregelen om het ziekteverzuim te monitoren en te reduceren. Daarom wil het management van de organisatie onderzoeken hoe dit ziekteverzuim gereduceerd kan worden. De volgende onderzoeksvraag staat daarom centraal in dit onderzoek: *"Hoe kan het ziekteverzuimpercentage bij de organisatie gereduceerd worden met maatregelen op organisatieniveau welke in overeenstemming zijn met de bestaande manier van werken?"*

Om dit onderzoek te beginnen, is er een literatuuronderzoek uitgevoerd om te onderzoeken wat ziekteverzuim is, wat oorzaken voor ziekteverzuim zijn en welke factoren op organisatieniveau het ziekteverzuim in een organisatie kunnen reduceren. Op basis van dit literatuuronderzoek zijn er drie (sub)onderzoeksvragen in de praktijk onderzocht. Allereerst de (sub)onderzoeksvraag: *"Wat is het ziekteverzuim bij de organisatie?"* Om deze vraag te beantwoorden is het huidige ziekteverzuim in de organisatie onderzocht door de ziekteverzuimstatistieken van de organisatie te analyseren. Er is ook een interview met de bedrijfsarts van de organisatie afgenomen om meer inzicht in het ziekteverzuim bij de organisatie te verkrijgen.

De tweede (sub)onderzoeksvraag was: *"Wat is het verschil tussen de huidige en de ervaren verzuimgelegenheid bij de organisatie?"* Om deze vraag te beantwoorden is de huidige ziekteverzuimgelegenheid onderzocht door documenten met betrekking tot het ziekteverzuimbeleid van de organisatie te analyseren. Met deze documentanalyse is onderzocht wat de organisatie al doet om het ziekteverzuim te reduceren. Daarnaast is de ervaren verzuimgelegenheid onderzocht met een online vragenlijst voor alle werknemers van de organisatie (n=64; 88,89%) en een aanvullende vragenlijst voor de langdurig en frequent zieke werknemers (n=11; 68,75%). Deze aanvullende vragen zijn door de langdurig en frequent zieke werknemers ingevuld om beter inzicht te verkrijgen hoe de ziekteverzuimprocedure van de organisatie ervaren wordt. Op deze manier is onderzocht welke aspecten met betrekking tot de ziekteverzuimprocedure de organisatie zou kunnen verbeteren om het ziekteverzuim te reduceren.

Daarnaast is een derde (sub) onderzoeksvraag onderzocht: *"Hoe ervaren werknemers van de organisatie de factoren op organisatieniveau welke het ziekteverzuim in de organisatie kunnen beïnvloeden?"* Hierbij gaat het om factoren op organisatieniveau die ziekteverzuim kunnen beïnvloeden welke uit het literatuuronderzoek naar voren kwamen. De mening van de werknemers over deze factoren is in dezelfde vragenlijsten onderzocht als voor de tweede (sub) onderzoeksvraag: een online vragenlijst voor alle werknemers van de organisatie en een aanvullende online vragenlijst voor de langdurig en frequent zieke werknemers. Op deze manier is onderzocht welke factoren op organisatieniveau de organisatie zou kunnen verbeteren om het ziekteverzuim te reduceren.

De resultaten van dit onderzoek laten zien dat het ziekteverzuim bij de organisatie inderdaad hoger is dan het landelijk percentage voor organisaties van vergelijkbare grootte. Het ziekteverzuim bij de organisatie blijkt 4,56% te zijn in het jaar 2012/2013 in vergelijking met het landelijk gemiddelde van 3,5% voor bedrijven van vergelijkbare grootte (CBS, 2013). Het kwam naar voren dat het grootste deel van het ziekteverzuimpercentage verklaard kan

worden door het langdurig ziekteverzuim. Echter, er kwam ook naar voren dat de organisatie weinig invloed kan hebben op het eerder terugkeren van de huidige langdurig zieke werknemers. Daarnaast bleek het kortdurend ziekteverzuim ook een belangrijk aandeel van het ziekteverzuimpercentage te zijn. Er kwam naar voren dat de organisatie verbeteringen zou kunnen maken wat dit kortdurend ziekteverzuim betreft en dat het reduceren van dit kortdurend ziekteverzuim ook bevorderlijk is voor het reduceren van het langdurig ziekteverzuim. Er kan daarom geconcludeerd worden dat het reduceren van het ziekteverzuim bij de organisatie gefocust zal moeten zijn op het kortdurend ziekteverzuim welke zowel uit fysieke als mentale gezondheidsklachten bestaat.

Daarnaast kwam naar voren dat de organisatie op twee kernaspecten zal moeten focussen in het reduceren van het kortdurend ziekteverzuim. De focus bij de organisatie in het reduceren van het kortdurend ziekteverzuim moet liggen op maatregen op organisatieniveau met betrekking tot het naleven van het bestaande ziekteverzuimbeleid en de hoge (cognitieve) werkdruk. Met betrekking tot het beter naleven van het ziekteverzuimbeleid is het aan te bevelen dat de organisatie haar ziekteverzuimbeleid duidelijker communiceert en meer bewustwording over het bestaan en het belang van het ziekteverzuimbeleid creëert. Ook een striktere handhaving van het ziekteverzuimbeleid is aan te raden om de ziekteverzuimdrempel te verhogen en een ziekteverzuimcultuur te stimuleren waar ziekmelden niet te eenvoudig is.

Om de (cognitieve) werkdruk te verlagen, kwam naar voren het aan te raden is wanneer de organisatie zorgt dat er meer afwisseling en meer beweging tussen de werkactiviteiten plaatsvindt. Het is ook aan te bevelen dat werknemers de mogelijkheid hebben om kleine afgesloten werkruimtes te gebruiken wanneer ze graag in zo'n werkklimaat willen werken. Daarnaast is het aan te raden dat de organisatie meer aandacht besteedt aan het monitoren van de (cognitieve) werkdruk en de werk-privé balans van werknemers door dit op regelmatige basis met werknemers te bespreken. Het is ook aan te bevelen dat de organisatie het aantal momenten waarop werknemers feedback op hun werk kunnen krijgen verhoogt. Tot slot is het aan te raden dat de organisatie de carrièreperspectieven van werknemers meer inzichtelijk maakt.

Deze maatregelen op organisatieniveau met betrekking tot een betere naleving van het ziekteverzuimbeleid en een verlaging van de hoge (cognitieve) werkdruk, kunnen ervoor zorgen dat minder werknemers zich ziekmelden. Met deze maatregelen zou de organisatie het ziekteverzuim in de organisatie kunnen reduceren. Aan het eind van dit onderzoek worden enkele algemene aanbevelingen voor in de praktijk en aanbevelingen voor vervolgonderzoek gegeven.

Table of contents

1. Introduction

1.1 Introduction of the research topic

In recent years, the thinking about sickness absenteeism has greatly changed in the Netherlands. In the seventies and eighties, it was much more accepted to be sick and stay at home than it is nowadays (Geurts & Smulders, 2006). This idea has now been replaced by the idea that a quick return to the workplace is conducive for the recovery of the sick employee (Van Deursen & Koenders, 2007). As a result, employers have received an increasingly large responsibility in reducing the sickness absenteeism. This responsibility is partly reflected in new legislation of the last few years. In 2002, the 'Wet Verbetering Poortwachter' ('*Law Gatekeeper Improvement*') has been introduced. This law strengthens the rights and obligations of employers and employees concerning sickness absenteeism and therewith contributes to getting sick employees back at work as soon as possible (Arboportaal, 2013). Also the 'Wet Verlenging Loondoorbetalingsverplichting bij Ziekte' ('*Law of lengthening of the obligation to continue to pay wages in case of sickness'*) of 2004 has ensured that sickness absenteeism has become a more important issue to employers. This law has ensured that employers are required to continue paying the wages of sick employees for two years (Jehoel-Gijsbers, 2010).

So, the attention for sickness absenteeism in organisations is growing. It appears that this may also entail positive consequences for organisations and its employees. Research by the Arbodienst (*Occupational Health Service*) shows that attention for the working conditions in organisations can effectively reduce the sickness absenteeism and can provide lower costs (Arboportaal, 2013). In general the sickness absenteeism in an organisation is actually seen as a high cost (Van der Klink, Blonk, Schene & Van Dijk, 2003). In addition, the sickness absenteeism is also an indication of lost productivity and the welfare of employees in the organisation (Gimeno, Benavides, Amick, Benach & Martínez, 2004). Reducing the sickness absenteeism often has a positive effect on the productivity and the welfare of employees in an organisation (SER, 2009). Reducing the sickness absenteeism is therefore certainly of great importance for both employers and employees.

Reducing the sickness absenteeism and increasing the welfare of its employees is also very important for the organisation. This is reflected in the strategic business goals of the organisation. One of these goals is that the organisation pursues that 90% or more employees are proud of the work of the organisation and that they value the organisation with a grade of 7.5 or higher. To reach this goal, the organisation strives for optimal working conditions. Therefore, in 2012, the organisation conducted a research to investigate how the secondary employment conditions of the organisation are experienced by employees and how these conditions are in comparison with other companies in the same industry.

These surveys and benchmark study seem to show that the organisation has good secondary employment conditions. Not only the freedom for employees to perform their work appears great, but also the possibility of a good work-life balance appears to be good. It turns out that the relative high degree of free time and the flexibility for employees to perform their work and to fill in the workweek in their own way are quite unique. Working hours can be adapted to the personal rhythm of the employee and to the demands of clients and colleagues of the employee. It is stated that this flexibility creates stability and autonomy and thus sustainable employment. The research shows that 86% of the employees of the organisation are (very) satisfied.

However, despite these positive results, in the perception of the management it appears that the sickness absenteeism at the organisation is still too high. So, the flexibility for employees to perform their work and to fill in the workweek in their own way does not seem

to ensure that the sickness absenteeism decreases or is actually low. Statistics from the CBS (Centraal Bureau voor de statistiek; '*Central Office of Statistics'*) show that midsize businesses such as the organisation, with ten to hundred employees, have an average absenteeism rate of 3.5%. In recent years, the average sickness absenteeism of all companies in the Netherlands almost stabilised and is around 4%. This means that on average each day 1 in 25 workers in sick (CBS, 2013). According to the management of the organisation their sickness absenteeism is higher than this national average in medium-sized companies in the Netherlands. Therefore, the management of the organisation decided that they want to reduce the sickness absenteeism with about two percent.

1.2 Problem statement

Given the above, the sickness absenteeism rate is still perceived higher than the national average. According to the management of the organisation, the feeling that the sickness absenteeism is too high in their organisation is a problem of the last few years. This high absenteeism is not perceived as very logically, because the organisation does a lot for its employees to adapt the work as closely as possible to the needs of the employees. For example, employees are given a lot of freedom to perform their work and to combine their work with their private life. They also make use of various measures to monitor and reduce the sickness absenteeism. In their opinion the sickness absenteeism is still remarkably higher than for other comparable companies in the industry of interactive multimedia. This raises questions to the management of the organisation.

Therefore, the management of the organisation would like to take action to reduce this sickness absenteeism. Actions should be central which the organisation can take to reduce the sickness absenteeism. That is the reason that the focus is on actions at organisational level. A prerequisite is that the way to reduce the sickness absenteeism fits with the existing way of working in the organisation. They suspect that the high sickness absenteeism may have to do with the fact that it is too easy for employees to report sick. Besides this, they assume that the high sickness absenteeism is due to a high rate of 'long-term sick employees'. However, they are not really sure of this.

Therefore, the focus of this research is to investigate what may cause this high rate of sickness absenteeism and how it can be reduced. That is why, given this information, the next main question is central in this research:

"How can the sickness absenteeism rate at the organisation be reduced with measures at organisational level which are in line with the existing way of working?"

To start this research, first a short description of the background of the organisation and its sickness absenteeism policy is given. Then, before looking at the practice of the organisation, a theoretical study will be done. In this theoretical study the following three sub-questions will be discussed:

a. *What is sickness absenteeism?*
b. *What are causes for sickness absenteeism?*
c. *What organisational factors can reduce the sickness absenteeism in an organisation?*

These three theoretical questions will be answered using recent and relevant literature. In this way a good basis is formed for the remainder of this study to answer the main research question. Following this theoretical framework, the used method in this study is described. Also the results will be presented. Then the conclusion gives an answer on the main research question and gives some recommendations for the application in practice. Finally, in the reflection some recommendations for further research are given.

1.3 Background of the organisation

The organisation in this research is an organisation with around eighty employees. The organisation is an interactive multimedia company with its expertise in the field of web portals, sites and shops, digital business development, hosting acceleration and mobile devices. The employees are mainly classified into four departments within the organisation. Firstly, the '*project organisation',* where project managers, designers, interaction designers, web developers and programmers work. Secondly, *'the service and maintenance department'* with the webmasters and application maintainers. Thirdly, '*the hosting and system administration department',* where the system engineers and system administrators work. And fourthly, '*the project bureau',* with the administrative and household staff. Next to this, there are the directors and professionals in training (Expertises of the organisation, 2013).

It is the aim of the organisation to keep the organisation as flat as possible, so the managerial lines are short and clear. The goal is that every employee in the organisation knows what is going on within the organisation and that every employee is responsible for his own work. It is stated that this will keep all employees alert and motivated. Much of the work is done within teams with people from various disciplines. So employees must be able to work together, but they also have a lot of independence in their work. Besides this, the organisation consists mainly of highly educated professionals. The organisation is also characterised by the fact that there are far more men than women and that the employees are quite young. Most of them work full-time. The organisation is not only young because of the age of the employees, but also because the organisation itself now exists for only twenty years (Expertises of the organisation, 2013).

Concerning the sickness absenteeism in the organisation, the organisation makes use of various measures to monitor and reduce the sickness absenteeism. The organisation has extensive employment conditions regulations. In these regulations various aspects are described which are beneficial for the health of the employees. the organisation states to have an active sickness absenteeism policy which focuses on the maintaining and enforcement of the safety, health and welfare of their employees. The aim is to prevent and reduce the sickness absenteeism in the organisation. The managers and employees are jointly responsible for the application and implementation of the sickness absenteeism policy and the actual work situation. This policy is accessible to all employees and is published on the intranet. Every employee is obliged to know and to comply with this policy. This sickness absenteeism policy consists of several elements, for example agreements concerning the working times, the procedure by reporting sick and the involvement of employees (Arbeidsvoorwaarden, 2013; Bedrijfsregelement, 2013; Intranet of the organisation, 2013).

However, despite these measures to monitor and reduce the sickness absenteeism the absenteeism rate in the organisation is perceived as higher than the national average of 3.5% in companies of similar size (CBS, 2013). In this research shall be investigated how this sickness absenteeism can be reduced.

1.4 Scientific and practical relevance

This research is of scientific relevance because it provides insight into how sickness absenteeism can be reduced in an organisation. It provides insight into what absenteeism is, what may cause sickness absenteeism and what factors on the organisational level may reduce sickness absenteeism. This research contributes to existing theories and studies on reducing absenteeism in organisations. In practical terms, this research gives the organisation insight into which factors they can improve in the organisation to try to reduce the sickness absenteeism. For the organisation the advices are directly applicable to take actions in their attempt to reduce the sickness absenteeism in the organisation and to improve their sickness absenteeism rate.

2. Theoretical Framework

In this theoretical framework first the sub-question is examined what sickness absenteeism is (2.1). Then the second sub-question will be investigated what causes for sickness absenteeism are (2.2). Finally the third sub-question will be investigated what organisational factors can reduce the sickness absenteeism in an organisation (2.3). At the end the conclusions of this theoretical framework will be presented (2.4).

2.1 What is sickness absenteeism?

Concerning this first sub-questions it will be investigated how sickness absenteeism can be defined and which types of sickness absenteeism there are (2.1.1). Also it will be examined which key concepts are important (2.1.2) and which categories of sickness absenteeism can be distinguished (2.1.3). This will lead to an extensive description of the concept of 'sickness absenteeism', which forms the basis for the remaining of this study.

2.1.1 Definition and different types of sickness absenteeism

To start with this study on sickness absenteeism, it is first important to define the term '*sickness absenteeism*'. Sickness absenteeism can be defined as '*the incapacity for the performance of work because of sickness or disability*' (Bastiaanssen, Kuis, Burdorf & Van der Velde, 2008; Geurts & Smulders, 2006). This applies in particular to a temporary incapacity to perform the work. Temporary incapacity can be divided into short-term and long-term absence. If an employee is sick for no more than seven days, this is called short-term sickness absenteeism. In addition, the long-term sickness absenteeism is the absence because of sickness or disability in a period of more than seven days (Arboportaal, 2013). Here 'medium-term sickness absenteeism' is included, because usually absenteeism is divided merely into short-term and long-term absenteeism. Geurts and Smulders (2006) add to this that when a temporary incapacity to work due to sickness or disability turns into permanent disability, this is no longer called sickness absenteeism. This short-term and long-term sickness absenteeism is related to the absenteeism parameter: '*the average duration of absence*' (Bakhuys Roozeboom, Gouw, Hooftman, Houtman & Klein Hesselink, 2008; Bastiaanssen et al., 2008). The short-term and long-term absenteeism can occur often or just a few times, here it is about the absenteeism parameter concerning the frequency: '*the reporting frequency*' (Bakhuys Roozeboom et al., 2008; Bastiaanssen et al., 2008).

To give a more detailed impression of these absenteeism parameters, here are some examples. If the reporting frequency is examined, it appears that employees most often are absent because of flu or a cold. Also, employees often report sick because of back pain; complaints to the abdomen, stomach or intestines; complaints of hip, legs and knees; complaints to heart and circulatory system and complaints of the neck, shoulders, arms, wrists and hands (Bakhuys Roozeboom et al., 2008; Bastiaanssen et al., 2008). In contrast, when the average duration of absence is considered, there are different reasons for sickness absenteeism. Absenteeism due to flu or a cold for example, have a relatively short average duration of absence of three days. Health complaints with a longer average duration of absence are psychological symptoms (60 days), complaints to heart and circulatory system (60 days) and complaints of the neck, shoulders, arms, wrists and hands (29 days) (Bakhuys Roozeboom et al., 2008; Bastiaanssen et al., 2008).

In total, absence due to psychological complaints, overstrain and burnout have the largest part in the total number of days of sickness absence in the Netherlands. Psychological symptoms include a sad feeling, irritability, tiredness and a lack of job satisfaction. These symptoms may indicate an occupational depression, overstrain and burnout (Arboportaal, 2013). The reason that this part is so big is not because employees frequently report sick as a

cause of this type of health complaints. This is because the number of days lost per sickness absenteeism report is high. The absence by flu or cold also has a large share in the total number of days of absence. In contrast, that is caused by the high absenteeism frequency for this type of health problem (Bakhuys Roozeboom et al., 2008; Bastiaanssen et al., 2008).

The reporting frequency and the duration of absence may thus help explain the type of absence by a given absenteeism rate. Frequent short-term sickness absenteeism, such as a cold or flu, is characterised by a high reporting rate and a short average duration of absence. A low reporting rate and a long average duration of absence are in contrast an indication of more serious health problems by sick employees (Geurts & Smulders, 2006). As can be noticed above, in the nature of the health complaints a distinction can be made between physical and mental health complaints. A previous mentioned example of a physical health complaint is back pain or flu, while burnout is a mental health complaint. In Figure 1 the relation between this nature of the health complaints and the duration and the frequency of the sickness absenteeism is displayed. The figure shows which eight different types of sickness absenteeism can arise from these factors.

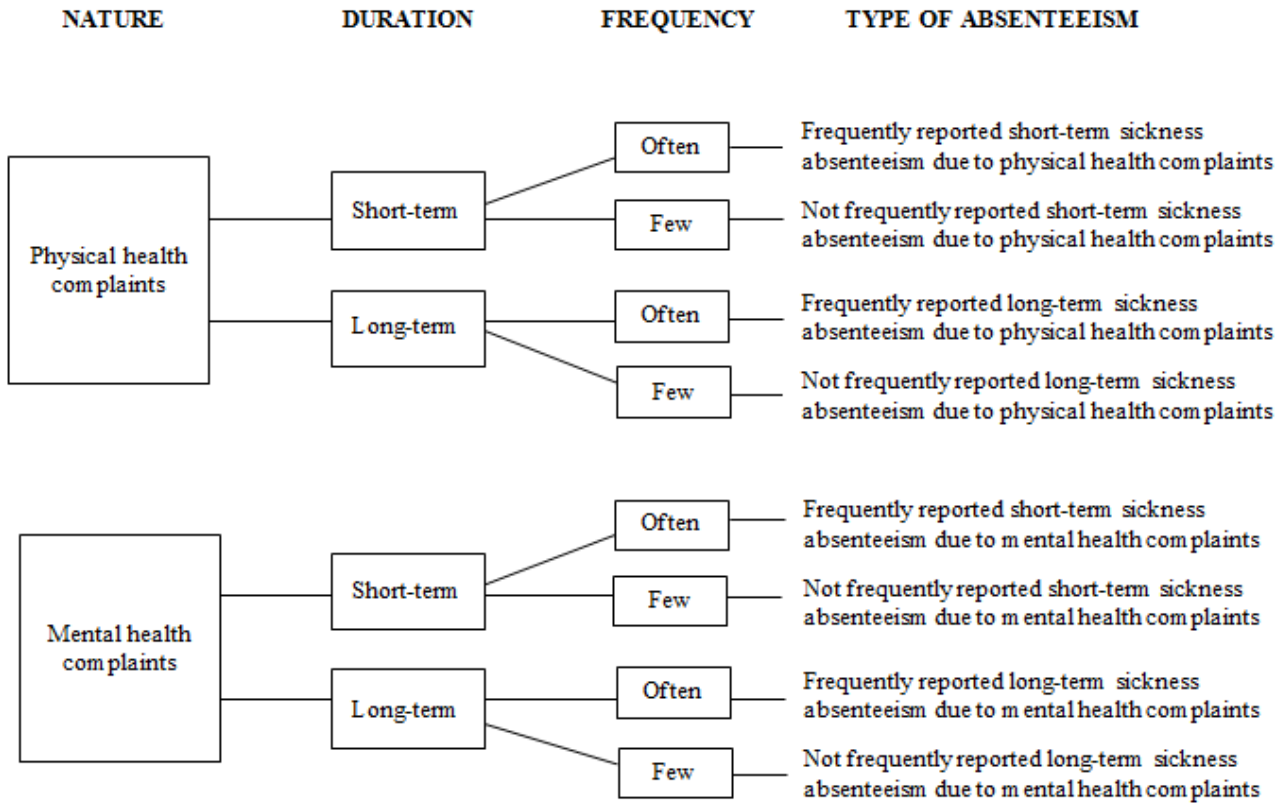

Figure 1. Model of eight different types of sickness absenteeism.

So the model in Figure 1 can be used to show in which way different health complaints lead to different types of sickness absenteeism. So in the remainder of this study the model of Figure 1 will be used to examine which factors can cause these physical and mental health complaints which lead to these different forms of sickness absenteeism. However, first it will be explained why sometimes these physical and mental health complaints lead to sickness absenteeism and why sometimes they do not.

2.1.2 Absenteeism threshold, absenteeism opportunity and absenteeism need

The described model in Figure 1 seems to show that only health complaints lead to sickness absenteeism. However, here a refinement is necessary because not all employees will report

sick when they have the same health complaints. By the same health complaints one employee will decide to report sick while another employee still goes to work. This has to do with the absenteeism threshold, the absenteeism opportunity and the absenteeism need. So here it is about the subjectivity of the concept 'sickness absenteeism', because it differs among employees when they report sick.

The *absenteeism threshold* explains why, with the same health complaints, one employee goes to work and another does not (Van den Berg, 2010). The absenteeism threshold therefore involves the step which an individual employee should take to decide to report sick. Health problems lead only to a sick report when the absenteeism threshold is exceeded, because an employee must decide whether there is sufficient reason to report sick (Geurts & Smulders, 2006). The absenteeism threshold is determined by the absenteeism need and the absenteeism opportunity. To reduce absenteeism, the absenteeism need should be reduced and the absenteeism opportunity should be limited, so the absenteeism threshold becomes higher and employees will be less likely to report sick (Van den Berg, 2010). So the absenteeism threshold cannot be seen as a cause of sickness absenteeism, but it can be seen as a reinforcing factor for employees to decide to report sick.

The absenteeism threshold arises from the absenteeism opportunity and the absenteeism need. The *absenteeism opportunity* is whether it is relatively easy for employees to report sick. The absenteeism opportunity is for example large when employees are not faced with the financial consequences of their absence, when it is not checked when they are absent and when they do not know that colleagues have to take over their work when they are sick. Formal regulations concerning sickness absenteeism, the control procedures and the extent to which one is missed during sickness is important. Also when they do not have to report sick at their team managers, but for example at the reception or the human resources department, this ensures that employees can report sick more easily. Here the absenteeism opportunity is large, what ensures a lower absenteeism threshold and a higher tendency to report sick (Bastiaanssen et al., 2008; Jehoel-Gijsbers, 2007). The absenteeism opportunity is hereby also strongly related to the absenteeism culture in an organisation (Geurts & Smulders, 2006). This is how an organisation deals with absenteeism and how employees view sickness absenteeism. This determines how free the worker feels to report sick easily. The absenteeism opportunity also depends on what Johansson and Lundberg (2004) describe as 'flexibility to be sick'. They argue that the freedom to may adjust work on health and the requirement to be present are decisive for the decision to report sick.

Next to this, the *absenteeism need* has to do with how gladly the employee wants to report sick. Job satisfaction, the involvement in the organisation and the desire to work affect how strong the need for the employee is to report sick (Geurts & Smulders, 2006; Bastiaanssen et al., 2008). When the absenteeism need is high, the absenteeism threshold is lower and this will cause that a worker is more likely to report sick. Van den Berg (2010) describes the need for an employee to report sick is greater as the number of negative factors at work is high. When these are removed, the need to report sick is lower. These factors are related to the work content, working conditions and working relations. When an employee is less satisfied with these factors, then the need to report sick will increase.

So for the sickness absenteeism in an organisation a low absenteeism threshold ensures that an employee is more likely to report sick. When both the absenteeism opportunity and the absenteeism need are high, this will decrease the absenteeism threshold for an employee due to which he is more likely to report sick. This will not cause that the sickness absenteeism in the organisation is higher, but it will reinforce that employees are more likely to report sick. In Figure 2, the relationship between the absenteeism opportunity, absenteeism need and the absenteeism threshold is displayed schematically.

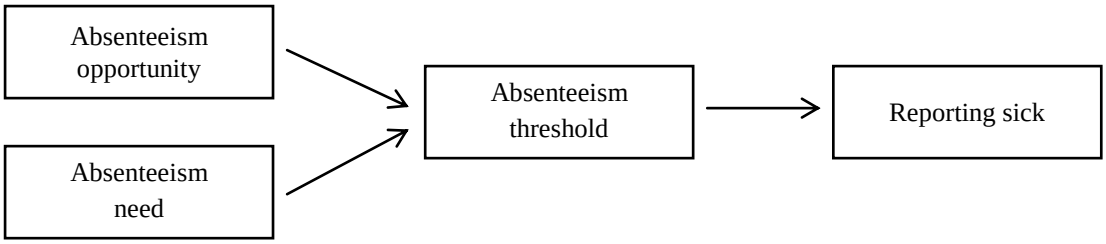

Figure 2. Absenteeism opportunity, absenteeism need and absenteeism threshold in relation to the reporting sick of employees.

2.1.3 White, grey and black sickness absenteeism

As described before, a large absenteeism opportunity and absenteeism need may cause a lower absenteeism threshold, which may ensure that an employee reports sick more easily. The way an employee makes the decision to report sick can be classified into three categories of sickness absenteeism. Here it is about the distinction of Philipsen (1969) between three categories of sickness absenteeism based on sickness as a form of behaviour, which is often used in absenteeism research in the Netherlands (Jehoel-Gijsbers, 2007). This distinction is graphically displayed in Figure 3.

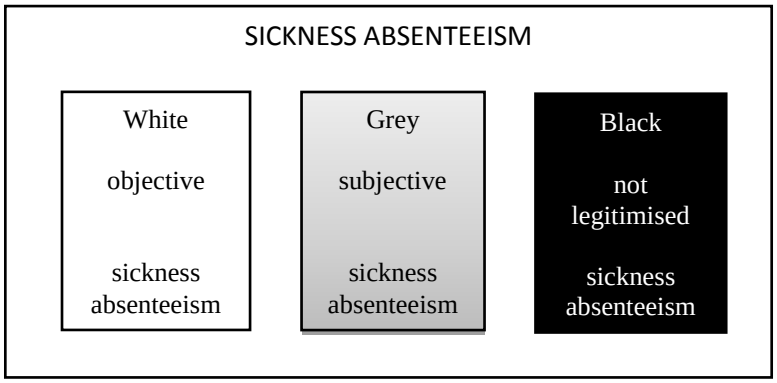

Figure 3. White, grey and black sickness absenteeism.

First '*white sickness absenteeism*' is when the employee reports sick on the basis of demonstrable medical health complaints which lead directly to the sick report (Geurts & Smulders, 2006; Hopstaken, 1994). Here is the necessity to report sick because of the health complaints. The employee has to do with such a disease or disability that he has to report sick (Jehoel-Gijsbers, 2007). The absenteeism is inevitable and there is no other option than to report sick (Bastiaanssen et al., 2008). An example is when an employee breaks his leg and therefore no longer can perform his physically challenging work.

Secondly, '*grey sickness absenteeism*' may occur. This type of absenteeism is most common (Geurts & Smulders, 2006). Here the employees will report sick when they feel sick and when they experience subjective health complaints. Here, an employee will have a choice, despite the complaints, to go to his work or to stay at home (Bastiaanssen et al., 2008). There may be a necessity to report sick, but in this case the absenteeism need does exist. It is not clear whether there are demonstrable health problems which make it impossible for an employee to go to work, but the personal experience of the health complaints lead to the decision to report sick (Hopstaken, 1994). By 'grey sickness absenteeism' the health complaints are difficult to determine objectively and there can hardly be demonstrated that the employee is unable to work. So the employee has a degree of freedom to decide to report sick

or not (Geurst & Smulders, 2006). The employee considers he is unable to work (Jehoel-Gijsbers, 2007). An example is when an employee reports sick because 'he did not feel fit'.

Thirdly, '*black sickness absenteeism*' is when the employee is not legitimised absent. The employee is and feels not sick at all (Geurts & Smulders, 2006) and there are no health problems or complaints (Hopstaken, 1994). By 'black sickness absenteeism' all necessity to report sick is absent (Hopstaken, 1994). Jehoel-Gijsbers (2007) describes that there are no health problems and the employee is simply able to work, but decides to report sick. An example is when a healthy employee reports 'sick' during school holidays to take care of the kids. Research shows that the commitment to the organisation and the job satisfaction are strongly related to the duration of voluntary 'black sickness absenteeism', but not with involuntary 'white sickness absenteeism' (Sagie, 1998). Schaufeli, Bakker and Van Rhenen (2009) argue that voluntary absenteeism also has to do with the motivation of employees. A demotivated employee will report sick more easily.

When this distinction between white, grey and black sickness absenteeism is related with the previously described model of absenteeism opportunity, absenteeism need and the absenteeism threshold (Figure 2), then a new model arises to describe why an employee may decide to report sick or not. This new model is shown in Figure 4. Following the distinction of Philipsen (1969), the '*necessity to report sick'* can be added to the model, on which the distinction between white, grey and black sickness absenteeism is based. By 'white sickness absenteeism' there is a pure necessity to report sick. The employee does not have to decide whether or not to go to work, because the health complaint directly ensures that performing the work is not possible and that therefore the employee has to report sick. 'White sickness absenteeism' leads therefore 'directly' to absenteeism, without taking the absenteeism threshold into consideration. As described, for 'grey sickness absenteeism' the personal absenteeism need is present, but it is difficult to prove whether the objective necessity to report sick is present. The individual decision by the employee whether or not to report sick, the absenteeism threshold, is certainly of great importance. Here the absenteeism opportunity also affects the final decision to report sick. Finally, for 'black sickness absenteeism' the necessity to report sick is entirely absent. The decision to report sick is entirely based on the absenteeism need of the employee and can be further stimulated by the absenteeism opportunity. Therefore, by 'black sickness absenteeism' the absenteeism threshold plays an important role. Figure 4 represents this inclusion of the distinction of Philipsen (1969) into the previous model graphically.

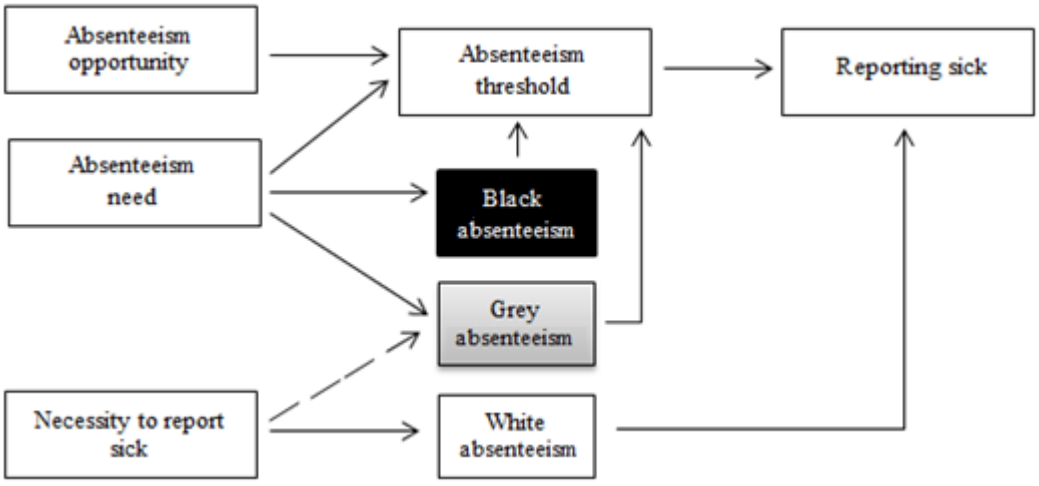

Figure 4. Factors which reinforce the decision to report sick, including the distinction of Philipsen (1969).

Figure 4 provides a theoretical framework to understand why and when employees report sick. These factors do not cause the health complaints which lead to sickness absenteeism, but these factors may reinforce the decision of the employee to report sick. Therefore, it was worthwhile to mention these factors to get a better understanding of the concept sickness absenteeism. However, because these factors do not directly explain how the health complaints arise which lead to sickness absenteeism, attention will be paid to the causes for sickness absenteeism in the following chapter.

2.2 What are causes for sickness absenteeism?

In the previous chapter it was described what sickness absenteeism is. The second sub-question is: what are causes for sickness absenteeism? This chapter describes the four best known models in the Netherlands about the causes of sickness absenteeism. These include the '*medical model*' (medisch model) (2.2.1), the *decision model* (beslissingsmodel) (2.2.2), the *load - load capacity model* (belasting-belastbaarheid model) (2.2.3) and the *job demands and -resources model (2.2.4)*. These models are used to explain sickness absenteeism and to tackle absenteeism in an organisation (Bastiaanssen et al., 2008). There will be investigated how these models can be linked to the previously constructed 'descriptive model of sickness absenteeism' (Figure 4). In this way the model can be further developed into a model which describes sickness absenteeism and takes the causes for sickness absenteeism into account. An overview of the main features of the four models is shown schematically in Table 1.

Table 1

Characteristics of the Four Sickness Absenteeism Models

Model	Starting Point	Focus	Absenteeism Control
Medical model	Sick is sick.	Limitations of the employee.	Improving the health of workers through health and lifestyle programs.
Decision model	Sickness absenteeism is a choice.	What the employee still can do.	Influencing the absenteeism choice. This involves factors such as the social environment and the motivation to be present.
Load - load capacity model *(individual level)*	There must be a balance between the work load and the work load capacity of the employee.	Working conditions.	Determination of the work load and the load capacity of the employee and then coupling the employability of the employee to that.
Job demands and -resources model *(organisational level)*	There must be a balance between work stressors and energy in the work.	Engagement of the employee.	Limiting work stressors and stimulating energy resources to increase the motivation of the employee.

2.2.1 The medical model

Traditionally, in the Netherlands the medical model was used to explain sickness absenteeism. However, over the years this model has more and more moved to the background. The medical model is mainly focused on the limitations of sick employees. It starts from the simple reasoning that health complaints lead to sickness absenteeism. A typical statement is 'sick is sick'. The doctor may determine whether the employee is able to work or not. Therefore, controlling the absenteeism is particularly focused on improving the health of employees and on reducing health complaints, based on the idea that people with fewer health complaints are less likely to report sick. The reduction of sickness absenteeism in this model is mainly aimed at creating health programs related to the lifestyles of employees. However, it

appears that in practice it is difficult to find a link between these measures and the rate of sickness absenteeism (Diehl, Koenders & Stoffelsen, 2007).

Because this model is based on the simple reasoning that health complaints lead to sickness absenteeism, the 'grey sickness absenteeism' as well as the 'black sickness absenteeism' is excluded in this model. Also, the absenteeism opportunity, the absenteeism need and the absenteeism threshold are disregarded. Because only health complaints in this model lead to sickness absenteeism, this model only takes the necessity to report sick into account. So only 'white sickness absenteeism' leads to absenteeism. This model is therefore comparable to the model in Figure 1 which shows that only physical and mental health complaints lead directly to sickness absenteeism.

2.2.2 The decision model

The second model is the decision model. This model of Philipsen (1969) focuses on the degree of freedom of the employee to decide to report sick or not (Philipsen, 1969). 'Sickness absenteeism is a choice', is a typical statement of this model. This is also the core of new legislation in the Netherlands; focusing on what an employee still can do, rather than what cannot be done anymore. It is assumed that sickness doesn't have to be a reason for an employee to report sick. In order to report sick, the employee must make a choice. This choice can be characterised as behaviour and thus may be influenced by their managers and colleagues (Diehl et al., 2007).

Thus in this model the absenteeism threshold of employees is central. The model assumes that workers with the same health complaints can make different decisions to be absent or to go to work. How the decision is, depends on the height of the personal absenteeism threshold (Jehoel-Gijsbers, 2010). The default threshold can vary greatly from one individual to another. If someone has a high absenteeism threshold, he is not inclined to report sick. The employee will try to work as long as possible, despite the presence of the health complaints. This is in contrast to those employees with a low absenteeism threshold, who report sick with a slight health complaint. Depending on the absenteeism opportunity, which can both inhibit and stimulate the sickness absenteeism, and the absenteeism need, how gladly the employee 'wants' to be sick, the point at which one decides to report sick given the same health complaints will differ (Hopstaken, 1994). When an employee has absolutely no freedom to make decisions, only the 'choice' for 'white sickness absenteeism' is possible. When there is freedom to make decisions for an employee, also 'grey' or 'black' absenteeism is possible (Hopstaken, 1994).

However, the decision model adds another aspect. It describes that the decision to report sick, next to the nature of the complaint (the necessity to report sick), is largely determined by other factors. These include for example the social environment, the job satisfaction and the motivation to be present. This explains why with the same health complaint one person hardly or never reports sick, while another stays at home for a long time because of the same health complaints. And why the sickness absenteeism rate in one organisation can be many times higher than in another organisation, while the health of employees is approximately equal. Understanding in how the choice whether or not to report sick is made is necessary for influencing the absenteeism rate. The focus in this model is on those factors which may affect the choice to report sick (Diehl et al., 2007). These are factors of various kinds, both motivational and situational factors, which may influence the decision to report sick.

These motivational and situational factors may influence the absenteeism opportunity and absenteeism need. For example, low job satisfaction influences the absenteeism need. Similarly, social norms about sickness absenteeism or the sickness absenteeism culture may influence the absenteeism opportunity. In this way these factors influence, via the absenteeism

opportunity and the absenteeism need, the absenteeism threshold, so the choice whether or not to report sick. When these factors are positive, for example sufficient motivation to work, this will not lead to the decision to be absent. These motivational and situational factors can be added to the factors which may reinforce the decision to report sick of Figure 4. This leads to the model in Figure 5.

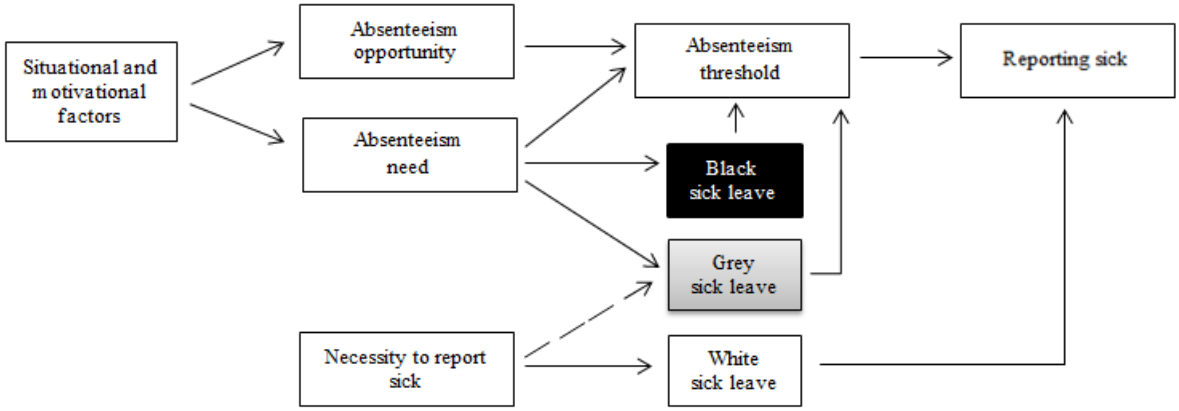

Figure 5. Factors which reinforce the decision to report sick, combined with the decision model.

2.2.3 The load - load capacity model

Thirdly, there is the load - load capacity model. This model of Van Dijk, Van Dormolen, Kompier and Meijman (1990) assumes that sickness absenteeism occurs when there is a discrepancy between the demands of the work, the work load, and the ability of the employee to meet those demands, the individual load capacity. According to Tweehuysen (2007), the work load is about delivering performances that must comply with the prescribed standards in the task in terms of quality and quantity, within the available time and given working conditions. It involves both physical and psychological work load. Work load may arise from the work content, working circumstances, work relations and the employment conditions. This model describes the control capabilities of the employee, which involves the ability of employees to change the stressful work factors by their own (Bastiaanssen et al., 2008).

Next to this, the load capacity is the ability of the employee to deal with the work load, the tasks that the employee is imposed on and the physical environment in which these tasks should be performed (Van Dijk et al., 1990; Hopstaken, 1994; Diehl et al., 2007; Geurts & Smulders, 2006). Load capacity is also often seen as the processing power of the employee, which is determined by education, experience and personal qualities of the employee (Tweehuysen, 2007). The motivation of the employee is also important (Van Bekkum, 2007). Geurts and Smulders (2006) describe that the capacity of an employee can be determined by personality, the current state of health and personal circumstances. So the capacity load consists of several aspects which must ensure that an employee can handle the work load.

The ratio between the load capacity and the work load determines the effort that needs to be done in carrying out the work. A greater load than the processing power, and thereby insufficient control options for the employee, may cause stress or fatigue concerns. If the employee is no longer able to deal with this work load, this can lead to consequences as sickness absenteeism (Van Dijk et al., 1990; Hopstaken, 1994; Bastiaanssen et al., 2008; Tweehuysen, 2007). Even when the work load and the individual load capacity are out of balance for a longer period without sufficient recovery time, this can cause health complaints which may lead to sickness absenteeism (Van Dijk et al., 1990; Hopstaken, 1994, Diehl et al., 2007; Geurts & Smulders, 2006). It may give the employee a feeling of 'overstrain'. The work load and load capacity can be related to psychological, physical and emotional areas (Hopstaken, 1994). In this way the relationship between the work load and the load capacity

of the employee thus determines the necessity to report sick, because of it may result in serious health concerns which may lead to sickness absenteeism.

This model also assumes that on the basis of the sickness or complaints the load capacity of the employee can be determined. In addition, by determining the work load it can be investigated whether and to what extent an employee is able to carry out his functions or any other activities. This model offers the possibility to search for work that the sick employee can do, despite of the health complaints. This model does not take into account various subjective personal and contextual factors that also may affect the sickness absenteeism. In this model, the emphasis is on the working conditions of the employee (Diehl et al., 2007) and the quality of the work. The working conditions are for example the management style, organisational structure and the reward systems. These exert influence on the motivation of an employee and therefore on the absenteeism need of the employee. Dissatisfaction with the imbalance between the work load, such as working conditions, and the load capacity, such as motivation, is detrimental to the quality of work (Hopstaken, 1994).

When this model is combined with the previous model with factors which may reinforce the decision to report sick, it can be said that the relationship between the work load and load capacity affects the absenteeism need and the necessity to report sick. As described, an excessive work load may cause serious health problems for employees. In addition, it may cause for example reduced motivation, what may stimulate the absenteeism need. In Figure 6, the addition of this model to the descriptive model of sickness absenteeism is displayed.

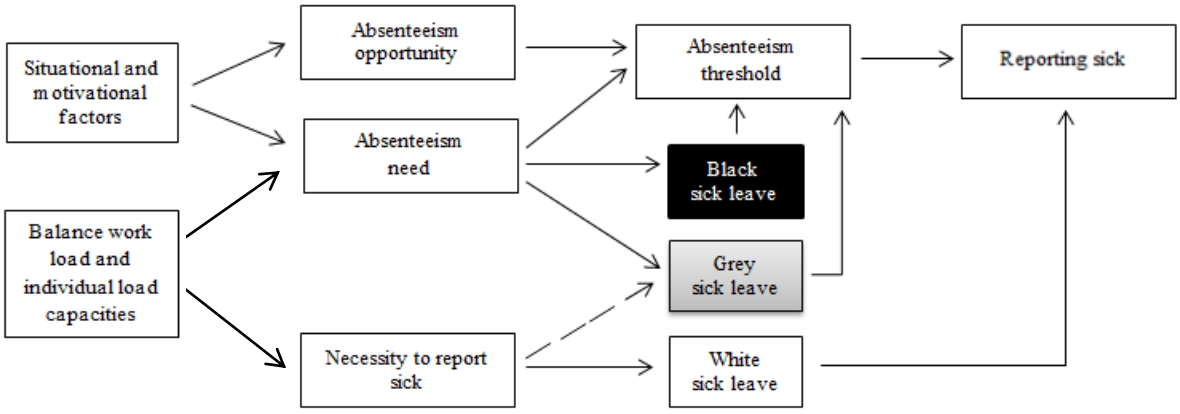

Figure 6. Factors which reinforce the decision to report sick, combined with the decision model and the load - load capacity model.

2.2.4 The job demands and -resources model

Finally, there is the job demands and -resources model. This model of Schaufeli and Bakker (2004) is an expansion of the job demand-control model of Karasek (1979). The job demands and -resources model shows strong similarities with the previously described load - load capacity model. At the individual level, the model is also based on the balance between the work load and the individual load capacity. At the organisational level, the model is based on work-related stressors and energy resources, which should also be balanced. These are called the job demands and the job resources.

Examples of job demands are complicated tasks, unclear task and role expectations, monotonous work, poor physical conditions, poor work relations, a high work pace, time constraints, lack of skills, lack of social support, cooperation problems, conflicts, inappropriate social behaviour, future uncertainty, no development opportunities, demanding or difficult customers and having too little impact on the working and rest times

(Tweehuysen, 2007). So job demands are work stressors that require some effort of the employee. This takes energy of the employee.

In addition, in this model the job resources are about the energy resources for employees. This include for example the social support from colleagues and managers, participation in decision-making, control options, feedback on their own performance and a good team atmosphere (Schaufeli & Bakker, 2004). Also development opportunities, job security, clear tasks and roles, inspiring physical environment and variation in the use of skills are potential energy resources (Karasek, 1979). Energy resources can motivate the employees and may lead to a sort of 'enthusiasm' or 'work engagement', which is characterised by vitality (physical component), absorption (cognitive component) and commitment (emotional component) (Schaufeli, Bakker & Jonge, 2003).

The model assumes that a good balance between these job demands and job resources ensures that an employee will become an 'enthusiastic employee' (Bastiaanssen et al., 2008) and that this allows optimal work performances (Tweehuysen, 2007). In contrast, a lack of balance between job demands and job resources enables the emergence of work load. When high job demands exist too long without any recovery options, these job demands can develop into work stressors what may create work load. Work stress is the response to work load and occurs when an employee is for a longer time not able to meet the requirements of the work environment requirements or feel that he is not able to deal with it, because the requirements of the work are too high or too much (Schaufeli & Bakker, 2007; Tweehuysen, 2007). Then the employee may respond with stress reactions such as fatigue, RSI (Repetitive Strain Injury) or depression. In this context work load can be seen as a risk to the health of employees (Klein Hesselink, Van der Klink & Vaas, 2001). Sustained work load may affect the energy reserves of the employee, which can lead to health problems and absenteeism (Tweehuysen, 2007). When an employee no longer has energy reserves, then this is called overstrain. Things that produce stress are then larger than that this stress can be processed. When there is too much stress at work for a longer time, this can lead to a burnout (Arboportaal, 2013).

Sustained stress can also lead to the decrease of job satisfaction and motivation (Leiter, 1993; Baker & Demerouti, 2007). This is because stress can ensure that there is for example no time for collegial reviews or discussions, the exchange of work experiences, solving work problems and the expressing of emotions. This may cause that more and more energy resources structurally are missing, which decreases the motivation (Tweehuysen, 2007).

Burnout, caused by work stress, involves both the depletion of energy reserves (physical load) as the mental exhaustion in the form of reduced motivation, less involvement and a greater degree of resistance to the work (mental load). This reduced motivation is basically a protection against the complete exhaustion of the last energy reserves. So exhaustion by physical load and mental exhaustion are two important causes of work stress (Schaufeli & Bakker, 2007).

This job demands and -resources model is displayed in Figure 7. This figure shows how an imbalance between job demands and job resources may cause health complaints and reduced motivation, which can lead to sickness absenteeism.

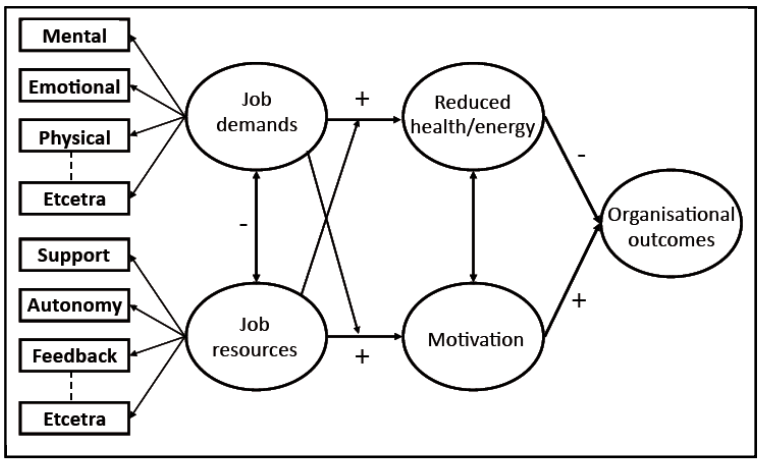

Figure 7. The job demands and -resources model (Schaufeli & Bakker, 2004).

When this model is linked to the previous model in Figure 6 with factors which reinforce the decision to report sick, then there exist an overlap between the job demands and -resources model and the decision model and the load - load capacity model. This is illustrated in Figure 8. For the decision model, situational and motivational factors were added to the descriptive model, which affect the absenteeism opportunity and the absenteeism need. These motivational factors can be classified in the job demands and -resources model. A motivational factor, such as job satisfaction, can be seen as a job resource. However, the situational factors, such as the absenteeism culture and social norms in an organisation, cannot be classified as job demands. They are about the social norms of reporting sick or the absenteeism culture. This cannot really be seen as work stressor, but is related to the absenteeism opportunity. Therefore, the choice is made to classify these situational factors under the absenteeism opportunity, because they correspond. In this way, the job demands and -resources model and the decision model can be merged.

Furthermore, as previously described, the job demands and -resources model has also strong similarities with the previously described load - load capacity model. In both models it is about the load and load capacity of the employee. The load - load capacity model emphasises more on the individual level, while the job demands and -resources model also takes the work stressors and energy resources at the organisational level into account. The work load, such as the work content, working circumstances, labour relations and labour conditions may be grouped together under the job demands. In addition, the individual load, such as the work motivation, can be classified under the job resources. This is illustrated in Figure 8.

To develop an overarching model of these three models, the choice is made to categorise all described factors among the job demands and the job resources. This is illustrated in Figure 8. These job demands and job resources affect the absenteeism need and the necessity to report sick, which together with the absenteeism opportunity, affect the sickness absenteeism in an organisation. This leads to the integrated model of factors which may reinforce the decision to report sick in Figure 8. This figure can be seen as a summarising model which incorporates the question what sickness absenteeism is and what causes sickness absenteeism. This model forms the basis for the remainder of the theoretical part of this study. Here the focus will be on the balance of job demands and job resources which may lead to the necessity to report sick, in the form of physical and mental health complaints. Besides that, the focus will be on the absenteeism opportunity which may reinforce the decision to report sick. For both it will be investigated what measures may reduce the sickness absenteeism in the organisation.

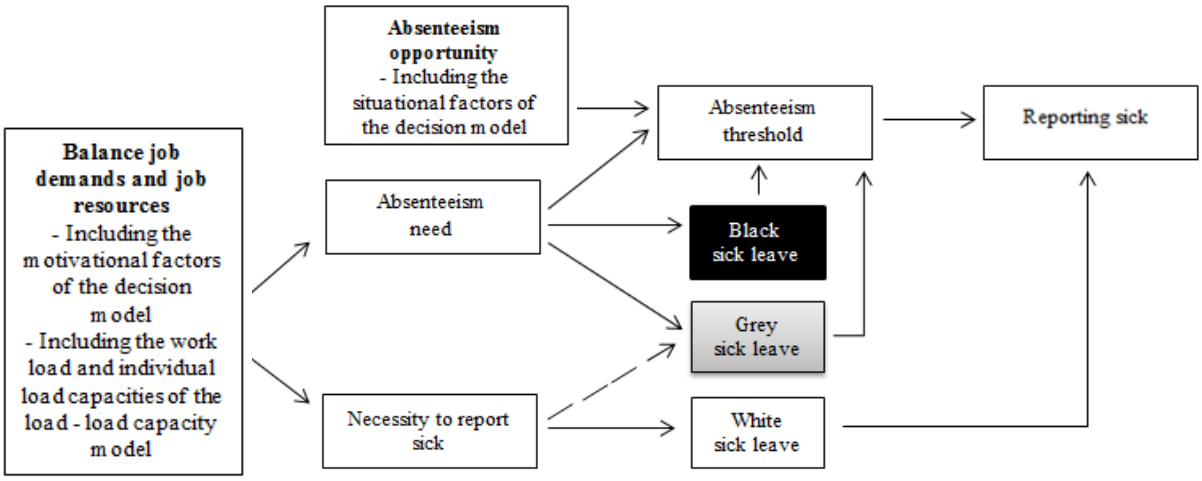

Figure 8. Integrated model of factors which reinforce the decision to report sick.

2.3 What organisational factors can reduce the sickness absenteeism in an organisation?

This chapter provides a deepening on the above developed 'integrated model of factors which reinforce the decision to report sick' (Figure 8). The focus is on factors that can be influenced by an organisation to reduce the sickness absenteeism. This is the third sub-question in this literature study. In Figure 8 it is shown that in particular five core components affect the decision to report sick. These are the balance between the job demands and job resources, the absenteeism opportunity, the absenteeism need, the necessity to report sick and the absenteeism threshold. The emphasis in this chapter is on the balance between job demands and job resources and on the absenteeism opportunity, because they are at the 'beginning' of the model from which other components arise. Various factors on organisational level can be influenced 'to optimise' these two 'starting components'. Here the factors concerning the job demands and job resources are taken together and are not discussed as 'job demand' and 'job resource' separately. Just because the extent to which the factors are present determine whether it is a job demand or a job resource. For example, the presence of sufficient control for the employee in the work can be a job resource, while the absence of enough control options in the work can be a job demand. In addition, only factors on an organisational level are discussed, because these factors can be influenced by the organisation to reduce the sickness absenteeism.

Thus the found factors in the literature are categorised according to job demands and job resources, and the absenteeism opportunity. These factors, which may cause that employees are less likely to report sick, are central in this chapter. At the end of this chapter an overview will be given of the found restrictive factors in relation to the model of Figure 8. This will give a more detailed model with factors which may reduce the sickness absenteeism in an organisation (see Figure 9).

2.3.1 Job demands and job resources

As can be seen in the developed model (Figure 8), the job demands and job resources may cause the absenteeism need and the necessity to report sick. The job demands and resources can be distinguished into physical and environmental factors (2.3.1.1), psychological factors (2.3.1.2), psychosocial factors (2.3.1.3) and work characteristics (2.3.1.4). These job demands and job resources can be seen as factors which should be taken into account to form measures which can reduce the sickness absenteeism in an organisation. These factors are described below.

2.3.1.1 Physical and environmental factors

A series of physical and environmental factors can be classified as job demands which affect sickness absenteeism. Research by the Arbodienst shows that physical factors can be distinguished as a poor working posture, poor living habits and a poor work environment. The Arbodienst also mentions lifting and carrying, pushing and pulling and vibration and shocking as physical factors. However, these are for the organisation and the type of work in this study less applicable. These forms of physical load can lead to health problems and thus to sickness absenteeism (Arboportaal, 2013).

Poor working posture

A poor working posture can be distinguished into a static posture and a dynamic posture. Firstly, a static posture is that more than four seconds is worked in the same position. For example, this could be working with a computer in the same position. This type of work should therefore be interspersed as much as possible with breaks and other tasks. It is also good not to do computer work for more than six hours a day. Otherwise there may occur health problems on arms, neck, shoulders and eyes (Arboportaal 2013, Bakhuys Roozeboom et al., 2008; Burdorf, Van den Berg & Elders, 2008). There are some rules that can ensure that this type of complaints can be limited. Examples are that the computer monitor and keyboard are not attached to each other, adjustable furniture, a computer monitor of good quality, sufficient lighting and user friendly (pause) software (Arboportaal, 2013).

In addition, a dynamic posture can also be harmful. Hereby too often the same repetitive motion is made, what may cause that muscles and can become overloaded. This can also occur when employees work a lot with the computer. The risk of health problems increases when this dynamic posture goes together with a high work load and stress (Arboportaal, 2013; Bakhuys Roozeboom et al., 2008; Burdorf et al., 2008).

Poor living habits

Furthermore, too little exercise may cause that health problems occur (Burdorf et al., 2008). This may result in both physical and mental complaints. At the mental level sufficient exercise may have the effect that employees are more at ease at work, have a better self-image and suffer less from depression. This can reduce the sickness absenteeism. To encourage this, an organisation can for example encourage going to work on the bicycle and to take the stairs in the office instead of the elevator. Sufficient exercise often goes together with promoting a healthy lifestyle, for example by offering healthy meals in the canteen (Arboportaal, 2013). A study by Van Deursen and Koenders (2007) also shows that absenteeism can be reduced by optimising the lifestyles of employees. The study showed that employees with a healthy lifestyle had a lower absenteeism rate. Here attention was paid to personal vitality training, stress prevention training and weight reduction. They made use of lunch walking, climbing stairs and movement intensive business fitness.

Poor work environment

Finally, environmental factors also affect the sickness absenteeism in an organisation. This is about the space and the environment in which the employee works and the equipment being used. Examples of environmental factors are the air humidity, air velocity, temperature and sufficient light. These factors should form a good working climate, and should not lead to unnecessary health complaints (Arboportaal, 2013).

So a static posture, dynamic posture, poor lifestyle, lack of exercise and a poor work environment are physical and environmental factors which may cause a negative work load. This negative work load can lead to the necessity to report sick and may in this way result in

sickness absenteeism. An overview of these physical and environmental factors which should be taken into account to reduce the sickness absenteeism is shown in Table 2.

2.3.1.2 Psychological factors

The psychological factors are also part of the job demands and may cause a too excessive work load for employees, which can lead to sickness absenteeism. Psychological factors are too excessive cognitive demands on the work and the self-efficacy of the employee.

High cognitive demands

First of all, too high cognitive demands have a negative impact on the health of employees (Bakhuys, Roozeboom, Gouw, Hooftman, Houtman & Klein Hesselink, 2008). Bastiaanssen et al. (2008) argue that also a large Dutch study found that the intensity of the mental work load plays a role in the occurrence of sickness absenteeism. When the work needs a lot of attention, the employee has to think intensively and a good concentration is important, there is a high cognitive work load or a high mental work load. A too high cognitive load can lead to overload and health problems. However, a too low cognitive load, when employees experience their work as boring and have little challenge, can also result in demotivation (North, Syme, Feeney, Shipley & Marmot, 1996).

Poor self-efficacy

Secondly, the self-efficacy of an employee can affect the intention to report sick and the attitude towards absenteeism (Hopstaken, 1994). The attitude towards absenteeism is about the judgment of the employee about his health and how reporting sick is viewed. It also involves the belief in the own capacities, this is the self-efficacy, which affects the going back to work (Lagerveld, Blonk, Brenninkmeijer & Schaufeli, 2010). Self-efficacy refers to the assessment of their own possibilities to work when one has health complaints. This is particularly applicable to 'white and grey' sickness absenteeism. For 'black' sickness absenteeism the attitude towards sickness absenteeism and the subjective social norm play a more important role (Hopstaken, 1994).

Summarised, the height of the cognitive demands and the amount of self-efficacy is important in reducing the sickness absenteeism, because they influence the absenteeism need and the necessity to report sick. An overview of these psychological factors is shown in Table 2.

2.3.1.3 Psychosocial factors

There are also a number of psychosocial factors that affect the balance between the amount of work stress and the amount of energy which it yields. Psychosocial factors are related to the dealing with colleagues, customers and managers. Van Veldhoven, Broersen and Fortuin (1999) describe that psychosocial work load involves occupational risks which via a social or psychological way affect the health and wellbeing of employees. Several studies show that high psychosocial work load among employees can cause health problems (De Lange, 2005). Since an average worker spends lots of time at work, these psychosocial factors may certainly influence the absence of employees. Psychosocial factors can cause both mental and physical health complaints. The Arbodienst distinguishes as psychosocial factors: aggression and violence, discrimination, (sexual) intimidation and bullying. In addition, they state that a high work load can cause stress. These forms of unacceptable behaviour and work load may provide psychosocial work load, which can lead to sickness absenteeism (Arboportaal, 2013). Also poor social support may be a cause of sickness absenteeism.

Much unacceptable behaviour

First, aggression and violence are about both verbal and physical aggression. This may be caused by colleagues, managers and customers. If there is aggression this may result for the employee in anxiety, sleep disorders and psychosomatic complaints, which can lead to absenteeism (Arboportaal, 2013; Bakhuys Roozeboom et al., 2008). Jehoel-Gijsbers (2010) suggests that aggression not only has a negative impact on the health of employees, but also on the work performance.

A second psychosocial factor which the Arbodienst distinguishes is discrimination. This involves discrimination during the working process. Discrimination can also ensure that employees report sick more easily (Arboportaal, 2013).

Thirdly, (sexual) intimidation may ensure that employees report sick more easily. This may involve physical contact, but also verbal and non-verbal intimidation in the form of comments or gestures which are experienced as unpleasant or threatening. When an employee has to deal with intimidation, this may result in complaints such as sleeplessness, concentration problems, lack of initiative, anxiety, stress or fatigue. It can also result in physical symptoms such as headaches, abdominal pain, stomach problems, back-, neck- and shoulder -problems and eating disorders. Intimidation can also have the effect that the job satisfaction and commitment to the organisation decreases and that an employee will show uncertain behaviour (Arboportaal, 2013). Research by Jehoel-Gijsbers (2007) and Bakhuys Roozeboom et al. (2008) also shows that the intimidation by superiors and colleagues affect absenteeism. Jehoel-Gijsbers (2010) states that intimidation does not only have a negative impact on the health of employees, but also on the work performance.

Fourthly, bullying may also lead to sickness absenteeism (Bakhuys Roozeboom et al., 2008). Bullying behaviour include for example making annoying or offensive remarks, ignoring, social isolation, gossiping, negative gestures, criticism and damaging of personal property. This behaviour does not occur occasionally but regularly. When an employee is being bullied, this may cause physical symptoms such as stress, irritability, heart and vascular diseases and stomach- and intestinal complaints. It can also ensure that a worker has less pleasure in his work, underperforms and is less self-confidence. It appears that employees who are bullied report three times more often sick than other workers (Arboportaal, 2013).

These psychosocial factors should be avoided to reduce the sickness absenteeism in an organisation. For this purpose, some things can be taken into account to counter this unacceptable behaviour. First of all, it is important that an organisation stresses that the behaviour is not acceptable. A clear policy with the sanctions can be used and involved persons should be approach about their behaviour. An open atmosphere is important in which there can be spoken about the unacceptable behaviour, even with employers. Furthermore, it is important that an organisation has a confidant and a complaints committee and that incidents are reported (Arboportaal, 2013).

High work load

Besides these forms of unacceptable behaviour, the Arbodienst emphasises that a too high work load can lead to sickness absenteeism. A higher work load makes it more likely for an employee to report sick (Hopstaken, 1994). This is also found in research of Jehoel-Gijsbers (2007). A too high work load can lead to work stress, which may cause both mental and physical health problems. However, a too low work load may cause comparable health problems. Physical symptoms may include increased blood pressure, headache, complaints about arms, neck or shoulders and reduced resistance to diseases. Mental symptoms could also include fatigue, sleeplessness, depression, worrying, overload and even a burnout. Work stress can also ensure that employees have less pleasure in their work, are less able to concentrate and that the quality and productivity of the work decreases (Arboportaal, 2013).

According to Gaillard (2003), there is stress when an employee is unable to deal with the environmental requirements.

There is work load when the balance between the capacity of the worker and the work load is not balanced. It is therefore not about the "busy at work", because a disturbed balance is here not necessary. Work load exists only when an employee is not able to do the work within the prescribed requirements or within the required time to complete it. The amount of work and the available time transcend the carrying capacity of the employee (Arboportaal, 2013; Tweehuysen, 2007). This may occur when there is too little time for a task, when the quality requirements of the work are unrealistically high, if the work does not reflect the level of training or experience of the employee, if the equipment is not present and when responsibilities are too heavy for the employee. Also the working circumstances may cause that working pressure arises because the work cannot properly be done. This includes for example conflicts with managers, unclear task descriptions, difficult customers, too few breaks or holidays and technical problems. The Arbodienst also distinguishes personal factors which may cause work load. These factors are about employees who are for example very perfectionist, find it hard to say no or have a difficult home situation which requires a lot of attention (Arboportaal, 2013). The extent to which a person experiences working pressure depends on the characteristics of the person and of the work (Tweehuysen, 2007).

The Arbodienst mentions some steps which can reduce the work load and thus the work stress. For the organisation, it is important to pick up the signals of extreme fatigue, too much overwork or too many deadlines which are not met. It is also important to regularly discuss the work load with the employees. A clear job description whereby the employee knows what is expected of him, sufficient training and experience and clear working conditions are important. It is also beneficial when an employee has freedom in controlling their own work, has good equipment to work with, has sufficient break opportunities, colleagues who can help in very busy periods and that a very busy period is alternated with a quiet period. An organisation may also decide to offer an employee courses assertiveness and time management to learn to deal with the work load (Arboportaal, 2013).

However, employees may ensure themselves that the work load is not too high, by taking sufficient pauses, properly planning activities, daring to say no, reducing overwork and by asking for help when needed (Arboportaal, 2013). On the other hand, employees who experience a high work load, but have sufficient autonomy in their work, experience many challenges and have many opportunities for personal growth and development. Thus a high work pressure does not have to be negative. However, when the employee also has little autonomy this will lead to stress symptoms more easily. A too low work pressure may also be negative for employees. A low pressure with little autonomy can lead to passivity and low pressure with much autonomy to boredom (Bakhuys Roozeboom et al., 2008).

Poor social support

Furthermore, the social support for employees can also be seen as a psychosocial factor which has an impact on the sickness absenteeism in an organisation. Social support is about the employment relationships with managers and colleagues which influence the absenteeism (Jehoel-Gijsbers, 2007). There are often negative associations found between the social support at work and the absenteeism frequency (De Jonge, Reuvers, Houtman, Bongers & Kompier, 2000; Kivimäki, Head, Ferrie, Hemingway, Shipley, Vahtera & Marmot, 2005). Little social support provides a greater chance of sickness absenteeism (Magnavita & Garbarino, 2013; Melchior, Niedhammer, Berkman & Goldberg, 2003; North et al., 1996; Schaufeli et al., 2009; Burdorf et al., 2008). This applies for low social support both from colleagues and from managers (Väänänen, Toppinen-Tanner Kalimo, Mutanen, Vahtera, Peiró, 2003; Michie & Williams, 2003). Employees state that they receive more social support

from colleagues than from executives. Employees who receive little social support from their managers also experience relatively frequently problems with their work-life balance, which may have a negative effect on sickness absenteeism (Backhuis, Roozeboom, Gouw, Hooftman, Houtman & Klein Hesselink, 2008).

Social support can be increased by feedback and support in order to reduce the sickness absenteeism (Michie & Williams, 2003). When employees receive feedback from managers about the quality and impact of their actions, this can contribute to the learning ability and the effectiveness of the employee. This may have the result that an employee feels competent, gain self-confidence and is more motivated to carry out its work. This is positive for the work load which the employee experiences (Tweehuysen, 2007). When employees experience support from others in their work, this also contributes to job satisfaction. Good peer relationships can also ensure that colleagues can replace each other more easily, which contributes to the load capacity of employees. The work load can be reduced by this, because the energy resources of the employees increase (Tweehuysen, 2007).

An overview of these described psychosocial factors which may reduce the absenteeism need and the necessity to report sick, depending on the extent in which they are present, is shown in Table 2.

2.3.1.4 Work characteristics

There are also factors which have to do with the working conditions that have an impact on the sickness absenteeism in an organisation. According to the Arbodienst it is of great importance to regularly pay attention to the personal working conditions of the employees to reduce the sickness absenteeism (Arboportaal, 2013). The most important factors with regard to the working conditions in order to reduce sickness absenteeism which were found in literature are: clarity about the tasks and role of the worker, task variation in the work, the amount of work, control options for employees, training and development opportunities, the work-life balance, working hours, job satisfaction and the experience of inequality.

Poor work content

An important factor which affects the sickness absenteeism has to do with the expectations of the employee and its executives about the work to be performed. When there is uncertainty about the tasks and the role of the employee, this can result in work load for the employee. This work load can cause work stress, which has a negative impact on sickness absenteeism. It turns out that when an employee knows what is expected from him, this can reduce the sickness absenteeism in an organisation (Tweehuysen, 2007).

In addition, out of the literature emerges that low job complexity may increase the sickness absenteeism. Often this is also called ‘task variation’. This is related to the degree of challenge and variation in the tasks of the employee at work. When there is sufficient complexity or variety in the tasks to be performed, this can lead to more involvement in the organisation and satisfaction in the work (Väänänen et al., 2003). In the ‘Report Work Pressure’ of Tweehuysen (2007) it is stated that task variation may also have a positive effect, because it appeals to the different skills of employees. This provides opportunities for development and recognition of talents. This can ensure that the energy resources for the employee increase and that work stressors and the work load decrease. In this way, task variation may have influence on the reducing of the sickness absenteeism (Schaufeli, Bakker & Young, 2003; Rousseau & Aubé, 2013). This is in line with the findings in the literature that passive or monotonous work can also lead to more absenteeism because of a lack of variation in tasks (Gimeno et al., 2004; Van den Berg, 2010).

Also a too large amount of work may have a negative influence on the sickness absenteeism of employees (Dwyer & Ganster, 1991; Schaufeli et al., 2009). When the number of tasks which must be carried out is too high in relation to the available time, this may cause work pressure (Tweehuysen, 2007). This work pressure can result in work-related stress and this may result in an increased risk of sickness absenteeism. This is in line with the findings from several studies that overwork leads to a higher sickness absenteeism rate. However, research of Jehoel-Gijsbers (2007) and research of Beckers, Van der Linden, Smulders, Kompier, Van Veldhoven and Yperen (2004) shows that employees who work more hours have a lower rate of absenteeism. This seems strange, but this is often explained with the 'healthy worker effect', which means that employees who do overwork on a regular basis are more frequent the satisfied and non-fatigued employees. Also the 'motivated worker effect' may be appropriate, which states that the most motivated employees make longer working weeks. This is a reason why there can't be stated that overwork leads to a higher sickness absenteeism rate. Because of these contradictions in the literature it seems that overwork cannot be seen as a negative factor for absenteeism. However, Bakhuys Roozeboom et al. (2008) state that making a lot of overtime can have a negative impact on the work-life balance of the employee, which can have a negative impact on sickness absenteeism. Not having a good work-life balance is seen as a negative factor for sickness absenteeism.

Few control options

Another important factor in reducing the sickness absenteeism in an organisation, which is confirmed in several studies, is the possibility of the employee to have control options in their own work (Duits, Kant, Swaen, Van den Brandt & Zeegers, 2007; Magnavita & Garbarino, 2013). Here control options can be defined as the control of the employee on his tasks and conduct; how he or she performs his work, at what pace, in which order and their own ideas on when taking rest and recovery times (Karasek, 1979). With this control the employee can also affect the existing work stressors, so that they remain within acceptable limits. Where the employee has little control over his work, this creates a greater risk of sickness absence. Especially when there is a relatively high work load and relatively little autonomy in the work or with low control and high demands in the work, the chance of health problems is increasing (Gimeno et al., 2004; Michie & Williams, 2003; North et al., 1996; Jehoel-Gijsbers, 2007). For high demands at work there can be thought of long working hours, a lot of work load and a large amount of work (Michie & Williams, 2003). Also the meta-analysis from Burdorf et al. (2008) turns out that a lack of control at work affect the sickness absenteeism. Too little control options in the work is also about the lack of decision-making freedom or power which can lead to absenteeism (Melchior et al., 2003; Schaufeli et al., 2009). Therefore, participation of employees in decision making and problem solving can reduce the sickness absenteeism (Michie & Williams, 2003).

When an employee has more control options, decision-making freedom or autonomy in his work, this allows for more opportunities to deal with stressful situations. Autonomy is seen here as the independence of employees in the execution of tasks and the freedom to make decisions about the work pace and the kind of work tasks. Little autonomy creates stress and can cause health problems (Väänänen et al., 2003; Jehoel-Gijsbers, 2007). When employees have the ability to adjust their work tasks or pace of work when they feel less fit, this can lower the sickness absenteeism (Johansson & Lundberg, 2004; Rentsch & Steel, 1998). The extent to which the employee can make decisions in and about the work contributes greatly to the decrease of the work load and increases the job satisfaction (Schaufeli and Bakker, 2007). Autonomy in teams can also reduce the absenteeism, because it gives more motivation to be present when they have autonomy (Rousseau & Aubé, 2013). In addition, much autonomy in the work and a great amount of work load will ensure that

employees experience that the work is challenging and that the work offers growth and development opportunities more easily (Bakhuys Roozeboom et al., 2008).

Few training and development opportunities
When the work offers more training and development opportunities, this can also have an impact on the sickness absenteeism. This is also reflected in the meta-analysis of Burdorf et al. (2008) where is stated that a lack in training and development opportunities in an organisation and in the work has a negative impact on the sickness absenteeism. This can lead to work stress and even to burnout. Having too few opportunities to learn and to get feedback also has to do with this (Schaufeli et al., 2008). Especially when the work is not very varied, this requires little creativity and the employee has to learn few new things, this limits the development opportunities for employees. When this occurs in combination with a high work load and low control options, this can definitely lead to stress and burnout (Bakhuys Roozeboom et al., 2008). Development opportunities are in many investigations seen as a possibility to obtain energy from the work and to form a buffer for potential sources of work stress. Hereby employees can make optimal use of their skills in their work. Besides individual energy sources can arise because of more training and development opportunities, such as self-confidence, personal effectiveness and a sense of purpose (Tweehuysen, 2007).

Poor work-life balance
According to several studies, the difficulty in combining work and private life contributes to sickness absenteeism. When the total load of problems at home and at work is too high, this is associated with more health problems which may lead to absenteeism (Van Hooff, Geurts, Kompier, Houtman & Van den Heuvel, 2005; Goff, Mount & Jamison, 1990; Schaufeli et al., 2009). A disturbed work-life balance can cause conflicts for the employee, which can result in fatigue and depression. Van Rossum (2001) even argues that the greatest risk of absenteeism occurs when there is at home and at work overload, dissatisfaction and when major changes take place. Problems with the work-life balance are more likely to occur when the work load is too high (Bakhuys Roozeboom et al., 2008). Research shows that when the work has a negative impact on the private life, the greater the chance will be that private life has a negative impact on the work (Bakhuys Roozeboom et al., 2008). An organisation can take actions to improve the balance between work and private life. As Jehoel-Gijsbers (2010) describes, more taking into account the private circumstances of the employee may result in a decrease of the absenteeism. She describes that this can be realised by making working hours more flexible and align them to the care duties.

Low work time control
The working hours of the employee also affects how quickly employees report sick. When an employee has control over his working hours, work time control, this may reduce the absenteeism. Meta-research shows that ‘flextime scheduling’ and giving employees the opportunity to decide when they want start and finish working, this can ensure that the absenteeism decreases (Duits et al., 2007). However, research by Johansson and Lundberg (2004) suggests that employees who are required to be at work, are less absent and are more likely to work when they are sick. So the use of flexible working hours may be beneficial for a low sickness absenteeism rate, but only if employees are asked to work in the organisation and not at home. Employees are more required to be present at work when their absence has a great impact on the progress of their own work, the work of colleagues or on a third party.

Low job satisfaction

Furthermore it turns out that satisfaction with the content of the work is also related to sickness absenteeism in an organisation. It appears that the less satisfied the employees are about the work content, the longer a period of absenteeism lasts. In this case the motivation of the employee to return to work is lower (Hopstaken, 1994). Meta-analysis of Burdorf et al. (2008) and a research of the Arbodienst (Arboportaal, 2013) also show that a lack of pleasure in the work itself influences the absenteeism. This seems particularly applicable for women. When there are conflicts in the workplace, this can also affect the job satisfaction and thus indirectly affect the absenteeism. Labour conflicts also directly affect sickness absenteeism (Burdorf et al., 2008).

Finally, Burdorf et al. (2008) show in their meta-analysis that a perceived inequality in the workplace has a negative impact on the absenteeism in an organisation. This may be related to the previous mentioned job satisfaction. When an employee experiences unjustified inequality in his work, this may reduce the satisfaction with the work and may ensure that the employee reports sick more easily. This involves not only inequality in relation to other employees, but also in relation to what employers receive for their proceedings. Geurts, Schaufeli, and Rutte (1999) argue that a number of studies have shown that employees who experienced inequality in what they invest in the organisation and what they receive in return, report sick more often than others.

An overview of these described work characteristics which have an effect on the absenteeism need and the necessity to report sick and can help to reduce the sickness absenteeism, is shown in Table 2.

Table 2

Overview of the Job Demands and Job Resources

Physical and environmental factors
Poor working posture
Static posture
Dynamic posture
Poor living habits
Lifestyle workers
Lack of exercise
Poor work environment
Psychological factors
High cognitive demands
Poor self-efficacy
Psychosocial factors
Much unacceptable behaviour
Aggression and violence
Discrimination
Intimidation
Bullying
High work load
Poor social support
Work characteristics
Poor work content
Clarity about the role and tasks
Task variation
Amount of work
Few control options
Few training and development opportunities
Poor work-life balance
Low work time control
Low job satisfaction
Experienced inequality

2.3.2 Measures concerning the sickness absenteeism opportunity

Factors concerning the sickness absenteeism opportunity are related to the absenteeism procedure in an organisation. As can be seen in the developed model (Figure 8), the absenteeism opportunity influences the height of the absenteeism threshold and may reinforce the decision to report sick. Factors related to the absenteeism procedure are: a comprehensive absenteeism policy; understandability of the absenteeism procedure; absenteeism control, the procedure of reporting sick; attention for the return of employees; keeping in touch with sick employees; cooperation on the work resumption; good employment conditions and the absenteeism culture. These factors may reduce the sickness absenteeism in the organisation. These measures are discussed below. However, when there is a significant difference between the actual and perceived absenteeism opportunity, these factors can reinforce the tendency of employees to report sick.

2.3.2.1 Effective sickness absenteeism policy

Firstly, according to the Arbodienst it is important in reducing the sickness absenteeism to have a good health and safety - and absenteeism policy. This policy must fit with the nature,

size and culture of the organisation. It should indicate how employers, employees and other involved persons should deal with absenteeism. According to the Arbodienst, an effective absenteeism policy consists of sickness absenteeism prevention, an absenteeism protocol, absenteeism training for executives, absenteeism registration and -analysis, guidance for reintegration and what to do when conflicts occur. For the employee it should be clear what the rules for absenteeism are. Control is also important when the employer suspects that an employee unjustly reports sick (Arboportaal, 2013).

The way in which the employee should report sick should also not be too easy. The reporting sick via SMS, e-mail or via the reception is much easier than via the manager (Arboportaal, 2013). Next to this, it is important that employees are familiar with the policy of absenteeism, because this has a direct influence on the intention to report sick. Being well informed about the absenteeism policy in the organisation ensures a lower tendency to report sick (Hopstaken, 1994).

It is also important in the absenteeism policy to pay attention to the return of an employee after short-term or long-term absence. Because when the employee goes unnoticed to work, this makes it easier to report sick the next time. The employee can experience that he is not missed and this is not beneficial for the work motivation (Van den Berg, 2010). Conversations during the period of absence and with the return can therefore be a valuable contribution.

The Arbodienst complements to this that it is of great importance in reducing the sickness absenteeism to keep in contact with the sick employees. To prevent frequent short-term sickness absenteeism it is important to have conversations on a regular basis with the absent employees to find out what the causes are (Arboportaal, 2013). Van den Berg (2010) also describes that keeping in contact with the sick employee ensures that the return threshold remains low. Little interest and information from the organisation can work as a return threshold.

Furthermore, to reduce the sickness absenteeism it is also important that the employer and employee work together on a rapid resumption of work (Van den Berg, 2010). This can by the aforementioned conversations or by offering the employee work alternatives or the possibility to work at home (Bastiaanssen et al., 2008). Resumption of work is of influence on the length of the absence. Research of Jehoel-Gijsbers (2010) shows that partial resumption of work is the most important predictor of full return to work after 56 weeks. Other results showed that employees which were partially back at work after nineteen weeks had about five times more chance to resume their work. So, sick workers should be involved as soon as possible in the labour process. Hereby Jehoel-Gijsbers (2010) describes that it is important to make an analysis of the problem and a plan of approach around the return to work. This should be done within six to eight weeks in cooperation between the employee and the supervisor. The probability of full resumption of work became almost twice as large as when this analysis and plan was not made.

2.3.2.2 Good employment conditions and strong absenteeism culture

As mentioned, a good sickness absenteeism policy is important in an organisation. Thereby it is also important that an organisation has good employment conditions in order to limit the sickness absenteeism (Jehoel-Gijsbers, 2007). Another aspect is that the absenteeism culture in an organisation is of great importance for the sickness absenteeism. The used absenteeism policy can affect the creation of this culture. Absenteeism culture refers to the opinions and behaviour that exist within a department or organisation regarding the acceptance of absenteeism which affects the employees. Various studies show that a tolerant absenteeism culture ensures that employees report sick more easily (Geurts, Buunk & Schaufeli, 1994). Research by Hopstaken (1994) shows that the standard in the private environment about

absenteeism and the atmosphere at work regarding absenteeism are direct predictors of the absenteeism frequency (Hopstaken, 1994). Thus it's actually about the 'absenteeism culture at home and at work'.

2.3.2.3 Presenteeism

However, for these factors in relation to the absenteeism procedure, the remark has to be made that a too extensive absenteeism procedure may make the absenteeism threshold for employees too high. This allows that employees with serious health problems make the decision to still go to work. This may still lead to absenteeism, dissatisfaction at work, reduced productivity and a poor working atmosphere (Geurts & Smulders, 2006). When employees with serious health problems, with which they actually should report sick, still go to work, this is called '*presenteeism*'. Research shows that employees with high levels of presenteeism also score high on absenteeism. Because eventually, working with serious health problems leads to longer lasting health problems as neck and back pain, fatigue and depression. Because of this the employees are absent for a longer time than when they reported sick with the same health complaints in an earlier stage (Aronsson, Gustafsson, Dallner, 2000). Furthermore, working with serious health complaints may decrease the productivity in the organisation (Hemp, 2004). So when employees with serious health problems go to work, this may adversely affect the employee and the organisation.

However, employees may decide to go to work sick, for example because they feel that they are difficult to replace (Aronsson et al., 2000). The culture in the organisation and the attitude of other employees towards sickness absenteeism can ensure that sick employees go to their work (McKevitt, Morgan, Dundas & Holland, 1997). Grinyer and Singleton (2000) argue that the relationship with colleagues also affects the decision to go to work sick, especially when there is teamwork. Hansen and Andersen (2008) describe that the time constraints in which the job should be done may also increase the presenteeism. Also the personal attitude of the employee towards reporting sick and the involvement in the organisation affects a higher level of presenteeism. Their research also shows that when employees have a higher degree of control over their own work, they will go to work ill more easily. This is caused by the fact that it is much easier for them to adapt their activities to their health condition.

So measures related to the absenteeism procedure should therefore not be implemented in such a way that they lead to presenteeism. The measures regarding the absenteeism opportunity are shown schematically in Table 3.

Table 3

Overview of the Factors Regarding the Absenteeism Opportunity

Difference between actual and perceived absenteeism opportunity
Effective policy
Comprehensive absenteeism policy
Understandability of the absenteeism procedure
Absenteeism control
Procedure of reporting sick
Attention for the return of employees
Keeping in touch with sick employees
Cooperation on the work resumption
Good employment conditions
Strong absenteeism culture

2.3.3 Factors which are not included in this study

Above, a series of factors were described which affect the reporting sick of employees, thus the sickness absenteeism in an organisation. They are all factors concerning the absenteeism opportunity or organisational factors which have to do with the work context. However, research by Jehoel-Gijsbers (2007) shows that not the factors concerning the work, but factors concerning the health of workers are the most powerful predictors of sickness absenteeism. Many studies show that the health of the employee is an important predictor for absenteeism (Van Deursen, Smulders & Bongers, 1997; Jehoel-Gijsbers, 2010). In the National Survey of Working Conditions among 24.000 employees it is examined which health complaints cause sickness absenteeism (Van den Bossche, Hupkens, De Ree, & Smulders, 2006). Firstly, this appears to be caused by flu or colds (38-39%), followed by back pain (12%) and thirdly, psychological symptoms (12%) as overwork, burnout, headaches, fatigue and concentration problems. However, the meta-analysis of Burdorf et al. (2008) shows that both factors concerning health and work are the main determinants for absenteeism.

There are also private and individual factors which affect sickness absenteeism. These include factors such as personality, risky habits and a stressful home situation. Risky habits include for example smoking, drinking, unhealthy eating and doing dangerous sports (Geurts & Smulders, 2006; Duits et al., 2007). This may cause sickness absenteeism. A stressful home situation is for example about family problems, divorce and financial concerns.

Besides the health characteristics and individual and private characteristics of employees, there are many other variables which are mentioned in research to explain and reduce sickness absenteeism. However, only a small percentage of the sickness absenteeism can be explained with these variables (Jehoel-Gijsbers, 2007). Bakhuys Roozeboom et al. (2008) argue that only 1% of the sickness absenteeism can be explained by personal characteristics and 3% by work characteristics. In total, only 9% of the sickness absenteeism can be explained by variables. Jehoel-Gijsbers (2007) argues that this is because the sickness absenteeism also has to do with incidental, non-systematic conditions such as flu, colds and the perceived mood of people. Furthermore, meta-analyses show that many different variables may play a role in the sickness absenteeism, whereby it is almost impossible to combine all these variables in one study (Jehoel-Gijsbers, 2007; Geurts & Smulders, 2006). In fact factors can be sought at the individual and organisational level, the sector and the society.

In this study, characteristics of the health of employees and individual and private characteristics are not included. Also personal characteristics such as age, gender and ethnicity, are not taken into account. In fact, the focus in this study is on factors which can be influenced by the organisation, even though they explain only a small percentage of the sickness absenteeism. Therefore, the factors described above with respect to the work and working conditions of employees are central in this study to reduce the sickness absenteeism. These are factors concerning the sickness absenteeism opportunity and organisational factors which may influence the sickness absenteeism. An overview of these described which affect the sickness absenteeism is shown in Figure 9. This is an expansion on the integrated model of factors which influence the decision to report sick of Figure 8. It shows how the organisational factors may influence the reporting sick of employees by influencing the absenteeism need, the necessity to report sick and the absenteeism threshold. It also shows how the factors of the absenteeism opportunity may influence the reporting sick of employees by influencing the absenteeism threshold. By taking into account these organisational factors and factors concerning the absenteeism opportunity, or to optimise them, the sickness absenteeism may be reduced in an organisation.

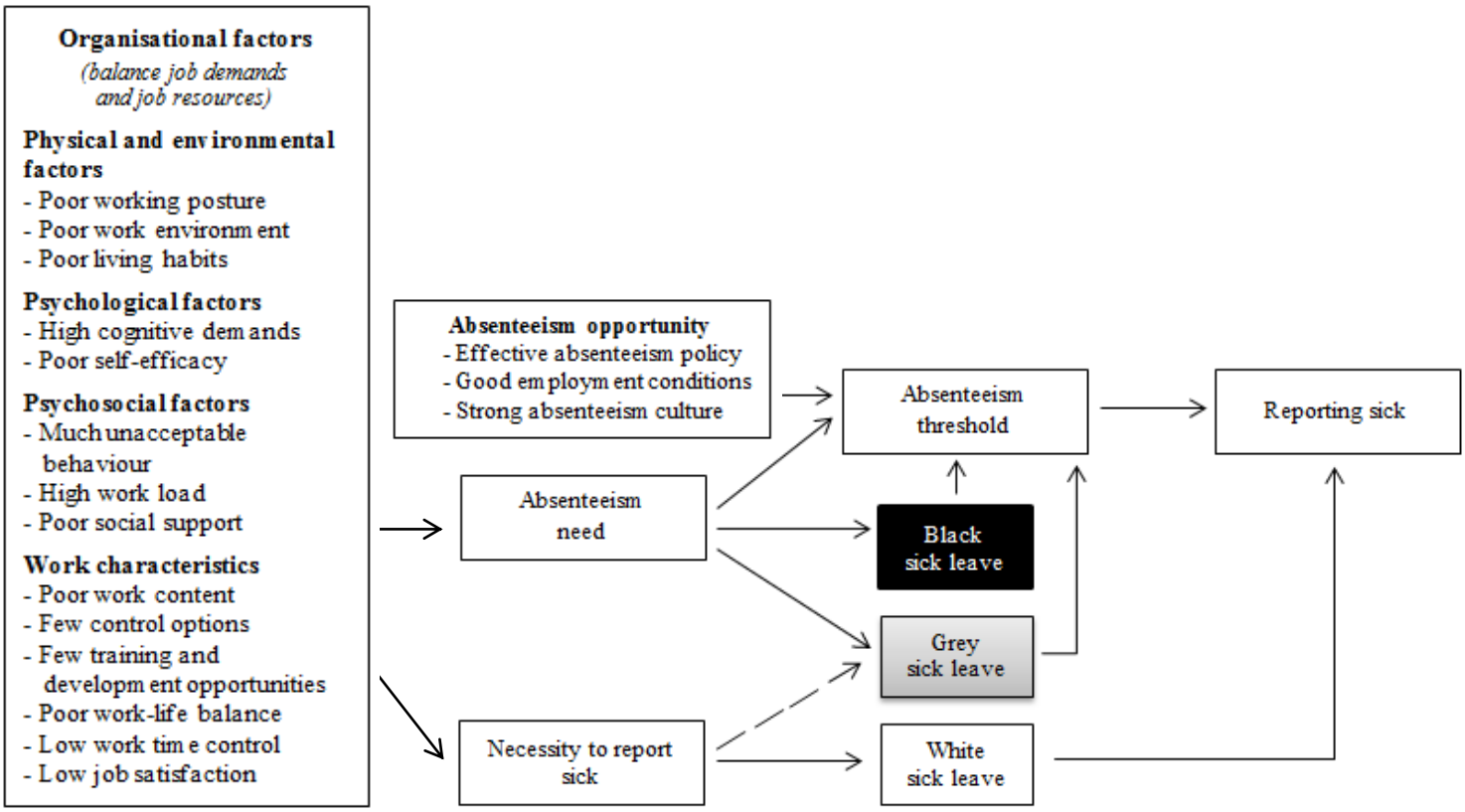

Figure 9. Organisational factors and the factors concerning the absenteeism opportunity which influences the decision to report sick.

2.4 Conclusion theoretical framework

This literature study was conducted in the context of the main research question: *"How can the sickness absenteeism rate at the organisation be reduced with measures at organisational level which are in line with the existing way of working?"* In this literature study first the sub-question '*What is sickness absenteeism*?' was central. This to investigate what actually is meant by '*sickness absenteeism*' in the first part of the main research question. In summary, it can be concluded that sickness absenteeism can be defined as '*the incapacity for the performance of work because of sickness or disability*' (Bastiaanssen et al., 2008; Geurts & Smulders, 2006). Here the health complaints which cause sickness absenteeism can be of a physical or mental nature. Next to this, sickness absenteeism can be classified into three types of sickness absenteeism: short-term, medium-term and long-term sickness absenteeism. For a given sickness absenteeism percentage the reporting frequency and the duration of absence can help to explain the type of sickness absenteeism. If an employee reports sick depends on the perceived absenteeism threshold which is created by the perceived absenteeism opportunity and the absenteeism need. Here a distinction can be me made into white, gray and black sickness absenteeism.

Because of the literature study it is now known what sickness absenteeism means. It is also known that the sickness absenteeism opportunity is important for sickness absenteeism. Also insight is gained into organisational factors which may influence the sickness absenteeism. In the remainder of this study there will be examined what the sickness absenteeism is at the organisation. So the following question will be central in the remainder of this study:

1. *What is the sickness absenteeism at the organisation?*

Here the described nature, reporting frequency, duration and type of sickness absenteeism of the literature study will be used in determining the sickness absenteeism at the organisation.

The second part of the main research question is about '*the measures at organisational level*' with which the the organisation may reduce the sickness absenteeism. Therefore in this literature study it was first examined what possible explanations for sickness absenteeism are. This is done by answering the second sub-question of this literature study: '*What are causes for sickness absenteeism?*' Therefore the four best known models in the Netherlands to explain sickness absenteeism were described. In summary, the 'medical model' focuses on the limitations of the employee and tries to reduce the sickness absenteeism by improving the health of employees. The 'decision model' suggests that absenteeism is a choice and the focus lies on what the employee still can do. Reducing the sickness absenteeism is dependent on factors such as the social environment and the motivation to be present. The 'load-load capacity model' states that there must be a balance between the work load and the load capacity of the employee. The focus here is on the working conditions. Furthermore, according to the 'job demands and -resources model' there must be a balance between the work stressors and the energy which the employee gets from the work. To reduce the sickness absenteeism the work stressors should be limited and the energy resources should be encouraged to increase the motivation of the employee. An overarching model of these models was made in which the causes which affect the reporting sick of employees are included. This model has formed the basis for the composition of the organisational factors which the organisation may influence to reduce the sickness absenteeism. So this sub-question is answered as an intermediate step for forming a good literature basis for the continuation of this research in answering the third sub-question in this literature study.

So subsequently, on the basis of this model in the literature is examined how to answer the third sub-question of this literature study: '*What organisational factors can reduce the sickness absenteeism in an organisation?*' In summary, these factors could be classified as physical and environmental factors, psychological factors, psychosocial factors and work characteristics. It appeared that regarding the physical and environmental factors a poor working posture, a poor work environment and poor living habits are important in reducing sickness absenteeism. For the psychological factors high cognitive demands and a poor self-efficacy turned out to be of influence. The psychosocial factors consist of much unacceptable behaviour, a high work load and poor social support. Concerning the work characteristics poor work content, few control options, few training and development opportunities, a poor work-life balance, low work time control and low job satisfaction appeared to be important in reducing sickness absenteeism.

Now it is known what organisational factors are important in reducing sickness absenteeism, in the remainder of this study it will be examined to what extent these organisational factors, which emerged from the literature, are present at the organisation. It will be investigated how employees of the organisation perceive the presence of these organisational factors which are of influence on the sickness absenteeism in the organisation. In this way it is investigated which organisational factors the organisation should improve to reduce the sickness absenteeism. Thus the following question will also be central in the remainder of this study:

2. *How do employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation?*

The third part of the main research question is about '*the existing way of working*' at the organisation. Here it is about what the current policy concerning sickness absenteeism in the organisation is. In answering the third sub-question of this literature study it turned out that the absenteeism opportunity is also an important factor in reducing the sickness absenteeism

in an organisation. In summary, in the literature study it came forward that concerning the absenteeism opportunity an effective absenteeism policy, good employment conditions and a strong absenteeism culture are important in reducing sickness absenteeism. In the remainder of this research there will be investigated to what extent these factors are present at the organisation and how these factors are perceived by the employees of the organisation. So the actual and the perceived absenteeism opportunity and the difference between these two will be examined. In this way it is investigated which aspects of the sickness absenteeism policy the organisation should improve to reduce the sickness absenteeism. Therefore, the following question will also be central in the remainder of this study:

3. *What is the difference between the actual and the perceived absenteeism opportunity at the organisation?*

Now there has been described what this literature study has yielded, the sickness absenteeism of the organisation will be further examined in practice. The three described research questions will form a guideline for this. However, for the benefit of a logical structure the three research questions will be discussed in the following way in the remainder of this study:

1. *What is the sickness absenteeism at the organisation?*
2. *What is the difference between the actual and the perceived absenteeism opportunity at the organisation?*
3. *How do employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation?*

These three research questions will be used to answer the main research question in this study: *"How can the sickness absenteeism rate at the organisation be reduced with measures at organisational level which are in line with the existing way of working?"* The conceptual model of Figure 10 forms the end product of this literature study and displays the elements which are central in the remainder of this study to answer the main research question (the aspects shown in bold). This model displays the aspects of the sickness absenteeism (nature, frequency, duration and type of absenteeism), the factors on which the actual and the perceived absenteeism opportunity may differ and the organisational factors which are investigated in the remainder of this study. The research design in the next chapter is built on this conceptual model of sickness absenteeism and these three newly formulated research questions.

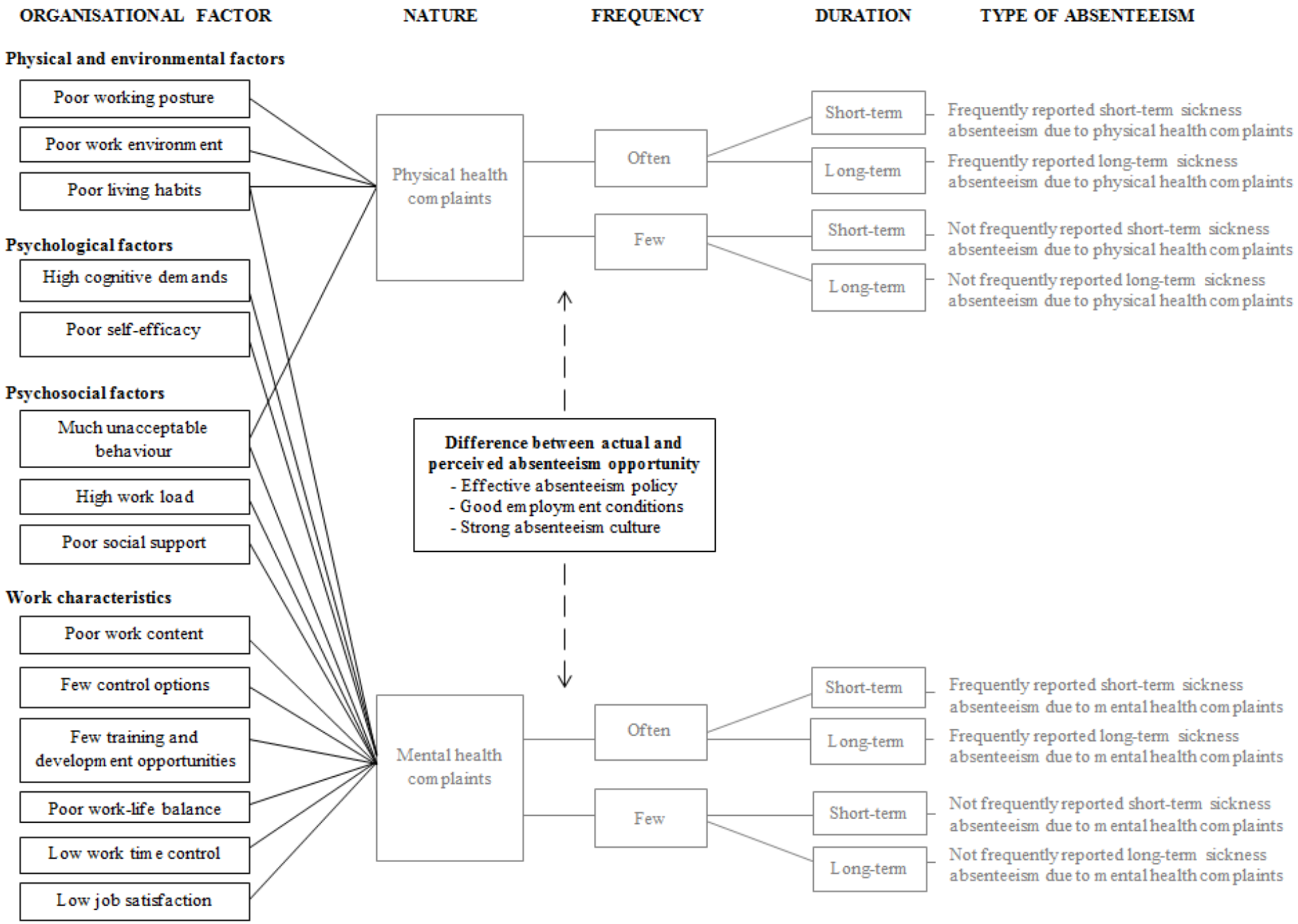

Figure 10. Conceptual model of the factors which may lead to the eight different types of sickness absenteeism.

3. Method

In this chapter the used method of this research will be explained. First the research approach will be described (3.1). Then attention will be paid to the objects of research, the research instruments and analysis of the data (3.2 to 3.5). This will be structured by the three newly formulated research questions. Finally the reliability and validity of the used method will be discussed (3.6) and a brief summary will be given (3.7).

3.1 Research Approach

In this research, first a literature study was conducted to investigate what sickness absenteeism is, what causes are for sickness absenteeism and which measures could reduce the sickness absenteeism in an organisation. The next step is to investigate the three formulated (sub) research questions in practice to answer the main research question.

The first research question which should be investigated is: "*What is the sickness absenteeism at the organisation?*" Therefore the current state of affairs concerning the sickness absenteeism in the organisation is examined by analysing the sickness absenteeism statistics of the organisation. Also an interview with the occupational health physician of the organisation is conducted to get more insight in the sickness absenteeism at the organisation.

The second research question turned out to be: "*What is the difference between the actual and the perceived absenteeism opportunity at the organisation?*" Therefore the actual absenteeism opportunity is examined by analysing the sickness absenteeism policy documents of the organisation. With this document analysis it is investigated what the organisation already does to reduce the sickness absenteeism. In addition, the perceived absenteeism opportunity is examined with an online questionnaire for all employees of the organisation and an additional online questionnaire for the long-term and frequently sick employees. These additional questions are asked to the frequent and long-term sick employees to get a deeper understanding of how the sickness absenteeism procedure of the organisation is experienced. In this way it is examined what aspects concerning the sickness absenteeism procedure the organisation may improve to reduce the sickness absenteeism.

The third research question which should be investigated is: "*How do employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation?*" This question is about the organisational factors that may influence sickness absenteeism which emerged from the literature study. The perception of employees about these factors is investigated in the same questionnaires as for the second research question: an online questionnaire for all employees in the organisation and an additional online questionnaire for the long-term and frequently sick employees. In this way it is investigated which organisational factors the organisation may improve to reduce the sickness absenteeism.

In Table 4 an overview is shown of the instruments used, the objects of research, and what is intended.

Table 4

Data Collection Instruments, Objects of Research and the Purpose

Instrument	Object of research	Purpose
Document analysis	Documents about the sickness absenteeism policy; Recent sickness absenteeism statistics.	Analysis of the sickness absenteeism opportunity to investigate what the organisation already does to reduce the sickness absenteeism; Analysis of sickness absenteeism statistics to investigate which type of sickness absence causes the high sickness absenteeism rate.
Individual interview	The occupational health physician of the organisation.	(control) Analysis of sickness absenteeism statistics to investigate which type of sickness absence causes the high sickness absenteeism rate.
Online questionnaires	All employees of the organisation; Long-term and frequently sick employees of the organisation.	Investigate how the sickness absenteeism opportunity in the organisation is experienced and may be improved; Investigate in how far organisational factors which can reduce sickness absenteeism are present in the organisation (and which may be improved).

Overall this study can be seen as an exploratory study. This is a valuable mean of finding out what is happening, to seek new insights, to ask questions and to assess phenomena in a new light (Robson, 2002). It is particularly meant to clarify the understanding of a problem and its precise nature (Saunders, Lewis & Thornhill, 2009); in this case the sickness absenteeism at the organisation. Because the data are collected at a single moment in time, also the online questionnaires which should be completed at once, this is also a cross-sectional study. This is the study of a particular phenomenon at a particular time (Saunders et al., 2009). The research design consists mainly of quantitative data collection techniques and analysis procedures (Saunders et al., 2009). Because, next to the document analyses, in this study two types of online questionnaires are used to collect the data and one individual interview is held.

3.2 Research question 1: "What is the sickness absenteeism at the organisation?"

3.2.1 Sickness absenteeism statistics

The sickness absenteeism statistics of the organisation are analysed to investigate what the current state of affairs concerning the sickness absenteeism in the organisation is. All the absenteeism statistics from the period from 1 February 2009 to 31 January 2013 are collected for employees of the organisation which are still working for the organisation (N=72). The data is collected by using the IT&Care database of Human Capital Care Arbozorg B.V. in which the data is stored. The organisation has only been working with this program for one year, which causes that data of previous years is registered less detailed. The data of the past year, the period from 1 February 2012 to 31 January 2013, are therefore central in this research. Every mentioned year starts on February 1 and ends on January 31 the next year.

For analysing the data, the criteria of the literature study for defining sickness absenteeism are used. Therefore, the sickness absenteeism statistics are analysed concerning the total sickness absenteeism rate, the reporting frequency, the duration of absence and the type of sickness absenteeism (short-term, medium-term and long-term). When analysing these

sickness absenteeism statistics the formulas and calculations of Human Capital Care Arbozorg B.V. are used (IT&Care, 2013).

First the *absenteeism rate* is calculated and analysed, which in most organisations is used to give an indication of the size of the sickness absenteeism. It indicates the number of days of absence in a given period (Geurts & Smulders, 2006). The absenteeism rate only gives information of the extent of the absence and not of the type of sickness absenteeism (CBS, 2013). When calculating the absenteeism rate, part-timers are taken into account. For analysing the absenteeism rate the national average of 3.5% for organisations with 10 to 100 employees is taken into account as criterion (CBS, 2013). The absenteeism rate is calculated in the following way:

$$\textit{Absenteeism rate} = \frac{\textit{the total of the weighted absent calendar days in period } t}{\textit{potential available days in period } t} \times 100\%$$

In the database a distinction is made between absenteeism rates including and excluding absenteeism reports concerning pregnancy and other '*safety net sick reports*' ('*vangnetziekmeldingen*'). 'Safety net sick reports' involve returners to work, (ex) WIA/WAO employees (wet Werk en Inkomen naar Arbeidsvermogen *(('law of work and income to work capacity')*/Wet ArbeidsOngeschiktheidsverzekering ('*law of occupational disability insurance'*)), occupational disabled people, sickness because of organ donation and partially disabled or sick people which have become sick within five years after employed. The absences related to pregnancy and other 'safety net sick reports' are not taken into account in this whole analysis. In this way it is investigated what the absenteeism in the organisation is which does not depend on these factors. After all, in this study the absenteeism is central on which the organisation has some influence, so not the absenteeism due to pregnancy and to other 'safety net sick reports'.

Furthermore, in this analysis the absenteeism rate is classified into short-term, medium-term and long-term sickness absenteeism. Short-term sickness absenteeism involves absence with a maximum duration of 7 days. Medium sickness absenteeism concerns the absence with a minimum of 8 and maximum of 42 days. And long-term sickness absenteeism is the absence with a minimum duration of 43 days. These absenteeism rates are calculated as follows:

$$\textit{Short-term} = \frac{\textit{the total of the weighted absent calendar days of cases of absence with a maximum of 7 calendar days in period } t}{\textit{potential available days in period } t} \times 100\%$$

$$\textit{Medium-term} = \frac{\textit{the total of the weighted absent calendar days of cases of absence with a minimum of 8 and a maximum of 42 calendar days in period } t}{\textit{potential available days in period } t} \times 100\%$$

$$\textit{Long-term} = \frac{\textit{the total of the weighted absent calendar days of cases of absence with a minimum of 43 calendar days in period } t}{\textit{potential available days in period } t} \times 100\%$$

In addition, the reporting frequency and the average duration of absence give information about the nature of the sickness absenteeism and are therefore analysed (Geurts & Smulders, 2006). The *reporting frequency* is the average number of times that an employee reports sick in a period of time (Bakhuys Roozeboom et al., 2008; Bastiaanssen et al., 2008). According to the occupational health physician the average reporting frequency is 1.4. A reporting frequency of more than 1.4 is therefore seen as too high and higher than 2.0 is seen as alarming. This is an indication that there is something wrong in the organisation, for example that there are a lot of viruses of flu or that there may be other reasons why the reporting frequency is that high. When an employee has a reporting frequency of two, this does not

mean that the employee has been sick for two days, but that there were two times that he has been sick for a while. These criteria of a too high reporting frequency of 1.4 and an alarming reporting frequency of 2 are used. Because of the comparability, the reporting frequency is calculated at an annual basis. Here only new cases of absenteeism are counted. Part-timers are not taken into account. The reporting frequency is calculated in the following way:

$$\textit{Reporting frequency} = \frac{number\ of\ absenteeism\ reports\ in\ period\ t}{average\ number\ of\ empolyees\ in\ period\ t} \times \frac{number\ of\ days\ in\ a\ year}{number\ of\ days\ in\ period\ t}$$

The *average duration of absence* is about the average amount of days the employee has been sick each time he has reported sick (Bakhuys Roozeboom et al., 2008; Bastiaanssen et al., 2008). Here part-timers are not taken into account in the analysis. Also 'half days of absence' have not been taken into account. The average duration of absence is calculated in the following way:

$$\textit{Average duration of absence} = \frac{sum\ of\ the\ duration\ of\ the\ discontinued\ cases\ of\ absence\ in\ period\ t}{number\ of\ discontinued\ cases\ of\ absence\ in\ period\ t}$$

In the analysis of the sickness absenteeism statistics it is also investigated whether the nature of the health complaints is physical or mental. Additionally, the sickness absenteeism statistics are analysed specified per month, by gender and by age group. These criteria did not come forward in the literature study. However, the way the data are displayed in the database made these additional analyses possible.

3.2.2 Sickness absenteeism statistics according to the occupational health physician

Also a second analysis of the sickness absenteeism statistics is carried out with the occupational health physician of the organisation to investigate what the current level of sickness absenteeism in the organisation is. In this way the analysis of the sickness absenteeism statistics by the researcher is checked. Therefore, an in-depth interview was conducted to 'find out what is happening (and) to seek new insights' (Robson, 2002; Bartelds, Kluiter & Van Smeden, 1978). The interview with the occupational health physician is thus very useful to get a deeper understanding of the sickness absenteeism in the organisation.

In the interview open questions are used to ensure that a topic is discussed at a deeper level and that additional clarifying questions could be asked (Baarda & De Goede, 1997). Through the direct interaction during the interview, unclear answers could also be explained and additional questions could have been asked (Gadourek, 1972; De Bie & Dijkstra, 1989). For asking these open questions, an interview schedule is used to provide structure (Rossi, Wright & Anderson, 1983). In this interview schedule the topics of the conversation are listed (Wester, 1987; Patton, 1990). The interview schedule is based on information obtained from the literature study about what sickness absenteeism entails. Therefore the topics in the interview are the sickness absenteeism rate, the reporting frequency, the duration of absence, the nature of the health complaints and the type of sickness absenteeism (short-term, medium-term and long-term). Also attention is paid to the statistics specified by month, gender and age group because this is also done in the analysis of the researcher. The occupational health physician is asked what her opinion about these statistics for the organisation is and if her analysis of the sickness absenteeism statistics corresponds with the findings of the analyses of the researcher. The questions and the order of the questions are not fixed, but gave guidance to the conversation.

For the quality of the interview, the interview schedule was discussed and checked in advance by supervisors from the organisation and a supervisor of the university (Baarda, De Goede & Teunissen, 1995). During the interview notes and a sound recording are made

(Wester, 1987; Saunders et al., 2009). A transcript was made of the interview as soon as possible after the interview, so that the progress of the conversation could have been displayed as good as possible (Baarda & De Goede, 1997). With the sound recording the interview could be listened again. The results of this interview are compared to the analysis of the sickness absenteeism statistics of the researcher. In this way it is investigated what the sickness absenteeism at the organisation is.

3.3 Research question 2: "What is the difference between the actual and the perceived absenteeism opportunity at the organisation?"

3.3.1 Actual sickness absenteeism opportunity

The actual absenteeism opportunity at the organisation is examined by analysing the sickness absenteeism policy documents of the organisation to investigate what the organisation already does to reduce the sickness absenteeism. For this, all the information regarding sickness absenteeism is gathered from the Intranet of the organisation. This is a kind of 'internal data base' for the employees of the organisation where they can find relevant information with regard to their work. Documents are included in this analysis which are related to sickness absenteeism. These documents concern the company regulations, the employment regulations and the sickness absenteeism protocol. Only the most recent versions, from 2012 or 2013, are included in this analysis.

These policy documents are analysed by using the findings of the literature study. In the literature study came forward that the absenteeism opportunity can be measured with the effectiveness of the absenteeism policy, the quality of the employment conditions and the strength of the absenteeism culture. It turned out that these factors are important in reducing sickness absenteeism. Therefore, the selected documents concerning sickness absenteeism are analysed on the basis of these three criteria. The findings are categorised as related to the sickness absenteeism policy, the employment conditions and the absenteeism culture. In this way the actual absenteeism opportunity is described for the organisation and it is identified what the organisation already does to reduce sickness absenteeism.

3.3.2 Perceived sickness absenteeism opportunity

The perceived absenteeism opportunity at the organisation is measured to investigate how employees experience the way the organisation deals with sickness absenteeism. The perceived absenteeism opportunity at the organisation is measured by the use of an online questionnaire for all employees of the organisation and an online questionnaire for the long-term and frequently sick employees. In both questionnaires it is investigated how employees experience the factors of the literature study which measure the absenteeism opportunity: the sickness absenteeism policy, the employment conditions and the absenteeism culture. These factors or criteria are also used in examining the actual sickness absenteeism opportunity. The findings of both questionnaires are compared to describe the perceived absenteeism for the organisation. These findings are compared to the measured actual sickness absenteeism opportunity. In this way it is investigated what the difference between the actual and the perceived sickness absenteeism opportunity at the organisation is.

Both questionnaires are also used to examine the third research question on how employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation. Therefore the selection of the respondents, the development of the questionnaires and the analysis of the data for both questionnaires for research questions 2 and 3 are described in chapter 3.5.

3.4 Research question 3: "How do employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation?"

It is investigated how employees of the organisation experience the organisational factors of the literature study that may influence the sickness absenteeism in the organisation. For this an online questionnaire for all employees in the organisation is used. In this questionnaire all organisational factors of the literature study (see Figure 10) are measured with separate scales of questions. An additional online questionnaire for the long-term and frequently sick employees with open questions is also used to examine if organisational factors come forward which the organisation can improve to reduce the sickness absenteeism. The organisational factors that emerge from this questionnaire are compared to the findings of the questionnaire for all employees of the organisation. In this way it is investigated how employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation and which organisational factors should be improved. Because both questionnaires are used to examine the second and the third research question, the questionnaires are explained in chapter 3.5. In that chapter attention is paid to the selection of respondents, the development of the questionnaires and the analysis of the data for both questionnaires in order to answer the second and third research question.

3.5 Data gathering and analysis

3.5.1 Online questionnaire for all employees of the organisation

The online questionnaire for all employees of the organisation is used to examine both the second and third research question. The main part of this questionnaire focuses on the third research question to investigate to what extent the organisational factors of the literature study that can reduce sickness absenteeism in the organisation are present. In this way at the same time it is investigated which aspects the organisation should improve. A small part of the questionnaire focuses on the second research question to examine how the sickness absenteeism opportunity is perceived. Because it concerns the same online questionnaire also the same group of respondents is applicable. The group of respondents, the development of the questionnaire and the analysis of the data for this questionnaire for both research questions are described.

3.5.1.1 Selection of the respondents

All 72 employees of the organisation are asked to fill in this online questionnaire. Both employees with a managerial and a more executive role are asked to participate. In this way it is tried to involve as many employees in the research as possible so that the topic is viewed from a broad perspective. In the weekly work meeting is announced that employees are expected to complete the questionnaire, to improve the response rate. Also, the employees got half an hour of their employer to fill in the questionnaire in their working time. A reminder to fill in the questionnaire was also sent.

Eventually, 67 respondents out of the total of 72 possible respondents completed the online questionnaire (n=67; 93.05%). However, of these questionnaires 3 are filled in incomplete. On the one hand this can be the result of some employees who stopped halfway through the questionnaire and have completed it from the start at a later time. On the other hand this could be questionnaires of employees who decided after some questions not to continue. Since it is not known whether these questionnaires are of respondents who have already completed the questionnaire as a whole, or of new respondents, it is decided to delete these data. So in total there are 64 questionnaires which are included in the analysis. This is a response rate of 88.89% (n=64).

3.5.1.2 Development of the questionnaire

The online questionnaire to answer the second and third research question is developed based on two existing validated questionnaires: de Vragenlijst Beleving en Beoordeling van de Arbeid (VBBA; '*Questionnaire Experiencing and Assessing of Employment'*) and the InternetSpiegel (IS; *'Internet Mirror'*). A structured questionnaire is used because it provides a good opportunity to collect information from many people at the same time (Baarda et al., 2000; Gadourek, 1972). Besides this, it also allows asking many different aspects within a short time (Baarda & De Goede, 1997) and a major advantage is that all respondents answer exactly the same questions and may have a choice from exactly the same answers options. This makes the differences in responses comparable (Baarda & De Goede, 1997).

Both questionnaires, the VBBA and de IS, are focused on how employees experience and assess their work. The aim of these questionnaires is signalling those aspects in the work situation that need improvement in order to formulate recommendations for the removal of these bottlenecks and to prevent reduced functioning. So both the VBBA and the IS measure aspects which may influence the arising of sickness absenteeism in an organisation. Only those scales with questions are used which are related to the organisational factors from the literature study that can lead to sickness absenteeism (organisational factors of Figure 10). In addition, the scales with questions are used that are related to the factors of the literature study which measure the perceived absenteeism opportunity (the sickness absenteeism policy, the employment conditions and the absenteeism culture). First, the VBBA and IS will be briefly explained here.

The VBBA-scales

In the VBBA the emphasis lies on the psychosocial work load and on the work stress which can lead to sickness absenteeism (Van Veldhoven, Meijman, Broersen & Fortuin, 2002). The VBBA is the most widely used instrument in the health and safety practice at work in the Netherlands. The VBBA uses scales with various comparable questions that cover a problem area. In this way, the same subject is examined from different points of view in order to increase the reliability of the questionnaire.

The VBBA is developed based on an analysis of 50 existing instruments in the field of psychosocial work load and work stress. The VBBA has been used among hundreds of thousands of employees in thousands of organisations. Research on the quality of the scales with questions show that the scales score well on reliability, construct validity and predictive validity. The VBBA appears to be able to significantly predict the individual sickness absenteeism (Van Veldhoven et al., 2002). A study shows that the explained variance for the reporting frequency was 6% and 8% for the duration of absence. It is stated that these rates appear to be low, but that this may be seen as maximum based on other Dutch absenteeism research (Smulders & De Winter, 1993).

The VBBA has copyright, so permission for the use of the questionnaire is obtained from the authors. This is obtained through the signing of a declaration which declares to use proper citations, only using whole scales with questions and to send a final version of this research.

The IS-scales

The IS is another widely used instrument for measuring aspects relating to sickness absenteeism in organisations. In the IS the emphasis is more on employee satisfaction. It provides insight in how people experience different aspects that are important for their job satisfaction and therefore for their effectiveness. The IS is developed by TNS NIPO (a Dutch public opinion polling organisation) and is widely used by government agencies. As with the VBBA, next to the work load, other topics are included such as employee satisfaction,

motivation, need for recovery, autonomy, working conditions, aggression and assertiveness et cetera.

The IS uses standardised scales with questions that are validated by scientific research, so that they measure what they supposed to measure. The questionnaire does not have a fixed content, but depending on the research question different scales with questions can be combined (Medewerkersonderzoek, 2013).

The development of the online questionnaire for all employees of the organisation is based on the conceptual model of Figure 10 of the literature study. In this conceptual model, different categories of factors emerged from the literature which needs to be examined in this study. For the absenteeism opportunity, to answer the second research question, this concerns the sickness absenteeism policy, the employment conditions and the sickness absenteeism culture. For the organisational factors to answer the third research question, this includes the physical and environmental factors, psychological factors, psychosocial factors, work characteristics and the absenteeism opportunity. Each category has its own subcategories with factors that may affect the sickness absenteeism. To develop the questionnaire for each factor, first it is examined if a scale with questions of the VBBA can be used (see Table 5).

In Table 5 it can be seen that the organisational factors 'high cognitive demands', 'high work load', 'poor social support', 'poor work content', 'few control options', 'few training and development opportunities', 'low work time control', 'low job satisfaction' and 'good employment conditions' are measured with scales of the VBBA about these subjects. Some factors are measured with more than one scale with questions. The factor 'poor social support' is measured with the sub-scales 'relationship with colleagues', 'relationship with direct leaders' and 'information'. The factor 'poor work content' is measured with the sub-scales 'uncertainty about the task', 'variety of work' and 'pace and amount of work'. The factor 'few control options' is measured with the sub-scales 'autonomy in work' and 'participation'. The factor 'few training and development opportunities' is measured with the sub-scales 'learning opportunities' and 'career opportunities'. And finally the scale 'low job satisfaction' is measured with the sub-scales 'work pleasure' and 'reward'.

For example, the scale 'social support' is measured with three subscales. One subscale is 'relationship with colleagues'. This scale is measures with 9 questions as for example the following questions: *'Can you rely on your colleagues when there are some difficulties in your work?'* and *'Do you feel appreciated by your colleagues at the workplace?'* All scales with questions are displayed in Appendix C.

When a scale was not included in the VBBA, or when a scale could not be used completely, it was examined if a scale with questions of the IS could be used. In Table 5 it can be seen that the factors 'poor working posture', 'poor work environment' and 'much unacceptable behaviour' are measured with IS-scales about these subjects. To get some additional information about the background and state of health of the employees, two IS-scales 'health complaints' and 'background information' are also used. Only complete scales with questions of the VBBA and IS are used because the scales are designed to measure the same concept in different ways with questions that belong together. Next to this, it is a requirement for using these questions. An exception is the factor 'low work time control'. This is measured with four separate questions of the VBBA, since it concerns the scale 'other questions about characteristics of the work'.

When, for a (sub) category, no scale of the VBBA or IS is available, there is searched for an alternative scale or new questions were prepared. For this reason, it can be seen in Table 5 that the factor 'poor self-efficacy' was not included in the VBBA or IS. Here a shortened version of the OCCSEFF questionnaire (Occupational Self-efficacy Scale) of Schyns and Collani (2002) is used. This is an existing validated questionnaire to measure self-

efficacy and consists of six items. A higher score on the questions indicates a higher occupational self-efficacy.

As can be seen in Table 5 for some organisational factors new questions are developed. For the factor ‘poor living habits’, four questions are developed based on the subjects ‘movement’ and ‘healthy food’ of employees of the BRAVO questionnaire (meer Bewegen, stoppen met Roken, matig Alcohol, gezonde Voeding, en Ontspanning; *‘more exercise, stop smoking, little alcohol, healthy food and relaxation’*), because this category is missing in the VBBA and IS. The purpose of the BRAVO questionnaire is to give a reliable picture of the lifestyle of an employee. This questionnaire of the SKB (Stichting Kwaliteitsbevordering van Bedrijfsgezondheidszorg; ‘Foundation for Quality and Stimulation of Occupational Health’) is designed to measure the lifestyle of employees (BRAVO Company Check, 2013). This questionnaire is not validated.

Finally, for the factors ‘effective absenteeism policy’ and ‘strong absenteeism culture’, factors of the second research question, no questions from the IS or VBBA could be used. Therefore new questions are prepared for these subcategories.

Table 5

Overview of the Used Scales

Factors	VBBA-scale	IS-scale	OCCSEFF-scale	New developed scales
Organisational factor*				
Physical and environmental				
Working posture		x		
Work environment		x		
Living habits				x
Psychological				
Cognitive load	x			
Self-efficacy			x	
Psychosocial				
Unacceptable behaviour		x		
Work load	x			
Social support				
Relationship with colleagues	x			
Relationship with direct leaders	x			
Information	x			
Work characteristics				
Work content				
Uncertainty about the task	x			
Variety of work	x			
Pace of work and amount of work	x			
Control options				
Autonomy in the work	x			
Participation	x			
Training and development opportunities				
Learning opportunities	x			
Career opportunities	x			
Work-life balance	x			
Work time control	x			
Job satisfaction				
Pleasure in work	x			
Reward	x			
Sickness absenteeism opportunity				
Sickness absenteeism policy				x
Employment conditions	x			
Sickness absenteeism culture				x
Remaining factors				
Health complaints		x		
Background questions		x		

** = Italicised words are sub-scales of the VBBA-scale with which the organisational factor is measured*

Concerning the response options, only closed-ended questions are used. In this way all respondents will answer the question using the same provided response options. This type of question is usually quicker and easier to answer and responses are easier to compare (Creswell, 2002; Saunders et al., 2009). The VBBA uses four point scale questions with the answer options ‘always’, ‘often’, ‘sometimes’ and ‘never’. For the scales ‘work-load’, ‘work-life balance’ and the scale ‘job satisfaction’ the existing response options ‘yes’ and ‘no’ from the VBBA are used. The IS uses propositions with the five point scale answer options ‘strongly agree’, ‘agree’, ‘neither agree nor disagree’, ‘disagree’ and ‘strongly disagree’.

The ‘newly developed questions’ have in some cases different response options. The scale ‘lifestyle’ has the existing response options of the BRAVO questionnaire on which the questions are based. These are ‘yes’, ‘still not optimal’ and ‘no’. For the scale ‘self-efficacy’ is made use of the existing response options of Schyns and Collani (2002). These are the same as for the IS-scales. The scales ‘effective absenteeism policy’ and ‘absenteeism culture’ are developed by the researcher and have the possible response options ‘not at all’, ‘hardly’, ‘to a reasonable extent’, ‘to a large extent’, and ‘to a very high degree’. This is a five-point scale. For the ‘other questions’ was also made use of different response options.

The questions are to a limited extend formulated both in positive and negative terms to prevent respondents only to tick to the right or left side of the answer options (Saunders et al., 2009). However, no additional negative questions are formulated, which may be desirable, because existing scales are used.

3.5.1.3 Procedure

The questionnaire is distributed electronically over the internet to all employees of the organisation. This is a good way to collect all the questionnaires (Saunders et al., 2009). The website thesistool.com is used to make an online version of the questionnaire. The questionnaire is accompanied by a demand email, which explains the purpose of the survey (Saunders et al., 2009). In this demand letter it is emphasised that the questionnaire will be analysed anonymously, because the employees may experience it as ‘threatening’ that they are asked to give their personal opinion about a lot of aspects of their organisation. The demand letter for completing the online survey is displayed in Appendix A. The introductory text of the online questionnaire is in Appendix B, the developed individual questionnaire for the employees of the organisation is in Appendix C and finally the closing text of the online questionnaire is in Appendix D. In Appendix E a reminder email is displayed.

Before sending the questionnaire to the respondents it is checked by supervisors of the organisation and a supervisor of the university to ensure and optimise the quality of the questionnaire. In addition, the entire data collection process is tested on a small scale with a pilot (Giesen, Meertens, Vis-Visschers & Beukhorst, 2010). In this way the questionnaire could have been refined so that respondents would have no problems in answering the questions and there would be no problems in collecting the data (Saunders et al., 2009). Important sources of information for the functioning of the questionnaire are in the first place the respondents (Giesen et al., 2010). Therefore, three persons of other organisations which are representative for the target group, young male employees with an academic and technical background, participated in the pilot. Testing a questionnaire can also be done by asking a group of experts to evaluate the questionnaire. Especially for the comprehensibility, sequence and structure of the questions it is good to involve ‘content experts’ (Giesen et al., 2010). Therefore, also two content experts participated.

This pilot group (n=5) is asked by email to read the demand letter for completing the online questionnaire and to fill in the questionnaire. The pilot group is also asked to answer some evaluation questions about the demand letter and the online questionnaire and to send it back by email. In the pilot attention is paid to nine different parts: the demand letter (1), the introduction of the online questionnaire (2), the length of the questionnaire (3), the structure of the questionnaire (4), the newly developed questions of the category ‘lifestyle’ and its response options (5), the newly developed questions of the category ‘sickness absenteeism policy’ and its response options (6), the newly developed questions of the category ‘sickness absenteeism culture’ and its response options (7), the concluding text (8) and finally there was room for other comments (9). Examples of the evaluation questions are: *‘Is the demand letter clearly formulated? If not, what could be improved?; ‘How long does it take to complete the online questionnaire?’’; Is the order of the questions clear? If not, what could be improved?’*

and '*Are the questions related to the category 'lifestyle' clearly formulated? If not, what could be improved?'*

In this way, all self-formulated aspects of the questionnaire are checked, so that they could be improved as a result of the pilot. Since the existing scales with questions may not be adapted, no attention is paid to the content of these questions in this pilot. Furthermore, in the pilot only open evaluation questions are used to get as much input from the pilot group and to make sure that they could answer in their own words and would not be influenced by existing response options (Baarda & De Goede, 1997, Patton, 1990; Saunders et al., 2009; Fink, 2003). This could ensure that respondents give their own opinion more precisely (Rossi et al., 1983), which may yield more valuable information in the pilot.

As a result of this pilot, the questionnaire is improved. For example, a deadline for completing the questionnaire is added to the demand letter and the information on how many questions an average block of questions contains is added to the introduction. The structure turned out to be good, there is only added how many questions a respondent can expect every block. Three questions from the 'sickness absenteeism policy' are reformulated in response to the pilot. Also the response option '*not applicable, because I have never reported sick*' is added; otherwise some questions could not be answered. The pilot also showed that that completing the questionnaire takes about 20 to 30 minutes.

3.5.1.4 Data analysis

The employees complete the questionnaire in digital form. The data of the closed questions are collected and analysed with SPSS, a software package used for statistical analysis. First the questionnaires are checked with SPSS for outliers and errors. It appeared that the data was represented correctly and that it could be analysed except for the 'background questions'. In the survey some background questions were asked to the employees to give an impression of the employees who participated in this study. They were asked for their gender, age, number of years that they are working in the organisation and the number of hours they work every week according to their contract with the organisation. This had also been done to examine the relationship between the answers given in the survey and the background of the respondents.

However, these background information of the respondents turned out not to be useful. Despite having repeatedly emphasised towards the respondents that the survey could be completed anonymously and also will be analysed anonymously and that analysis will only be done and displayed at organisational level (and not at the individual level). A group of employees was still afraid that the background questions could lead to an individual. This is due to the sensitivity and confidentiality of the subject and the fact that the organisation is not very large so everyone knows each other. The background questions could imply that the identity of a person can be traced. Therefore, a group of employees has declared that they have not answered the background questions truthfully, because they could not skip these questions. With this they have 'polluted' the results and the reliability of the background questions. Also the OR (ondernemingsraad; *'entrepeneurs council'*) has asked to delete the data of the background questions. Thus these background questions are not usable for further analyses or to give an impression of the employees who participated in this study.

For all other organisational factors it is examined what the average outcome and the total score of the answers is. This is calculated for each question and for each scale as a whole. Hereby, negatively formulated closed questions or statements are first recoded. For the analysis the VBBA has its own method to analyse the data, which is used here (Van Veldhoven et al., 2002). All questions are coded with the most unfavourable response option yields the most points. The most desirable response option gets no points. The score for each question varies from 0 to 3 points, because a four-point scale is used. For the scales 'work-

load', 'work-life balance' and the scale 'job satisfaction' the response options are 'yes' and 'no'. So the score for each question varies from 0 to 1 point, because a two-point scale is used here. The negative formulated questions are 'rescaled' before calculating the score.

In the calculation of the scale scores, the scores are standardised to a score between 0 and 100. This means that the number of points scored is divided by the maximum possible score and is multiplied by 100:

$$Scale\ score = \frac{total\ score}{maximum\ score \times number\ of\ items\ answered} \times 100$$

A scale score of 100 is thus achieved if, with all questions answered, the most unfavourable answer is given. The most favourable responses lead to a scale score of 0 (Van Veldhoven et al., 2002).

An exception is the subcategory 'working hours' which is measured with four separate questions of the VBBA, since it concerns the scale 'other questions about characteristics of the work'. In calculating and interpreting the answers it is taken into account that this is not a full-scale.

The IS and the 'newly developed' questions have not a standard method to analyse the data. A scale score for a five-point scale is calculated here for the IS and the 'self-efficacy'. An average of the given answers for each question of the subcategories 'lifestyle', 'effective absenteeism policy', 'absenteeism culture' and 'other questions' is calculated. With these subcategories a score for the whole scale could not have been calculated, because the questions are not designed for this purpose but are independent questions. The answers 'not applicable, because I have never reported sick' are excluded from the calculation.

3.5.2 Online questionnaire for the long-term and frequently sick employees

Besides the questionnaire for all employees, an online questionnaire for the long-term and frequently sick employees is used. This questionnaire is also used to investigate both what the perceived absenteeism opportunity is (research question 2) and what organisational factors may be improved to reduce the sickness absenteeism at the organisation (research question 3).

3.5.2.1 Selection of the respondents

A selection of the long-term and frequently sick employees is made to ask to fill in this short online questionnaire with a few questions about the sickness absenteeism procedure in the organisation. This is a non-probability sample in which certain people, those which represent some characteristics that are important to the study, are more likely to participate than others (Baarda, De Goede & Kalmijn, 2000; Creswell, 2002).

A selection of frequently and long-term sick employees is made to gather as much as possible valuable information about the perceived absenteeism opportunity and the organisational factors that may be improved to reduce the sickness absenteeism. The frequently, or short-term, sick employees are central in this study. However, the long-term sick employees are also involved, because they are often 'arisen from' the frequently short-term sickness absenteeism. Besides, some 'long-term sick employees' also belong to the 'frequently sick employees'. In addition, they also have a more than average amount of experience with how the organisation deals with sickness absenteeism which is the focus of this questionnaire. When only the frequently sick employees are involved, and not the long-term sick employees, this will provide very little input. Therefore, both the long-term and frequently sick employees are involved.

For making the selection the database with sickness absenteeism statistics of the organisation is used. This is the IT&Care database of Human Capital Care Arbozorg B.V. Here the most recent statistics, of May 2013, are used to make a selection. Therefore, only the

employees are involved that have a personal sickness absenteeism rate above the national average of 3.5%. This concerns employees that also have a high absenteeism frequency (≥ 3 sickness reports) and were absent for more than 15 days and it concerns employees which have a high total duration of absence (≥15 days of absence) regardless the absenteeism frequency. In total these criteria hold true for 16 employees. The difficulty with this questionnaire is that sick employees may not regularly read their email of the organisation which may have a negative influence on the level of responses. However, 11 long-term or frequently sick employees participated (n=11; 68.75%). These long-term and frequently sick employees were also asked to complete the previously mentioned questionnaire for all employees of the organisation.

3.5.2.2 Development of the questionnaire

This questionnaire for long-term and frequently sick employees consists of just a few questions (see Appendix H). The questions focus on what these employees perceive as 'good' about the way the organisation deals with sickness absenteeism and what can be improved in the organisation concerning sickness absenteeism. The questions focus also on what can be seen as possible causes of the high rate of sickness absenteeism in the organisation and what employees could do by themselves to reduce the sickness absenteeism. In this way it is investigated how these employees perceive the absenteeism opportunity at the organisation (second research question). At the same time it is investigated for the third research question if organisational factors emerge which may be improved to reduce the sickness absenteeism.

An example of a question is: '*What could the organisation have done so that you had been sick less frequently/for a shorter time?'* and *'What could you have done by yourself so that you had been sick less frequently/for a shorter time?* In contrast with the general questionnaire for all employees, in this questionnaire only open questions are used. These open questions could ensure that the topic is discussed at a deeper level (Baarda & De Goede, 1997). The open questions also made it possible for respondents to answer entirely in their own words (Patton, 1990; Saunders et al., 2009; Fink, 2003) and that respondents are not influenced by the given alternatives. This may ensure that respondents formulate their opinion very precise and that therefore a greater diversity of responses may occur (Rossi et al., 1983; Creswell, 2002).

Given the confidentiality of the subject there is chosen for an online questionnaire instead of interviews, because the employees may experience it as 'threatening' when they have been selected to participate in an interview to talk about sickness absenteeism. Also, it is very difficult to participate 'anonymous', because the employees work in teams and this makes it difficult to participate in the interview unnoticed. So to guarantee the anonymity, there has been chosen for a digital questionnaire so that employees can fill in the questionnaire anonymous and in the time and on the place they prefer.

3.5.2.3 Procedure

The questionnaire and a demand letter are sent by email to the 16 selected long-term and frequently sick employees. The website thesistool.com is used to make an online version of the questionnaire. In the demand letter it is emphasised that the questionnaire is analysed anonymously. The demand letter, the introductory text of the questionnaire, the questionnaire, the final closing text of the questionnaire and the reminder email are displayed in Appendix F to J.

Before sending the questionnaire to the respondents it is checked by and discussed with the supervisors of the organisation and a supervisor of the university. The accompanying texts, the demand email and the reminder email are also checked and approved by two supervisors of the organisation. On the one hand this is done to improve the quality of the

survey. On the other hand this is done given the sensitivity of the subject. It is very important that employees understand why they are selected to fill in this additional questionnaire.

3.5.2.4 Data analysis

The results of this questionnaire with open questions are analysed by using the data analysing procedure of Miles and Huberman (1994). Their procedure can be divided into: data reduction, data display and drawing conclusions and verification. By the phase of 'data reduction' the unnecessary data is omitted. For example, comments that respondents had 'no answer' to a question are eliminated. Also the data was made anonymous. Then, in the next phase of 'data display', the data are clearly organised and combined. The goal was to find similarities and differences in the responses. If a text fragment received a label, in the rest of the answers it is checked whether the same label could be given to other text fragments. If several times a reference was made to the same label, then it was checked to what extent the fragments have something in common and what differences there are. The purpose of this comparison is to form categories and to label them with the most appropriate theme. Themes of answers are made for labels which were mentioned by more than 3 respondents.

Then, for the second research question, the found themes of answers are compared to the factors of the literature study which measure the absenteeism opportunity. These are the effectiveness of the absenteeism policy, the quality of the employment conditions and the strength of the absenteeism culture with which the actual absenteeism opportunity also is measured. Together with the findings of the questionnaire for all employees of the organisation these findings are compared to the actual sickness absenteeism opportunity. In this way it is investigated what the difference between the actual and the perceived sickness absenteeism opportunity at the organisation is. Besides this, for the third research question, the found themes of answers are compared to the organisational factors of the literature study. In this way, together with the findings of the questionnaire for all employees of the organisation, it is investigated what should be improved at the organisation to reduce the sickness absenteeism.

3.6 Reliability and validity

In this study, the reliability and validity of the used method is taken into account. Reliability refers to which extend the data collection techniques and analysis procedures will yield consistent findings (Saunders et al., 2009; Miles & Huberman, 1994). It is about the robustness of the used method and, in particular, whether or not it will produce consistent findings at different times and under different conditions (Saunders et al., 2009). Besides that, the validity concerns with whether the findings are really about what they appear to be about (Saunders et al., 2009). Here the content validity refers to the extent to which the measurement instruments provide adequate coverage of the investigated questions. For each instrument there will be described how the reliability and validity is taken into account.

3.6.1 Analysis of the sickness absenteeism statistics by the researcher

To answer the first research question, the sickness absenteeism statistics of the organisation are analysed. In this case the reliability is taken into account because the analysis of the sickness absenteeism statistics by the researcher is done again and verified by the occupational health physician. In this way the findings of the researcher are checked. Also, the validity is taken into account because the questions with which the statistics are analysed are based on the literature study about what sickness absenteeism entails.

3.6.2 Interview with the occupational health physician

As mentioned, for answering the first research question an interview with the occupational health physician is also used. In this case the reliability is taken into account by the use of a

sound recording during the interview. This way the data could also be analysed at a later time. This is called replication, which means that through repetition it can be checked if the same data emerge (Wester, 1987). Also the validity is taken into account by using a literature-based and standardised interview schedule to identify the key information in a systematic way (Rossi et al., 1983). The interview schedule is also discussed with and checked by supervisors of the organisation and a supervisor of the university (Baarda, De Goede & Teunissen, 1995).

3.6.3 Analysis of the policy documents about sickness absenteeism

To answer the second research question, the policy documents about sickness absenteeism are analysed. For this part of the research the validity is taken into account by using questions to analyse the policy documents which are based on the literature study.

3.6.4 Online questionnaire for all employees of the organisation

3.6.4.1 Reliability

To answer the second and third research question first an online questionnaire for all employees of the organisation is used. The reliability is taken into account in a number of ways. First, a threat to reliability is the 'subject or participant bias', which means that 'respondents may say what they think their bosses want them to say'. Therefore, the anonymity of the respondents is ensured for completing and analysing this questionnaire. Also, the researcher was an independent person from outside the organisation (Saunders et al., 2009). This does not wholly eliminate this threat, but it can help to reduce it (Baarda et al., 2000). This contributes to the reliability of the questionnaire for all employees of the organisation. It was also beneficial for the reliability that the used VBBA-scales, IS-scales and OCCSEFF-scale consist of various questions to assess the same subject. With the use of various comparable questions that cover a subject, the reliability of the questionnaire is increased, because the same subject is examined from different points of view.

For each sub-scale of the questionnaire for all employees of the organisation was also calculated what the reliability of the questions is. Here the negatively formulated questions are first 'rescaled'. Cronbach's Alpha is used as an indication for the reliability. A reliability higher than 0.70 is acceptable, 0.80 is good, 0.90 is very good and 0.95 is outstanding (DeVellis, 2003; Drenth & Sijtsma, 1990). More items in a subscale often yield a higher reliability. Therefore, scales with less than 10 items often have a low Cronbach's Alpha. At such small scales, it is more suitable to compute the mean inter-item correlation for the items. A reliable scale has an optimal range, the difference between minimum and maximum, for the inter-item correlation of 0.2 to 0.4 (Briggs & Cheek, 1986). For scales with a low Cronbach's alpha (<0.70) this inter-item correlation has been calculated to see if conclusions could be drawn from the scales as a whole or that questions should be analysed separately.

Table 6 contains a summary of the calculated reliability for the used VBBA-scales. It can be seen that the reliability of the scales in the used questionnaire is comparable to the reliability at the scale construction research (Van Veldhoven, 1993; Van Veldhoven 1996). For almost all scales it can be stated that the reliability is 'good' or even 'very good'. The VBBA-scales 'work time control' and 'employment conditions' are not shown in this table. These questions should be analysed separately, because the reliability (Cronbach's Alpha and the inter-item correlation) for these scales as a whole is insufficient.

Table 6

Reliability of the Used VBBA-Scales, 'New Scales' and IS-scales

Scale	N_{items}	Cronbach's Alpha scale development research	Cronbach's Alpha questionnaire sickness absenteeism
VBBA-scale*			
Cognitive load	7	.87	.89
Work load	11	.87	.85
Social support			
Relationship with colleagues	9	.87	.82
Relationship with direct leaders	9	.90	.91
Information	7	.83	.80
Work content			
Uncertainty about the task	5	.81	.80
Variety of work	6	.82	.79
Pace of work and amount of work	11	.89	.82
Control options			
Autonomy in the work	11	.90	.91
Participation	8	.85	.90
Training and development opportunities			
Learning opportunities	4	.84	.85
Career opportunities	4	.77	.83
Work-life balance	4	.80	.88
Work time control	4	-	-
Job satisfaction			
Pleasure in work	9	.79	.87
Reward	5	.80	.86
Employment conditions	14	-	-
New scales			
Living habits	4	-	-
Self-efficacy	6	.75	.84
Sickness absenteeism policy	8	-	-
Sickness absenteeism culture	5	-	-
IS-scale	**N_{items}**	**Cronbach's Alpha**	**Inter-item correlation**
Working posture	3	.53	.37 (.22 to .61)
Work environment	6	.74	.37 (.21 to .49)
Unacceptable behaviour	6	.85	-
Health complaints	5	-	-
Background questions	4	-	-

** = Italicised words are sub-scales of the VBBA-scale with which the organisational factor is measured*

Table 6 also contains a summary of the reliability of the 'newly constructed scales'. Here the scales with questions of 'living habits', 'sickness absenteeism policy' and 'sickness absenteeism culture' cannot be analysed as a scale. The scores on these scales should be analysed for each question separately. Cronbach's Alpha and the inter-item correlation are here insufficient and the scales are not designed to use as a whole. The scale 'self-efficacy' is an existing instrument with a Cronbach's Alpha of 0.75. In this study, the Cronbach's Alpha turned out to be 0.84. This scale can thus be used as a whole in order to measure the self-efficacy.

Finally, the reliability of the IS-scales is calculated. The scales 'working posture' and 'working environment' score too low on the reliability calculated with Cronbach's Alpha. This may be because these scales consist of very few questions; they score sufficient on the inter-item correlation. The scale 'unacceptable behaviour' seems reliable. Besides this, for the scale 'health complaints' the reliability is not calculated, because these questions should be analysed separately. For the scale with 'background questions' about gender, age, years of working in the organisation and contract hours, logically the reliability is not calculated.

3.6.4.2 Validity

For the questionnaire for all employees in the organisation, the validity is also taken into account. Therefore, the questions in the questionnaire are based on a careful literature study and a prior discussion with and check by supervisors of the organisation and a supervisor of the university. This is beneficial for the quality of the online questionnaires (Baarda et al., 2000; Creswell, 2002). They were asked to comment on the representativeness and suitability of the questions (Saunders et al., 2009). This is also beneficial for the internal validity, which refers to the ability of the used questions to measure what it intends to measure (Saunders et al., 2009; Miles & Huberman, 1994). It is also beneficial for the validity that the online demand letter and questionnaire for all employees is checked by a pilot group of 'representative respondents' and 'content experts'.

Furthermore, the individual questionnaire for all employees is for the vast majority developed based on existing validated and well-tested questionnaires: the VBBA-scales, IS-scales and the OCCSEFF-scale. Also, for the analysis of the VBBA-scales the accompanying validated procedure to analyse the data is used (Van Veldhoven et al., 2002).

3.6.5 Online questionnaire for long-term and frequently sick employees

3.6.5.1 Reliability

To answer the second and third research question, also an additional questionnaire for the long-term and frequently sick employees in the organisation was used. With this questionnaire the reliability was also taken into account by ensuring the anonymity of the respondents when completing and analysing this questionnaire. Also, here the researcher was an independent person from outside the organisation. This way there has been tried to reduce the 'subject or participant bias' and to contribute to the reliability of this questionnaire (Saunders et al., 2009; Baarda et al., 2000).

3.6.5.2 Validity

Concerning the validity, the questions in the questionnaire were reviewed by supervisors of the organisation and a supervisor of the university. This is beneficial for the quality of the questionnaire (Baarda et al., 2000; Creswell, 2002). They were asked to comment on the representativeness and suitability of the questions in the context of the internal validity. This refers to the ability of the used questions to measure what it intends to measure (Saunders et al., 2009; Miles & Huberman, 1994). Also a systematic way of data-analysis was used in accordance with the steps of Miles and Huberman (1994). This way there has been tried to identify the key information from the analysis in a systematic way what contributes to the quality of the interpretation of the data (Rossi et al., 1983).

3.7 Summary

In summary, in this chapter it is described how the three research questions are investigated. Attention was paid to the research approach, the objects of research, the research instruments and the analysis of the data. Finally, the reliability and validity of the methods was discussed.

It is explained that the first research question is investigated by an analysis of the sickness absenteeism statistics of the organisation and an interview with the occupational health physician of the organisation. The second research question is investigated by a document analysis to investigate the actual sickness absenteeism opportunity. Besides this, an online questionnaire for all employees of the organisation and an additional online questionnaire for the long-term and frequently sick employees were used to investigate what the perceived sickness absenteeism opportunity is. These questionnaires are also used to investigate the third research question. There has been described how the research instruments and data analysis methods are based on the findings of the literature study. In the next chapter the findings are presented which this method has yielded.

4. Results

First it is investigated what the current degree of sickness absenteeism in the organisation is by analysing the available sickness absenteeism statistics and an interview with the occupational health physician of the organisation (4.1). Then, based on a document-analysis, it is investigated which measures to monitor and reduce the sickness absenteeism are present in the organisation. Documents about the sickness absenteeism policy of the organisation are analysed to investigate what the actual sickness absenteeism opportunity is (4.2). By the use of a questionnaire for all employees of the organisation and a questionnaire for the long-term and frequently sick employees it was also investigated what the perceived absenteeism opportunity at the organisation is. The results of this questionnaire for all employees are first described (4.3). Then the results of the questionnaire for all employees are also discussed by describing how employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation (4.4). Subsequently, the results of the questionnaire for the long-term and frequently sick employees are described (4.5). In this way it was investigated how these employees perceive the absenteeism opportunity at the organisation and whether organisational factors emerge which may be improved to reduce the sickness absenteeism. At the end the results are summarised (4.6).

4.1 The sickness absenteeism at the organisation

4.1.1 Analysis of the sickness absenteeism statistics

By analysing the sickness absenteeism statistics, attention is paid to the absenteeism rate, the reporting frequency, the average duration of absence, the type of sickness absenteeism and the nature of the sickness absenteeism. Out of the literature study emerged that sickness absenteeism can be described with these aspects. Additionally, the sickness absenteeism statistics are analysed by month, by gender and by age group.

4.1.1.1 Sickness absenteeism statistics for 1 February 2009 to 31 January 2013

For the absenteeism rates a scale is used from 0% to 100% where a higher score (closer to 100%) is an indication of a higher percentage of absenteeism in the organisation. It stands out that in recent years this percentage is higher than the national average of 3.5% in companies with 10 to 100 employees (CBS, 2013). A peak can be seen in the year 2011-2012 with 6.74%. The absenteeism rate of 2012-2013 is 4.56%. This is too high compared to the nationwide average for companies of similar size (see Table 7).

In addition, for the reporting frequency a scale is used from 0 to 365 sick reports where a higher score (closer to 365 sick reports) is an indication of more sick reports in the organisation. When this frequency of reporting sick is examined, it is seen that employees in the year 2012-2013 report less sick in comparison to the previous two years. The reporting frequency in 2012-2013 is 1.73. However, this reporting frequency is still too high according to the standard of 1.4. Only the year 2009-2010 has a very low reporting frequency of 0.49 which meets this standard (see Table 7).

To say something about the type of absenteeism, it is also relevant to look at the average duration of absence. For the average duration of absence a scale is used from 0 to 365 where a higher score (closer to 365 days of absence) is an indication of more days of absence in the organisation. There is no known comparable national average amount of days of absence. The average duration of absence seems to have slightly increased, with exception of the year 2010-2011 (see Table 7). When employees report sick the average duration is 16.45 days in the year 2012-2013. When this slightly increased duration of absence is linked to the slightly decreased reporting frequency, it seems therefore that the long-term sickness

absenteeism is increased compared to the short-term sickness absenteeism. After all, the reporting frequency is lower but the duration of absenteeism is longer. This can be further specified by dividing the sickness absenteeism into short-term, medium-term and long-term sickness absenteeism.

Table 7

Absenteeism Rate, Reporting Frequency and Average Duration of Absence 1 Feb. 2009 to 31 Jan. 2013 (N=72)

Period	Absenteeism rate (%)	Reporting frequency	Average duration of absence
2009-2010	4.30*	0.49	14.96
2010-2011	5.45*	1.86**	11.70
2011-2012	6.74*	1.86**	15.37
2012-2013	4.56*	1.73**	16.45

** = Scores higher than the national average absenteeism rate of 3.5%*
***= Scores higher than the standard of 1.4 sick reports*

4.1.1.2 Short-term, medium-term and long-term sickness absenteeism

For the short-term, medium-term and long-term sickness absenteeism rates a scale is used from 0% to 100% where a higher score (closer to 100%) is an indication of a higher percentage of the type of absenteeism in the organisation. There are no known comparable national average absenteeism rates for these three types of sickness absenteeism.

When the sickness absenteeism statistics are divided into short-term, medium-term and long-term absence, it is notable that in recent years the short-term absence (percentage of days of absence with a maximum of 7 days) first increased and then slightly decreased. It remains around the 1.3% in 2012-2013. The medium-term absenteeism (percentage of days of absence with a minimum of 8 and a maximum of 42 days) is 0.67% in the year 2012-2013 and is stable compared to the previous years, except for a peak of 1.63% in the year 2010-2011. The long-term absenteeism (percentage of days of absence with a minimum of 43 days) in the year 2012-2013 is 2.59%. This percentage is twice as high as the short-term absence. All previous years this percentage of long-term absenteeism was quite high. The long-term absence varies between 2.44% and 4.38% (see Table 8).

The great majority of the absenteeism rates are thus explained by the long-term absenteeism. The short-term absenteeism is a much smaller percentage of the total amount of days on which employees are sick, but is also a significant part. Medium-term absence is the lowest of these three types of sickness absenteeism in the last two years.

Table 8

Short-term, Medium-term and Long-term Sickness Absenteeism Rates for the Years 2009 to 2013 (N=72)

Period	Short-term (%)	Medium-term (%)	Long-term (%)
2009-2010	0.34	0.59	3.37
2010-2011	1.37	1.63	2.44
2011-2012	1.67	0.69	4.38
2012-2013	1.30	0.67	2.59

4.1.1.3 Nature of the sickness absenteeism

Furthermore, the causes for the sickness reports are analysed. No distinction could be made between the physical and mental health complaints. For 122 sickness reports of the year 2012-2013 the causes are registered. It turns out that about 50% of the causes for sickness

absenteeism are caused by flu, viruses and fever. This is by far the most registered cause of sickness absenteeism. Next to this, absenteeism caused by stomach or intestinal complaints and headache or migraine both counts about 10% of the causes for sickness absenteeism. The other causes for sickness absenteeism are very diverse. This concerns both physical and mental health complaints.

4.1.1.4 Sickness absenteeism statistics per month

The absenteeism statistics of 2012-2013 can be further specified per month (see Table 9). For the absenteeism rates per month a scale is used from 0% to 100% where a higher score (closer to 100%) is an indication of a higher percentage of absenteeism in the organisation. When the absenteeism rates per month are examined, it stands out that the absenteeism rate at the beginning and at the end of the year is quite high, higher than the standard of 3.5%, and in the middle of the year it decreases (see Table 9). So, a kind of wave movement can be distinguished.

In addition, for the reporting frequency a scale is used from 0 to 365 sick reports where a higher score (closer to 365 sick reports) is an indication of more sick reports in the organisation. Concerning the reporting frequency, a kind of wave movement can also be recognised. Here the reporting frequency is the highest in periods when the absenteeism rate is also the highest. This is at the beginning and at the end of the year (see Table 9). It can be seen that the reporting frequency is higher than the standard of 1.4 from February till May and from October till January. In the months March, October, November and December the reporting frequency is even above the 2.0. The wave movement in the reporting frequency seems to show that at the beginning and at the end of the year employees are more often sick.

For the average duration of absence a scale is used from 0 to 365 where a higher score (closer to 365 days of absence) is an indication of more days of absence in the organisation. There is no known comparable national average amount of days of absence. For the average duration of absence it can also be seen that it decreases in the middle of the year and it is higher at the beginning and at the end of the year (excluding high peaks in September and October). This can also be seen in Table 9.

Table 9

Sickness Absenteeism Statistics Specified per Month for the Year 2012-2013 (N=72)

Month	Absenteeism rate (%)	Reporting frequency	Average duration of absence
February 2012	6.70*	1.77**	40.56
March 2012	7.39*	2.19**	6.55
April 2012	5.64*	1.66**	5.25
May 2012	4.58*	1.76**	3.00
June 2012	3.47	0.91	4.00
July 2012	2.36	-	5.00
August 2012	1.90	0.53	1.67
September 2012	2.77	1.25	44.50
October 2012	4.43*	3.20**	44.78
November 2012	5.07*	3.44**	2.78
December 2012	5.22*	2.13**	7.83
January 2013	5.37*	1.78**	5.55
Total	4.56*	1.73**	16.45

** = Scores higher than the national average absenteeism rate of 3.5%*

***= Scores higher than the standard of 1.4 sick reports*

4.1.1.5 Sickness absenteeism statistics by gender

When analysing the sickness absenteeism statistics, a distinction can also be made between the absence of men and of women. The statistics do not show how many men and women are involved in the analysis, but only give a total number of respondents (N=72). The analysis gives the absenteeism rate, reporting frequency and average duration for men and women separately, but the involved number of men and women is not specified in the available statistics which are analysed.

The sickness absenteeism rate indicates the number of days of absence in a given period (Geurts & Smulders, 2006) and the national average for organisations of comparable size is 3.5% (CBS, 2013). For the absenteeism rates a scale is used from 0% to 100% where a higher score (closer to 100%) is an indication of a higher percentage of absenteeism in the organisation. As shown in Table 10, the absenteeism rate is much lower for men with 2.95% than for women with 10.87%. The absenteeism rate for men is below the national average absenteeism rate of 3.5%. The absenteeism rate for women is above this national average absenteeism rate.

In addition, for the reporting frequency a scale is used from 0 to 365 sick reports where a higher score (closer to 365 sick reports) is an indication of more sick reports in the organisation. It turned out that men report sick more often, 1.82 compared to 1.44. Both scores are higher than the standard of 1.4 sick reports.

For the average duration of absence a scale is used from 0 to 365 where a higher score (closer to 365 days of absence) is an indication of more days of absence in the organisation. There is no known comparable national average amount of days of absence. The average duration of absence is much higher for women. This is on average for men 11.09 days and for women 42.45 days. The absenteeism rate may be much higher for women because of a larger amount of long-term absenteeism, while men have more to do with short-term absence. This is supported by the results in Table 11.

Table 10

Sickness Absenteeism Statistics Specified by Male and Female for the Year 2012-2013 (Total N=72)

Gender	Absenteeism rate (%)	Reporting frequency	Average duration of absence
Male	2.95	1.81**	11.09
Female	10.87*	1.44**	42.45
Total	4.56*	1.73**	16.45

** = Scores higher than the national average absenteeism rate of 3.5%*
***= Scores higher than the standard of 1.4 sick reports*

Table 11 shows the short-term, medium-term and long-term absenteeism rates specified by gender. For this a scale is used from 0% to 100% where a higher score (closer to 100%) is an indication of a higher percentage of the type of absenteeism in the organisation. There are no known comparable national average absenteeism rates for these three types of sickness absenteeism.Table 11 shows that long-term absenteeism is indeed much higher for women than for men. That is 8.62% compared to 1.06%. Also, the medium-term absenteeism is higher, but with a smaller difference, in fact 0.51% for men compared to 1.26% for women. However, the short-term absence is higher for men with 1.38% compared to 0.99% for women. With this information should be noted that the organisation consists of very few women. This may cause that a few women which are sick for a long period strongly increases the long-term absenteeism rate. The absenteeism statistics for men are more reliable, because this sample is much larger. The statistics do not show the exact number of involved men and women separately.

Table 11

Short-term, Medium-term and Long-term Sickness Absenteeism Rates Specified by Male and Female for the Year 2012-2013 (Total N=72)

Gender	Short-term (%)	Medium-term (%)	Long-term (%)
Male	1.38	0.51	1.06
Female	0.99	1.26	8.62
Total	1.30	0.67	2.59

4.1.1.6 Sickness absenteeism statistics by age group

Finally, in Table 12 a classification of sickness absenteeism statistics is displayed by age for men and women. The statistics do not show the exact number of involved men and women for each age group separately. Only the total number of respondents is known (N=72).

For the absenteeism rates a scale is used from 0% to 100% where a higher score (closer to 100%) is an indication of a higher percentage of absenteeism in the organisation. It seems like the absenteeism rate for the youngest age group (<25 years) and the oldest age group (55-64 years) is the highest in the organisation, in fact 9.45% and 19.71% compared to the middle age groups. However, this could be explained by the fact that these age groups consist of very few respondents. Therefore it could not be said that the absenteeism rate in certain age groups is much higher or lower than for other age groups.

In addition, for the reporting frequency a scale is used from 0 to 365 sick reports where a higher score (closer to 365 sick reports) is an indication of more sick reports in the organisation. The reporting frequency is for all male age groups higher than the standard of 1.4. For female only the age group younger than 25 years has a reporting frequency which is higher than the standard of 1.4. However, the female age groups are not very reliable because these groups consist of a very small amount of respondents.

Finally, for the average duration of absence a scale is used from 0 to 365 where a higher score (closer to 365 days of absence) is an indication of more days of absence in the organisation. There is no known comparable national average amount of days of absence. It can be noticed that the average duration of absence is the highest for the age group of 35 to 44 with a value of 26.68. However, for this can also be noticed that this can be explained by a very high average duration of absence for female in the age group 35 to 44 years.

Table 12

Sickness Absenteeism Statistics Specified by Age Group for the Year 2012-2013 (Total N=72)

Age in years	Absenteeism rate (%)			Reporting frequency			Average duration of absence		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
< 25	-	11.84*	9.45*	-	5.96**	4.76**	-	7.67	7.67
25-34	2.19	3.78*	2.41	1.66**	1.05	1.58**	4.60	5.00	4.63
35-44	3.71*	12.91*	4.98*	1.90**	1.37	1.82**	16.00	112.71	26.68
45-54	1.54	0.88	1.35	1.99**	1.14	1.70**	2.60	2.67	2.62
55-64	-	20.83*	19.71*	-	1.25	1.20	-	3.80	3.80
≥65	-	-	-	-	-	-	-	-	-
Total			4.56*			1.73**			16.45

** = Scores higher than the national average absenteeism rate of 3.5%*

***= Scores higher than the standard of 1.4 sick reports*

4.1.2 Interview with the occupational health physician

The sickness absenteeism statistics were also analysed with the occupational health physician. This way the findings of the analysis of the researcher could be checked and more insight could be obtained on the subject. In the interview, the same aspects of the statistics are analysed and discussed as in the analysis of the researcher. Therefore, attention was paid to the sickness absenteeism rate, the reporting frequency, the duration of absence, the nature of the health complaints, the type of sickness absenteeism (short-term, medium-term and long-term) and the sickness absenteeism specified by month, gender and age group.

In the interview it appeared that the occupational health physician had analysed exactly the same sickness absenteeism statistics. Also exactly the same rates emerged for the sickness absenteeism rate, the reporting frequency, the duration of absence and the other analysed aspects of the sickness absenteeism. Thus the same results as which the researcher had found were discussed with the occupational health physician. Some valuable insights came forward.

Firstly, the occupational health physician confirmed that the sickness absenteeism rate of the organisation is too high. It was stated that this has to do with the remarkably high reporting frequency. Therefore, according to the occupational health physician the focus in the research should be on the short-term sickness absenteeism. She stated that the high reporting frequency gives rise to a too high short-term sickness absenteeism, particularly in the months March, October, November and December. In these months the reporting frequency is above the 2.0. She thinks that this could not only be explained by viruses or flu, but that there may be other reasons why the reporting frequency is extraordinary high. She stated that the short-term sickness absenteeism could also, for example, be explained by possible low job satisfaction of the employees, a poor work-life balance or poor work content (for example too little challenging work). She sees this high reporting frequency as an indication that there is something 'wrong' in the organisation, for example that the absenteeism threshold is not high enough for employees. In her opinion this may cause that employees report sick more easily when they 'don't feel very well', though they were able to work. The occupational health physician stated that the organisation may make improvements concerning the short-term sickness absenteeism, because in her opinion it is partially due to organisational factors.

So the occupational health physician states that it is very important to tackle this short-term absenteeism. She states that this can also be seen as an important indicator for long-term absenteeism. She also thinks that the high reporting frequency may be influenced in a positive way by the organisation, because at this moment it can also exist of 'excuses' to stay sick at home more often or for a longer period. Therefore, she also emphasised that the focus in this research should be on the short-term sickness absenteeism, because here the organisation can make improvements. The occupational health physician brings forward the idea to make agreements to work a few hours at home with employees which normally stay at home with just a cold. This sort of possibilities should be discussed with frequently absent employees. She also thinks that it may be valuable to hold conversations with frequent (more than three times) absent employees, even when they were absent for just one day. This may give valuable information why an employee was absent and possible causes may be identified more easily.

Next to this, the occupational health physician thinks that the focus should not be on the long-term sick employees. Although this is by far the largest part of the sickness absenteeism. She states that the organisation has the long-term sickness absenteeism 'under control', because the long-term sick employees are absent with reasons on which the organisation has no influence.

Concerning the medium-sickness absenteeism, according to the occupation health physician, it is an important finding that this absenteeism rate is very low, because this indicates that the absenteeism policy in the organisation is good. In her opinion the organisation is very involved with sickness absenteeism and copes well with sickness absenteeism. This can be seen in the good rates of the medium-term sickness absenteeism.

Concerning the nature of the sickness absenteeism, it is confirmed by the occupational health physician that about 50% of the causes for sickness absenteeism is caused by flu, viruses and fever. It turns out that on basis of her analysis she can state that the causes of sickness absenteeism consist for more than 50% of flu, viruses and fever. However, according to the occupational health physician it cannot be said if this short-term absenteeism is caused by physical or mental health complaints or a combination of the two.

In the interview attention was also paid to the statistics specified by gender and age. According to the occupational health physician the high rates for the age group of 35 to 44 may be explained by the fact that this can be seen as a 'double load' period. In many cases employees have to combine their career with parenting at this age. This may cause more pressure than they can handle which may lead to absenteeism.

4.2 The actual absenteeism opportunity at the organisation

Documents concerning the sickness absenteeism policy of the organisation are analysed to investigate what the actual sickness absenteeism opportunity is in the organisation. These documents are the company regulations, the employment regulations and the sickness absenteeism protocol. The findings in these documents about sickness absenteeism are categorised as the sickness absenteeism policy (4.2.1), the employment conditions (4.2.2) and the absenteeism culture of the organisation (4.2.3). As described in the literature study, these three factors measure the sickness absenteeism opportunity.

4.2.1 Sickness absenteeism policy

Findings concerning the sickness absenteeism policy are the procedure for reporting sick and the procedure by sickness absenteeism

Procedure for reporting sick - It is described that when an employee is sick, this should be reported before 9.00 am to the project bureau and the team manager. Even when an employee is sick on a day he would not have to work or when he goes home sick. It must be reported to the team manager how long the employee expects to be sick and if tasks should be delegated to colleagues. When the employee doesn't want to mention the reasons for absenteeism, then the employee must contact the Arbo-dienst. The employee must inform the project bureau and the team manager when he is recovered (Intranet of the organisation, 2013).

Procedure by sickness absenteeism - If an employee is sick he may be called by the Arbo-dienst to ask what the reason for absence is. Basically in the third week after reporting sick, the sick employee is asked for a (mandatory) consultation with the occupational health physician of the Arbo-dienst. In the sixth week the Arbo-dienst makes a problem analysis. Such a problem analysis consists of a description of the current situation, with special attention to the limitations of the worker, the bottlenecks in their current positions, the work opportunities of the employee and the employment relations. In addition, there will be identified what the reasons for the absenteeism are, the likelihood that someone can return in his own function and what needs to be done to realise this. The problem analysis is adjusted if necessary. Also, there is always a chance that a home visit or other control takes place (Intranet of the organisation, 2013).

In the eighth week the team manager and the employee make a plan to return healthy at work as soon as possible. The implementation of the plan is regularly evaluated and

adjusted. It may be decided that the employee is going to perform other suitable work. When an employee is sick for eight months then the WAO process (Wet Arbeidsongeschiktheids-verzekering; '*law of occupational disability insurance'*) is started (Intranet of the organisation, 2013).

Besides this, a team manager performs an absence interview with an employee that has frequently reported sick. This happens after the fourth sick report in a period of one year. The aim of this meeting is to direct the attention of the employee to the absenteeism and to find a solution for the problem. If necessary, the team manager discusses, after a period up to three months, the agreements made with the employee and looks again at the amount of absenteeism. The results of the conversation may, with permission of the employee, be discussed with the occupational health physician. In addition, when the employee reports sick for the fifth time within a year, he is automatically invited for a consultation with the occupational health physician (Intranet of the organisation, 2013).

If the workplace is the cause of the sickness absenteeism, the organisation will determine how repetition can be avoided. In this, the Arbo-dienst will be involved. It is stated that throughout the period of sickness absenteeism, depending on the situation, the contact between the organisation and the employee should be maintained on both initiatives. On the first day of return, the team manager has a short conversation with the recovered employee to inform him about the recent developments at work (Intranet of the organisation, 2013).

4.2.2 Employment conditions

Findings concerning the employment conditions are: the working times; the workplace; bullying, discrimination and intimidation; personal development; involvement and questions of employees; the functioning of employees and the rewards.

Working times - At the organisation, the employees have the freedom to fill in their working hours at moments they prefer. But the employee is obliged to announce one week in advance on which times he will work. Basically, the employee works at the office of the organisation, but there is also the possibility to work at home. Hereby, the employee may be required to be present at the office on certain hours to guarantee the continuity and communication in the organisation. A prerequisite is that the chosen working times and location should not limit a good access for customers and colleagues and the quality of the work. The normal daily working hours may not exceed eight hours per day, unless necessary for the progress of the work. Also, after each 5.5 hours of work the employee is obliged to take a half-hour break in their own time. Besides this, every employee may take a break of ten to fifteen minutes every four hours. The employee may decide for himself when and how to take this break (Arbeidsvoorwaarden, 2013; Bedrijfsregelement, 2013; Intranet of the organisation, 2013).

Furthermore, in the employment conditions regulations is described that an employee with full-time employment has the right to 216 hours of holidays, of which 160 hours are required by law. It is also obliged to take a holiday for at least two uninterrupted weeks. In addition, the employee is free on the usual holidays. In agreement with the employer, extra hours of holiday can be bought. Also, every employee who has been employed at the organisation for two years or longer is entitled to take unpaid leave. Visiting a doctor, physiotherapist, dentist, etc. should, whenever possible, take place in the own time of the employee. When an employee submits a request to work more or less, then there should be serious reasons for the organisation for not allowing this. With these guidelines and flexibility with regard to the working hours, the organisation tries to take into account the health of their employees (Arbeidsvoorwaarden, 2013; Bedrijfsregelement, 2013; Intranet of the organisation, 2013).

The workplace - The organisation takes measures at the workplace to take into account the health of their employees. At the organisation it is pursued to do an annually workplace investigation for each employee. In this way the risk of RSI and other complaints can be diminished. Employees can also request for such an investigation by themselves. On the intranet of the organisation there are also tips on how employees should for example use the computer mouse to prevent RSI. There are also resources available in the organisation to prevent health complaints, such as an anti-RSI program, an ergonomic keyboard and other devices. When an employee works at home, he is also entitled to a number of facilities to make working at home easier, such as hardware, furniture and a phone.
Besides this, no more than six hours of computer work may be done per day, with no more than two consecutive hours. Every employee must have a monitor program which reminds the employee of crossing these borders (Intranet of the organisation, 2013).

Bullying, discrimination and intimidation - The organisation also has a policy to deal with bullying, discrimination and intimidation, because this can influence the sickness absenteeism. Inside and outside of the organisation there is a person who can be approached when an employee is confronted with bullying, discrimination and intimidation (Intranet of the organisation, 2013).

Personal development - Within the organisation the professional and personal development of employees is encouraged, because this can also affect the health of employees in the organisation. This development can be initiated by both the employee and the employer. The employee makes a personal development plan with their supervisor with the goals the employee wants to achieve (Arbeidsvoorwaarden, 2013).

Involvement and questions of employees - The organisation is a member of Satar Arbodienst Drienerlo. They have experts who can give advice on absenteeism, health, safety policy and working conditions. Employees can also use their expertise when they have questions. For employees, it is also possible during working meetings to mention matters relating to working conditions and sickness absenteeism (Intranet of the organisation, 2013).

Functioning of employees - Each basic function at the organisation is described on the basis of main tasks, competencies and result areas, so that the employee knows what is expected and how he is evaluated. Once a year, an assessment interview takes place to assess the employees work in the light of his job description, job level, agreements and development. The employee also has the opportunity to assess the organisation, the direct supervisor and the management. In addition, at least once a year each employee has a performance evaluation with the aim to look jointly at the performance of the employee within the organisation. An employee can also request for an additional performance evaluation. In this way expectations of the organisation and employees about the work can be discussed and it provides the opportunity to give feedback (Arbeidsvoorwaarden, 2013; Bedrijfsregelement, 2013).

Rewards - In the organisation employees do not work only for themselves. Achieving the annual long-term strategic goals is also important for the persistence of the organisation. This is only possible if all employees work together. Therefore, the achievement of these goals is valued with a group bonus when the organisation makes profit. The organisation makes no use of extra bonuses for employees, to prevent colleagues feel they are disadvantaged. This may cause tensions and these are not positive for the well-being of the employees and the atmosphere in the organisation (Arbeidsvoorwaarden, 2013; Bedrijfsregelement, 2013).

4.2.3 Absenteeism culture

In the documents it is not clearly described what the sickness absenteeism culture of the organisation is or what is pursued. However, it is repeatedly mentioned that the sickness absenteeism is both the responsibility of the employee and of the organisation together. For

example, maintaining contact between the organisation and the employee during a period of sickness is the responsibility of both. Also, the organisation and the employee should both bring forward matters relating the working conditions and sickness absenteeism. The shared responsibility in matters relating to sickness absenteeism is a characteristic of the absenteeism culture of the organisation.

4.3 The perceived absenteeism opportunity at the organisation

The perceived absenteeism opportunity at the organisation is first measured with a questionnaire for all employees in the organisation. These findings are categorised as the sickness absenteeism policy (4.3.1), the employment conditions (4.3.2) and the absenteeism culture of the organisation (4.3.3). As described, these three factors measure the sickness absenteeism opportunity. The outcomes of this questionnaire for all employees are analysed in two different ways. The outcomes regarding the factors 'sickness absenteeism policy' and 'absenteeism culture of the organisation' may vary from 1 to 5 where 3 is the average score of the scale. Scores close to 1 indicate on average a positive response and scores close to 5 indicate on average a negative response on the question or scale of questions.

The factor 'employment conditions' was measured according to the method of analysis of the VBBA-manual. In the VBBA-manual is emphasised that the scale scores which the research has yielded may not be seen as percentages. The results may also not be interpreted as absolute scores. It is stated that it is the best way to compare the scores with a reference group (Van Veldhoven et al., 2002). However, this is not possible in this study. So some caution in the interpretation of the scores is required. In this study the scores will only be used in order to find out to which extent the various factors are present and which scores seems to stand out. In this case, a scale of 0 to 100 was used. Scores close to 0 indicate a positive response and scores close to 100 indicate a negative response. An explanation of each score is given below.

4.3.1 The sickness absenteeism policy

How the absenteeism policy in the organisation is experienced, is measured by a number of separate questions, as the questions don't come from a complete and reliable scale. The scores vary on a scale from 1 (positive) to 5 (negative) with an average score of 3. In analysing the results, the responses 'not applicable' are removed. The results are displayed in Table 13. The analysis shows that the employees know (average score 3.03) and are satisfied (average score 2.83) about the actions which the organisation takes when sickness absenteeism occurs to a reasonable degree. Both scores are very close to the average score of the scale which means that it cannot clearly be seen as positive or negative. The sickness absenteeism procedure is to a reasonable to barely extent perceived as clear (average score 3.52). Also, employees experience to a reasonable to barely extent that they are checked when they report sick (average score 3.40). These scores are on the negative side of the scale.

Furthermore, to a reasonable degree the employees experience that the organisation keep in contact sufficiently when they are absent because of sickness (average score 2.68). Also, it is experienced to a reasonable degree that sufficient attention is paid to the employees when they return to work after sickness (average score 3.04). Finally, to a reasonable degree employees experience that they are well accompanied when they are sick so that they can resume the work as soon as possible (average score 3.06) and that to a reasonable extent suitable work is offered when they cannot do their own work because of sickness (average score 3.18). These scores are also very close to the average of the scale, which is not clearly positive or negative. An overview of the scores is displayed in Table 13.

Table 13

Factors of the Sickness Absenteeism Policy as Experienced by the Respondents (N=64)

Factors	Scores*
Knowledge of the sickness absenteeism policy	3.03
Satisfaction with the sickness absenteeism policy	2.83
Clearness of the sickness absenteeism policy	3.52
Organisation checks sick reports of employees	3.40
Organisation keeps contact with sick employees	2.68
Attention of the organisation for employees who return to work after sickness	3.04
Accompaniment of sick employees by the organisation	3.06
Organisation offers suitable alternative work when the own work cannot be carried out anymore	3.18

***** *= Scores on a scale from 1 (positive) to 5 (negative) with an average score of 3*

4.3.2 The employment conditions

How the working conditions in the organisation are experienced, is measured by a number of separate questions, because the questions do not form a complete and reliable scale. A VBBA-scale was used from 0 (positive) to 100 (negative). The results are shown in Table 14.

The analysis shows that employees are relatively satisfied with the procedure of taking free days. They are positive that they can have free days when they want (31.25) and they experience that they are not recalled when they have a day off (9.38). The question of whether they have ADV (Arbeidsduurverkorting; *'reduction of working hours'*) is deleted, since not all employees are aware of this term. Also, employees are positive about how the work times and rest times are regulated (34.38). Generally employees think that there are not too many employees working with temporary contracts (17.71) and that the organisation does not work too much with temporary employees (9.90). Besides this, it is experienced that there are sufficient permanent employees (26.56) and that one does not have to regularly assist new employees (22.40). In addition, there are positive results about whether performance appraisals take place (21.35), whether there are opportunities to work part-time (30.73) and if there can be worked on hours that fit with the private situation (27.08). Finally, it is not experienced that the private life is unfavourably affected by irregular working hours (16.67). In total all these scores of the scale 'employment conditions' are experienced as positive. The scores are below the average scale on the positive side. This is an indication that the organisation has good employment conditions.

However, only the scores on the questions whether one believes that vacancies are filled quickly enough and whether replacement is well organised when an employee is sick seem to stand out. Employees do not see this as very positive with scores of 58.33 and 59.90. These scores are above the average score of the scale on the negative side. It should however be kept in mind that these scores are less reliable, since they are measured with a single question and not with a full scale. An overview of the scores is displayed in Table 14.

Table 14

Factors of the Employment Conditions as Experienced by the Respondents (N=64)

Factors	Scores*
Taking free days	31.25
Recall on a day off	9.38
Regulation of work times and rest times	34.38
Amount of employees working with temporary contracts	17.71
Amount of temporary employees in the organisation	9.90
Amount of permanent employees	26.56
Duty to regularly assist new employees	22.40
Performance appraisals take place	21.35
Opportunities to work part-time	30.73
Working on hours that fit with the private situation	27.08
Private life is unfavourably affected by irregular working hours	16.67
Vacancies are filled quick enough	58.33
Replacement is well organised when an employee is sick	59.90

***** *= Scores on a VBBA-scale from 0 (positive) to 100 (negative)*

4.3.3 Sickness absenteeism culture

How the sickness absenteeism culture is experienced at the organisation, is measured by a number of separate questions, since the questions do not form a complete and reliable scale. The scores vary on a scale from 1 (positive) to 5 (negative) with an average score of 3. In analysing the results, the responses 'not applicable' are removed. The results are displayed in Table 15.

The analysis shows that on average the employees find it to a reasonable degree difficult to report sick to colleagues and managers (average score 3.25) and to report sick when they are really sick (average score 3.29). In the analysis of these scores, a higher score (closer to 5) is an indication that employees find it less difficult to report sick.

Remarkable are the high scores on the return to work after sickness and the sickness absenteeism threshold. In analysing these scores, a higher score (closer to 5) is an indication that employees find it less difficult to return to work after sickness. Besides, a higher score (closer to 5) is an indication that the sickness absenteeism threshold is not experienced as high. Employees score on both factors high average scores (closer to 5).The analysis show that the employees find it, after a period of absence due to sickness, hardly difficult with respect to colleagues to return to work (average score 4.02). Also the threshold for reporting sick is hardly experienced as high in the organisation (average score 4.22).

Next to this, it turns out that employees feel that the organisation to a reasonable to hardly extent is critical to sickness absenteeism (3.58). In analysing the scores on this factor, a higher score (closer to 5) is an indication that employees find that the organisation has to a lesser extent a critical attitude to sickness absenteeism.

It should however be kept in mind that these scores are less reliable, since they are measured with a single question and not with a full scale. An overview of the scores is displayed in Table 15.

Table 15

Factors of the Sickness Absenteeism Culture (N=64)

Factors	Scores*
Difficulty to report sick to colleagues and managers	3.25
Difficulty to report sick when an employee is really sick	3.29
Difficulty with respect to colleagues to return to work after sickness	4.02
Height of the sickness absenteeism threshold	4.22
Critical attitude of the organisation to sickness absenteeism	3.58

***** *= Scores on a scale from 1 (positive) to 5 (negative) with an average score of 3*

4.4 Organisational factors which may influence the sickness absenteeism at the organisation

How employees experience the organisational factors which may influence the sickness absenteeism at the organisation is measured with a questionnaire for all employees and a questionnaire for the long-term and frequently sick employees. In this paragraph the findings of the questionnaire for all employees of the organisation are categorised according to the organisational factors which emerged from the literature study: the physical and environmental factors (4.4.1), psychological factors (4.4.2), psychosocial factors (4.4.3) and the work characteristics (4.4.4).

These outcomes of the questionnaire for all employees of the organisation are analysed in two different ways. In the VBBA-manual it is emphasised that the scores for VBBA-scales which the research has yielded may not be seen as percentages. The results may also not be interpreted as absolute scores. It is stated that it is the best way to compare the scores with a reference group (Van Veldhoven et al., 2002). However, this is not possible in this study. Thus some caution in the interpretation of the scores is required. In this study the scores will only be used in order to find out to which extent the various factors are present and which scores seems to stand out. There was made use of a scale of 0 to 100, with scores close to 0 indicating a positive response and scores close to 100 indicating a negative response. For the IS-scales and 'new questions' the scores may vary from 1 to 5, unless otherwise is described. Here an average score close to 0 indicates a positive response and an average score close to 5 indicates a negative response.

At the end, Table 16 gives an overview of the scores that the analysis yields. An explanation of each score is given below. At the end of this chapter also the remaining outcomes concerning the health complaints of employees are described (4.4.5).

4.4.1 Physical and environmental factors

Concerning the physical and environmental factors the working posture, work environment and living habits are analysed. Here a scale from 1 (positive) to 5 (negative) was used. The results of these factors are also displayed in Table 16.

Working posture - When the results of the scale 'poor working posture' are analysed it came forward that employees are positive about the posture in which they must perform their work. The average score on this scale is 2.12. When the scores on the individual questions are analysed, it appears that employees are the least positive about the extent to which they may sufficiently alternate their computer work with other tasks (average score 2.81).

Work environment - Analysis of the data shows that the organisation is positively rated on their working environment. The average score on this scale is 2.18. When the results of the individual questions are analysed it turns out that employees are satisfied about the air quality, the workspace, the lighting and atmosphere of the workplace (average scores ranging from

1.56 to 1.97). The temperature in the workplace and discomfort caused by background noise are the least highly valued with average scores of 2.98 and 2.83.

Living habits - When analysing the data of the scale 'lifestyle', the results of the individual questions are analysed because the scale as a whole did not appear to be reliable. The scores on this scale can range from 1 to 3, where an average score close to 1 indicates a positive response and a score close to 3 indicates a negative response. This analysis shows that employees feel that the organisation does not or does not optimally have a policy that stimulates to move in and around the workplace (average score 2.30). The employees do not clearly experience that they are stimulated by the organisation to move sufficiently (average score 2.48). Both scores are above the average score of the scale which is negative. Employees are more positive about the attention that the organisation spends on healthy food at work (average score 1.67). However, the stimulation of eating healthy food is less well rated (average score 2.12). Concerning the lifestyle, the attention to healthy food in the organisation is rated more positive than the attention for sufficient exercise.

4.4.2 Psychological factors

The psychological factors in this research are about the cognitive demands and the self-efficacy of the employees. Here a scale from 0 (positive) to 100 (negative) was used. The results of these factors are also displayed in Table 16.

Cognitive load - Remarkable in the analysis of the survey results is the cognitive load the employees experience in the organisation. The respondents have an unfavourable high score of 75.45. This score is far above the average of the scale. This means that on average the respondents experience a high cognitive load. They experience that the work requires pretty much concentration, that they have to pay attention to many things at once and that they have to do a lot of thinking.

Self-efficacy - Concerning the self-efficacy, the employees have an average score of 2.13. This means that the employees believe that they are well able to perform their tasks, to deal with difficulties in the work and to meet the requirements of their jobs.

4.4.3 Psychosocial factors

The psychosocial factors in the research include unacceptable behaviour, work load and the social support which employees may experience. For each factor a different scale was used. The results of these factors are also displayed in Table 16.

Unacceptable behaviour - Analysis of the data shows that employees experienced none or very little undesirable behaviour within the organisation. A scale from 1 (positive) to 5 (negative) was used. The average score on this scale turned out to be 1.51. Bullying, intimidation, verbal aggression and discrimination are not to hardly recognised (average scores ranging from 1.20 to 1.48). The highest, but still positive, score is on whether employees are sometimes ignored by (direct) colleagues with an average score of 2.14.

Work load - Because this factor was measured with a two-point scale it can be stated which part of the employees is positive and which part is negative about the work load. The analysis concerning the 'work load' shows that about half of the employees experience the work load as negative (43.75%) and the other half experience it as positive (56.25%). This concerns whether employees find it difficult to relax and settle down after a working day and whether employees experience a working day as tiresome or exhaustive.

Social support - The experienced social support within the organisation is measured by the scales 'relationship with colleagues', 'relationship with direct leaders' and 'information'. Scales from 0 (positive) to 100 (negative) were used. It turns out that the relationship with colleagues is experienced as very positive with a score of 21.35. This is about whether employees can ask for help, whether their relationship is good and if there are

conflicts. The experienced relationship with direct leaders is experienced in a comparable way. The score of 20.60 indicates on average a good relationship with the direct leaders. Concerning the scale 'information' the employees experience to a lesser extent social support. Here it is about whether employees feel they receive adequate information about the purpose of their work and whether they feel that they get enough feedback from peers and direct leaders on their work. Here a score of 41.00 is achieved. This score is still on the positive side of the scale, but is not valued as high as the previous mentioned aspects. Concerning the social support, employees experience the relationship with colleagues and direct leaders more positive than the amount of information they obtain about their work.

4.4.4 Work characteristics

The work characteristics are about the work content, control options, training and development opportunities, work-life balance, work time control and the job satisfaction. Here a scale from 0 (positive) to 100 (negative) was used. The results of these factors are also displayed in Table 16.

Work content - The work content is measured by the scales 'uncertainty about the task', 'variety of work' and 'pace of work and amount of work'. The analysis shows that the scale 'uncertainty about the task' achieves a score of 36.35. This refers to whether employees know what they can expect from colleagues, what their responsibilities are and whether their role is clearly delineated. On average employees experience their tasks regularly to occasionally as clear. The same applies to the degree of 'variation in the work', where a score of 35.68 emerges. Here it is about whether employees feel that their work is varied, if they can give their own input and whether the work requires all of their skills and abilities. On average the employees experience their work regularly to occasionally as varied. Finally, for the scale 'pace of work and amount of work' a score of 40.10 comes forward which is also on the positive side of the scale. This shows that employees experience regularly to occasionally a high pace of work and a large amount of work. This is about whether employees experience that they have to work under time pressure, have to do too much work and whether they can keep up with their work.

Control options - The control options that an employee has are measured by the scales 'autonomy in the work' and 'participation'. On the scale 'autonomy in the work' a score of 38.68 comes forward. This refers to whether employees feel that they have sufficient freedom in performing their work and in the order and the time in which this happens. Employees experience this independence in their work regularly to occasionally. The scale 'participation' has a score of 43.03. This score seems a little higher, but is also on the positive side of the scale. This means that employees experience that they can participate in making decisions, that sufficient consultation takes place and that they have enough influence regularly to occasionally.

Training and development opportunities - The training and development opportunities are measured by the scales 'learning opportunities' and 'career opportunities'. On the scale 'learning opportunities' a score of 41.93 is achieved. This means that employees feel regularly to occasionally that they learn new things in their work and that they have opportunities for personal grow and development. Concerning the career opportunities, a score of 61.72 is achieved. This score is quite striking, since employees seem not very positive about their career opportunities. This means that employees just sometimes feel that their job increases their chances on the labour market, provides opportunities for further education and that financial growth opportunities or promotion are possible.

Work-life balance - Because this factor was measured with a two-point scale it can be stated which part of the employees is positive and which part is negative about the work-life balance. Regarding the work-life balance it turned out that of the employees 46.88% is

negative and 53.12% is positive. This refers to whether employees can easily put away their work or take home their work problems. So the employees in the organisation experience the work-life balance very different.

Work time control - How the working hours of the organisation are experienced, is measured by a number of separate questions, as the questions do not form a complete and reliable scale. Herein a difference can be seen. When asked whether employees can determine the start and end of their workday by themselves and if they can decide when they pause, the responses are positive with a score of 28.65 and 19.79. When asked whether they have to do overwork and if work assignments are on time, the scores are respectively 43.23 and 41.67. These are not that positive as the previous mentioned aspects, but still on the positive side of the scale.

Job satisfaction - The job satisfaction is measured by the scales 'pleasure in work' and 'reward'. Because the factor 'pleasure in the work' was measured with a two-point scale it can be stated which part of the employees is positive and which part is negative about this factor. Here it turned out that 19.27% is negative and 80.73% is positive about the work pleasure. This positive score refers to whether employees find their work interesting, go to their work without resistance and are motivated. The scale 'reward' has a score of 48.23 on a scale from 0 (positive) to 100 (negative). This score is close to the average on the scale which means that employees are on average not clearly positive or negative. The point here is whether employees feel that the organisation pays fair and sufficient for the work they do.

Table 16

Overview of the Scores of the Organisational Factors (N=64)

Factor	VBBA-scale*	IS-scale**	OCCSEFF-scale**
Physical and environmental			
Working posture		2.12	
Work environment		2.18	
Living habits		-	
Psychological			
Cognitive load	75.45		
Self-efficacy			2.13
Psychosocial			
Unacceptable behaviour		1.51	
Work load	43.75		
Social support			
Relationship with colleagues	21.35		
Relationship with direct leaders	20.60		
Information	41.00		
Work characteristics			
Work content			
Uncertainty about the task	36.35		
Variety of work	35.68		
Pace of work and amount of work	40.10		
Control options			
Autonomy in the work	38.68		
Participation	43.03		
Training and development opportunities			
Learning opportunities	41.93		
Career opportunities	61.72		
Work-life balance	46.88		
Work time control	-		
Job satisfaction			
Pleasure in work	19.27		
Reward	48.23		

** = Score on a scale from 0 (positive) to 100 (negative)*
*** = Score on a scale from 1 (positive) to 5(negative)*
Italicised words are sub-scales with which the organisational factor is measured

4.4.5 Remaining results

The category of 'health complaints' is measured by a number of individual questions. It should therefore be taken into account that these scores are less reliable, since they are measured with a single question and not with a full scale. A scale is used from 1 to 5 with an average of 3 where a score close to 1 is positive and a score close to 5 is negative.

The analysis shows that employees score below the average score to the extent to which they perceive that their work affects their health (average score 2.39). Similar scores are found on whether the work has a negative effect on the psychological well-being of employees (average score 2.31) and whether employees have health problems related to work (average score 2.41). All these scores are on the positive side of the scale, so on average the employees are positive about the relation between their work and their health.

The employees were also asked about their satisfaction with the measures which the organisation takes to prevent health problems. Here an average score was found of 2.64. About this the employees are quite satisfied to neutral. About their own health employees are also quite satisfied to neutral, with an average score of 2.52.

4.5 Results additional questionnaire for long-term and frequently sick employees

A number of additional questions were asked to the frequent and long-term sick employees about the sickness absenteeism policy in the organisation. The questions focused on what these employees perceive as 'good' about the way the organisation deals with sickness absenteeism, what can be improved in the organisation concerning sickness absenteeism, what can be seen as possible causes of the high rate of sickness absenteeism in the organisation and what employees could do by themselves to reduce the sickness absenteeism. This way was investigated how these employees perceive the absenteeism opportunity at the organisation and whether organisational factors emerge that may be improved to reduce the sickness absenteeism. The answers of the respondents to these questions can be classified into six themes: the work load, involvement, (social) pressure, the threshold to report sick, trust and organisational aspects. These themes are discussed in paragraph 4.5.1 to paragraph 4.5.6. At the end there are some remaining remarks in paragraph 4.5.7. An overview of the number of respondents who mentioned the same theme is displayed in Table 17. In total 11 respondents participated. Only the themes are described which were mentioned by more than 3 respondents. It is described what the different opinions about these themes are.

Table 17

Overview of the Number of Long-term and Frequently Sick Employees who Mentioned the Same Theme (N=11)

Themes	N respondents
Work load	5
Involvement	6
(social) Pressure	4
Threshold to report sick	5
Trust	4
Organisational aspects	4

4.5.1 Work load

Firstly, it is repeatedly mentioned that the work load for some employees should be reduced to decrease the risk of getting a burnout, stress or other health complaints. This is seen as the main cause of sickness absenteeism and is mentioned by 5 respondents out of 11. It is noted that the absence of employees due to an excessive work load cause a domino effect because other employees have to do extra work which results in a higher work load for them. This creates a greater risk of a burnout for the remaining employees.

The frequent and long-term sick employees are also asked what they could do by themselves to be less frequently absent or absent for a shorter period. Here it also came forward that an employee should pay attention to his own work load and amount of work and should reduce it if necessary. This kind of personal responsibility was emphasised by three respondents. It was suggested that this could be done in consultation with the occupational health physician or with the HR-representative because it may be 'threatening' for employees to discuss this with their managers. As described by a respondent: *"Continuous watching over your work load and work content, can I handle it, does it fit with my ambitions and competences? Herein daring to be critical and honest to yourself. And then go talking about this, but it will be threatening for some people (so an obstacle) to do that with your manager.*

With a HR-representative this will possibly go much better." So, by all these respondents the work load is seen as a serious cause for sickness absenteeism in the organisation.

4.5.2 Involvement

The second point is about the perceived involvement in the organisation which is mentioned by 6 respondents out of 11. The involvement turns out to be both a positive point and a point of improvement in the answers of the respondents. On the one hand the personal involvement and the frequent contact are seen as positive by three respondents. Hereby one respondent describes that the staying in contact with long-term sick employees, the assistance with the reintegration after a period of absence and the monitoring and talking with employees who are frequently sick, is positive about current sickness absenteeism procedure.

However, on the other hand it turns out that things can be improved about the involvement of the organisation with frequent and long-term sick employees. Three respondents mention that team managers and team members should be more personally involved so that not only contact is sought when something of the sick employee is needed. It is also mentioned that team managers should not only ask sick employees how it is when they return at work, but in particular during the absence of the employee. It is stated that the sick employee should feel welcome in the organisation, without putting the pressure to come back as soon as possible. One respondent argues that the involvement and the contact not necessarily has to go via the manager: *"I can imagine that it is difficult for some colleagues that your direct supervisor is the person with whom you remain in contact constantly; an HR-representative might bring more objectivity in the process which causes that colleagues perhaps dare more to reveal themselves. I can imagine that this can speed up the healing process. The point is that a manager has direct interest in having contact because of the work that should be done; a HR-representative may focus more on the human side."* So the level of involvement is experienced differently by the respondents in this questionnaire.

4.5.3 (social) Pressure

The third point is related to the perceived (social) pressure created by managers and colleagues to return to work as soon as possible. This is mentioned by 4 respondents out of 11. Firstly two respondents stated that it is important that managers do not put too much pressure on starting to work as soon as possible. A respondent state: *"I understand that the employer wants to know when you think you are better, but this creates an unspoken pressure to go back to work sooner even when you know you're not completely cured."* This can cause that sick employees return to work too quickly and as a result the employee may get sick again because he was not fully recovered.

Also, two respondents experience in a negative way that there is a social pressure in the organisation to return to work as soon as possible. A respondent mentions that employees openly express to go to work when they are sick. This creates a form of social pressure which other employees do not want to be 'weaker' than colleagues and also go to work when they are actually sick. So by these respondents a kind of (social) pressure, from managers or colleagues, is experienced.

4.5.4 Threshold to report sick

Another point is related to the threshold for reporting sick, because this came forward in the answers of 5 respondents out of 11. Two times it is mentioned that sick reports are easily accepted and that it would be valuable to ask more questions on why an employee reports sick. Another respondent noted that it is good that employees are required to report sick by telephone, because this threshold is higher compared to email or sms. In total by four respondents, the threshold for reporting sick is seen as too low which makes it too easy for

employees to report sick. One respondent says: "*Reporting sick should be controlled more tightly; gray sickness absenteeism should be removed."* Two respondents mention that employees also lack an understanding of the consequences of reporting sick for colleagues and for the organisation. One respondent describes: *"People should be aware of the consequences of reporting sick. Obviously, sick is sick, but the threshold for reporting sick must be raised. To do this the consequences (costs, impact on colleagues, etc.) must be known."* It turned out that the threshold to report sick is perceived as too low by these respondents.

4.5.5 Trust

Another point has to do with the trust of employees. This is mentioned by 4 employees out of 11. A respondent states that too much emphasis on the fact that too many employees are sick does not help, but merely gives a signal that employees are not trusted. Hereby it is stated that employees therefore can feel taken less seriously when they are actually sick and report sick. Another respondent adds to this that a call on the first day of sick leave is also not good. Then it seems if the sick employee is not trusted. Furthermore, one respondent mentions that managers should not directly assume that employees 'deliberately lie', because one employee is more sick than others and they also probably do not like to be sick themselves. One respondent describes this in the following way: *"They just have to deal like adult people with employees who report sick, not like the little children who are 'school sick'."* It is therefore advocated by these respondents that employees should be given more confidence when they report sick.

4.5.6 Organisational aspects

4 Respondents out of 11 mention something regarding the organisational aspects which sickness absenteeism entails. Three respondents describe the way how the organisation deals with sickness absenteeism as clear and organised. However, one respondent mentions that it is bothersome for the sick employee to make sure that different people get an update how you're doing. This respondent states: *"Do not let me arrange everything by myself. I have experienced it as bothersome that I had to think about updating various people about my situation every day, and then getting no response on it. While I had to be 'busy with recovering', I was worrying about these things."* Instead of recovering, the employee was busy worrying about who at work has to be emailed or called about how he's doing.

4.5.7 Remaining remarks

Finally, there are some remarks that are not mentioned by other respondents. According to one respondent a possible cause for the sickness absenteeism is that workers are dissatisfied and feel undervalued, because the organisation is no longer 'the social organisation' it was. In addition, one other respondent mentions stress, frustration and dysfunctional relationships of employees and with the board as a possible cause for the high sickness absenteeism rate. These single points have also been tested in the general questionnaire for all employees. Here these remarks were not confirmed.

4.6 Summary of the results

4.6.1 Research question 1: "What is the sickness absenteeism at the organisation"

The analyses to examine the first research question "*What is the sickness absenteeism at the organisation"* can be summarised. It turned out that the analysis of the occupational health physician confirmed the findings of the researcher. Both analyses showed that the absenteeism rate in the organisation of 4.56% in the year 2012-2013 is higher than the national average of 3.5% for companies of similar size (CBS, 2013). In both analyses the

short-term sickness absenteeism turned out to be an important part. In particular by the occupational health physician it was emphasised that the focus in the organisation should be on reducing the short-term sickness absenteeism because it is too high. In addition, the short-term absenteeism was seen as an important indicator for long-term sickness absenteeism and it was stated that the organisation might realise improvements concerning this short-term sickness absenteeism. In addition, it turned out that the largest part of the sickness absenteeism rate in the organisation can be explained by the long-term sickness absenteeism. This corresponds to the presumption of the organisation. However, the focus should not be on the long-term sick employees because it emerged that the organisation can have little impact on the earlier return of the current long-term sick employees. The analyses also showed that for the medium-term absenteeism no improvements are necessary. Therefore, the focus in this study in reducing sickness absenteeism at the organisation is specifically on the short-term sickness absenteeism.

To get more insight into the sickness absenteeism at the organisation, the sickness absenteeism statistics were also analysed specified by month, gender, age and the nature of the health complaints. By analysing the year 2012-2013 it was shown that the absenteeism rate was higher at the beginning and at the end of the year. During the summer months the sickness absenteeism rate is the lowest. Therefore, it should be taken into account in reducing the sickness absenteeism that the sickness absenteeism rate varies per month.

In addition, the sickness absenteeism rate was also much higher for women than for men, where the long-term absence was many times higher for women. Men are more absent on short-term. However, this may be explained by the low amount of women in the organisation. Therefore, this distinction between men and women is not included in the remainder of this study because these results are to 'uncertain'. Besides, concerning the age it turned out that the sickness absenteeism was the highest for the youngest and the oldest age groups. However, this could also be explained by the fact that these age groups consist of very few respondents. Therefore, this distinction between age groups is also not included in the remainder of this study because these results are to 'uncertain'.

Finally, it cannot be said if the short-term absenteeism is caused by physical or mental health complaints or a combination of the two. The analyses showed only that the most reported cause of sickness absenteeism was because of flu, viruses and fever. Therefore, the health complaints cannot be further specified in this study. As a consequence, both the physical and mental health complaints are taken into account in this study.

So in summary, as a result of these analyses the focus in the organisation should be on improving the frequently reported short-term sickness absenteeism. Because the analysis did not indicate what the exact causes for the short-term sickness absenteeism had been, the focus is both on the physical and mental health complaints.

4.6.2 Research question 2: "What is the difference between the actual and the perceived absenteeism opportunity at the organisation?"

The document analysis and the results of the questionnaires can also be summarised regarding the second research question "*What is the difference between the actual and the perceived absenteeism opportunity at the organisation?"* The absenteeism opportunity is whether it is relatively easy for employees to report sick. Concerning the absenteeism opportunity an effective absenteeism policy, good employment conditions and a strong absenteeism culture are important in reducing sickness absenteeism.

The document analysis to describe the actual absenteeism opportunity showed that the organisation takes various measures to reduce and monitor the sickness absenteeism. There are clear rules on how the employee must report sick and there are steps which the team leader should take when an employee is sick frequently or for a long period. The organisation

also has extensive employment conditions which are focused on the prevention of sickness absenteeism. For example, employees may work no more than 5.5 consecutive hours, measures are taken to prevent RSI and performance interviews are held to discuss the working conditions. In the documents it was not clearly described what the sickness absenteeism culture of the organisation is or what is pursued. However, it is characteristic of the absenteeism culture that sickness absenteeism is seen as a shared responsibility where of both the organisation and the sick employee an active role is expected. It is also notable that on the one hand, as described, the organisation has a clear absenteeism policy and clear employment conditions. This seems to imply that the sickness absenteeism culture is a bit strict. However on the other hand the organisation does not strictly control the sick reports and it is the responsibility of both the organisation and the sick employee.

The perceived absenteeism opportunity is also investigated. In total the sickness absenteeism policy was perceived as not very positive. In general the scores on the questionnaire for all employees on this scale are close to the average or above the average of the scale on the negative side. This study shows that the absenteeism policy of the organisation is not experienced as effective as it should be. The clarity and awareness of the sickness absenteeism policy turned out to be not very positive. How employees are guided by the return to work also turned out to be not very positive, whilst this procedure is described in the absenteeism policy on paper. These two aspects can be seen as a difference between the actual and the perceived sickness absenteeism policy. However, in the questionnaire for the long-term and frequently sick employees it came forward that some respondents perceive the sickness absenteeism policy in the organisation as clear. Besides that, in analysing both questionnaires it came forward that the sufficient contact of the organisation with sick employees is experienced not clearly as positive or negative. This is also in contrast with the actual sickness absenteeism policy where is stated that there is frequently contact with sick employees.

Additionally, the perceived employment conditions seem to be experienced as positive. Only whether employees believe that vacancies are filled quickly enough and whether replacement is well organised when an employee is sick seem to stand out. In general it can be stated that the actual and perceived employment conditions are comparable, because the ‘good’ employment conditions on paper are also perceived as positive.

Concerning the sickness absenteeism culture, it can be stated that these outcomes are not very positive. All scores of the questionnaire for all employees are above the average of the scale on the negative side. It turned out that the threshold for reporting sick is hardly experienced as high in the organisation. This is supported by the findings of the questionnaire for the long-term and frequently sick employees. Employees find it hardly difficult to report sick and they hardly experience that the organisation is critical towards sickness absenteeism in the organisation. So it is remarkable that the sickness absenteeism culture seems to be not that strict or severe as intended in the absenteeism policy even when sickness absenteeism is seen as a shared responsibility. It may indicate that the responsibility for employees in reporting sick is too big. This can be seen as a difference between the actual and the perceived absenteeism opportunity.

However, this perceived low absenteeism threshold also seems to be in contrast with the social pressure which is perceived by some frequently and long-term sick employees. The perceived low absenteeism threshold is also in contrast with the fact that some of the long-term and frequently sick employees think that they should get more trust that when they report sick they are actually sick. They experience that they should get more personal responsibility in reporting sick and this is in contrast with the perceived low absenteeism threshold. So there are some contrasts between the actual and the perceived absenteeism opportunity, but also between different findings of the perceived sickness absenteeism opportunity.

4.6.3 Research question 3: "How do employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation?"

The findings of the questionnaires to answer the third research question "*How do employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation?*" can also be summarised. Most of the findings of the questionnaire for long-term and frequently sick employees were related to the sickness absenteeism opportunity. Only one theme about the work load was related to the organisational factors. The other organisational factors did not emerge in the results of the open questions.

The most remarkable findings of the analysis will be mentioned here. Firstly, with respect to the physical and environmental factors it turned out that employees are the least positive about the extent to which working with the computer can sufficiently be alternated with other work. Related to this, employees also do not clearly experience that they are stimulated by the organisation to move sufficiently on a working day. Concerning the working environment, it emerged that the temperature in the workplace and discomfort caused by disturbing sounds was the least highly valued.

Another organisational factor which was striking was the high cognitive load which employees experience. In addition to this, the analysis also reflects that about half of the employees experience a high work load. The questionnaire with frequently and long-term sick employees also showed that the work load was seen as the main cause for sickness absenteeism. It came forward that both the organisation and the employee should watch over the work load and should reduce the work load whenever necessary.

The results also showed that employees experience that they get social support from their relationship with colleagues and direct leaders, but that they experience less social support by the amount of information and feedback they receive. This was also a remarkable finding.

Furthermore, it came forward that the employees experience their career opportunities as not very positive and that almost half of the employees experienced a disturbed work-life balance. Also the analysis showed that despite the fact that employees seem to enjoy their work there is less positive thought about the reward they receive for their work.

Finally, no remarkable findings came forward concerning the 'health complaints' of employees. Employees are on average positive about their health, about the relation between their work and their health and about what the organisation does to prevent health problems.

5. Conclusion and recommendations

In this chapter an answer will be given to the three (sub) research questions in order to answer the main research question of this study: *"How can the sickness absenteeism rate at the organisation be reduced with measures at organisational level which are in line with the existing way of working?"* First it is concluded what the sickness absenteeism at the organisation is, what the difference between the actual and the perceived absenteeism opportunity at the organisation is and then how employees experience the organisational factors which may influence the sickness absenteeism at the organisation. This will be summarised in an answer to the main research question (5.1). In the second part of this chapter recommendations for measures are given how the organisation can implement these findings in the organisation. In addition, some general recommendations are given (5.2). At the end of this chapter a summary will be presented (5.3).

5.1 Conclusion

The first (sub) research question was: "*What is the sickness absenteeism at the organisation?"* Sickness absenteeism can be defined as '*the incapacity for the performance of work because of sickness or disability'* (Bastiaanssen et al., 2008; Geurts & Smulders, 2006). The sickness absenteeism at the organisation turns out to be 4.56% in the year 2012 to 2013. Based on this study it can be concluded that the sickness absenteeism at the organisation is higher than the national percentage of 3.5% for organisations of similar size (CBS, 2013). The largest part of the sickness absenteeism rate at the organisation can be explained by the long-term sickness absenteeism. This corresponds to the presumption of the organisation. However, it turned out that the organisation can have little impact on the earlier return of the current long-term sick employees. In addition, the short-term sickness absenteeism also appeared to be an important part of the sickness absenteeism rate. It turned out that the organisation might realise improvements concerning this short-term sickness absenteeism. Besides this, it emerged that reducing the short-term absenteeism is also beneficial for reducing the long-term absenteeism. Therefore, reducing the sickness absenteeism at the organisation should be focused on the short-term sickness absenteeism consisting of both the physical and mental health complaints. The organisation should take into account that this short-term sickness absenteeism appeared to be higher at the beginning and at the end of the year compared to the summer months.

The second (sub) research question was: *"What is the difference between the actual and the perceived absenteeism opportunity at the organisation?"* The literature study showed that the absenteeism opportunity is whether it is relatively easy for employees to report sick (Bastiaanssen et al., 2008; Jehoel-Gijsbers, 2007). It came forward that concerning the absenteeism opportunity an effective absenteeism policy, good employment conditions and a strong absenteeism culture are important in reducing sickness absenteeism in an organisation. It turned out that the perceived absenteeism opportunity differs from the actual absenteeism opportunity concerning the absenteeism policy and the absenteeism culture. The organisation can try to reduce the sickness absenteeism by improving these points.

First, the absenteeism policy of the organisation appeared to be experienced not as effective as is intended. Even though, in the questionnaire for the long-term and frequently sick employees it came forward that some respondents perceive the sickness absenteeism policy in the organisation as clear. However, in general it can be stated that the clarity and awareness of the sickness absenteeism policy turn out to be not very positive. Also the way employees are guided by the return to work is not experienced very positive, while this procedure is described on paper in the absenteeism policy. Besides that, there is a difference between the actual and perceived amount of contact between sick employees and the

organisation. In general, employees do not experience the amount of contact as that frequently as stated in the absenteeism policy.

There are also some differences between the actual and perceived absenteeism opportunity concerning the absenteeism culture. The sickness absenteeism culture seems to be not that strict or severe as intended in the absenteeism policy. The organisation has an extensive absenteeism policy and sees is as the responsibility of the employees only to report sick when they are really sick. However, the perceived absenteeism culture turned out to be not that strict. Employees perceive that the organisation is not very critically to sickness absenteeism, that they are not checked when they are absent and that it is hardly difficult to return to work after a period of absence. It also emerged that sick reports are too easily accepted, not thoroughly enough is asked about the reason for absence and that understanding of the impact for colleagues and the organisation because of reporting sick lacks. This corresponds to the presumption of the organisation that it is too easy for employees to report sick and that the absenteeism threshold is too low. Both questionnaires confirmed that the threshold for reporting sick is hardly perceived as high. This perceived low absenteeism threshold seems to be in contrast with the social pressure and lack of trust which some frequently or long-term sick employees experience when they report sick. However, this is not supported by the results of the questionnaire for all employees of the organisation. Therefore, in general it can be concluded that the low sickness absenteeism threshold is also a difference between the actual and perceived absenteeism opportunity.

The third (sub) research question was: "*How do employees of the organisation experience the organisational factors which may influence the sickness absenteeism in the organisation?"* The organisational factors which were not experienced as positive give rise to improvement. Improving these factors can help to reduce the sickness absenteeism at the organisation. Firstly, it can be concluded that employees are not very positive about the extent to which working with the computer can sufficiently be alternated with other work and about the extent in which they are stimulated to move sufficiently on a working day. Concerning the working environment, it emerged that the temperature in the workplace and discomfort caused by disturbing sounds was the least highly valued. In addition, it can be concluded that employees experience a high cognitive load and that about half of the employees experience a high work load. Also, almost half of the employees experience a disturbed work-life balance. Furthermore, it turned out that employees experience less social support by the amount of information and feedback they receive. Finally, it came forward that the employees experience their career opportunities and the received reward as not very positive.

By answering these three (sub) research questions, an answer can be given to the main research question of this study: *"How can the sickness absenteeism rate at the organisation be reduced with measures at organisational level which are in line with the existing way of working?"* First of all, it can be concluded that the organisation should focus on the short-term sickness absenteeism in reducing the sickness absenteeism rate in the organisation. In addition, when the conclusions of the three (sub) research questions are taken into account some 'overarching relationships' can be found. Two key aspects at organisational level can be discovered on which the organisation should focus in reducing the short-term sickness absenteeism. These are ensuring for a greater compliance with the existing absenteeism policy and taking into account the high (cognitive) work load.

Firstly, a greater compliance with the existing absenteeism policy may ensure that the differences between the actual and perceived absenteeism opportunity of the second (sub) research question may not occur. Both the 'not effective' absenteeism policy and the 'not severe' absenteeism culture have to do with the compliance with the existing absenteeism policy. This can be clarified as follows. It was stated that the absenteeism policy is not

experienced as clear even though there is an extensive absenteeism policy available. A greater compliance with the existing absenteeism policy can ensure that employees are better informed about the absenteeism policy and experience it not as unclear. Besides, it was concluded that the guidance by the return to work after sickness and the contact between the organisation and the sick employees is not experienced as sufficient. Whilst in fact detailed guidelines are described in the absenteeism policy. A greater compliance with the existing absenteeism policy may ensure that employees are also better informed about these existing regulations. The low absenteeism threshold of the sickness absenteeism culture at the organisation has also to do with a greater compliance with the existing absenteeism policy. The compliance with the existing absenteeism regulations affects the creation of the absenteeism culture. When the absenteeism policy is followed this may ensure that employees experience it as less easy to report sick. Therefore, the first key aspect on which the organisation should focus in reducing the short-term sickness absenteeism is the compliance with the existing absenteeism policy. This is related to the improvements which can be made regarding the perceived absenteeism policy and absenteeism culture.

Secondly, all other organisational factors which the organisation can improve to reduce the sickness absenteeism can be related to the experienced high (cognitive) work load. When working with the computer is not sufficiently alternated with other work and when employees move not sufficiently this may cause that employees are uninterrupted busy with their work. This may result in a higher (cognitive) work load which can be seen as a possible cause of sickness absenteeism. Also, discomfort because of the temperature and disturbing sounds in the workplace may give rise to a higher (cognitive) work load. In addition, the experienced disturbed work-life balance may also affect the experienced (cognitive) work load. The interrelation of the work life and private life may give rise to more stress which may result in a higher (cognitive) work load. Furthermore, less social support by the amount of information and feedback may also cause a higher (cognitive) work load. Finally, a lack of career opportunities and dissatisfaction with received rewards may result in diminished motivation which is also not beneficial for the experienced (cognitive) work load. Therefore, the second key aspect on which the organisation should focus in reducing the short-term sickness absenteeism is the experienced high (cognitive) work load. This is related to the improvements which can be made regarding the found organisational factors.

It should also be noticed that the finding that the short-term sickness absenteeism at the organisation appeared to be higher at the beginning and the end of the year could also be related to the experienced high (cognitive) work load. The holidays in the summer may cause that the (cognitive) work load is lower in this period. This may explain why the sickness absenteeism rate is higher at the beginning and at the end of the year compared to the summer months.

In conclusion, the organisation should focus on measures at organisational level concerning the compliance with the existing absenteeism policy and the high (cognitive) work load to reduce the short-term sickness absenteeism in the organisation. This is the answer to the main research question of this study: *"How can the sickness absenteeism rate at the organisation be reduced with measures at organisational level which are in line with the existing way of working?"*

5.2 Recommendations

In this study some factors came forward which should be improved to reduce the sickness absenteeism in the organisation. In this chapter recommendations are given with what measures at organisational level the organisation may improve these factors to stimulate a greater compliance with the existing absenteeism policy and to reduce the experienced (cognitive) work load.

These recommended measures concerning the compliance with the existing absenteeism policy can be related to the Decision Model (Philipsen, 1969) which was described in the theoretical framework. In this model, reducing sickness absenteeism is about influencing factors such as the social environment and the motivation to be present to affect the decision to report sick. Both the improvements concerning the sickness absenteeism policy and culture affect the decision to report sick, the sickness absenteeism threshold, and may ensure that the sickness absenteeism at the organisation will diminish. These recommended measures are discussed in paragraph 5.2.1.

The recommended measures concerning the (cognitive) work load can be related to the Load-Load Capacity Model (Van Dijk et al., 1990) and the Job Demands and -Resources Model (Schaufeli & Bakker, 2004) which were described in the theoretical framework. In these models, the balance between the work load of the individual employee/the work stressors on organisational level, and the load capacity of the employee/the energy resources of the work are central. In these models reducing sickness absenteeism is about finding a good balance between these factors. The found factors in this study can be best related to Job Demands and -Resources Model because the focus in this study is on factors at organisational level which may reduce the sickness absenteeism at the organisation. This model is about limiting the work stressors and stimulating the energy resources. This is also exactly what the found organisational improvements are aimed at. Recommendations for these measures concerning the (cognitive) work load which the organisation may take to reduce the sickness absenteeism are described in paragraph 5.2.2. Additionally, in paragraph 5.2.3 some general recommendations are given.

5.2.1 Recommendations concerning the compliance with the existing absenteeism policy

5.2.1.1 Clearer sickness absenteeism policy

In this study it is showed that the absenteeism policy of the organisation may be strengthened as it is not experienced as effective as is intended. The clarity and awareness of the sickness absenteeism policy turn out to be not very positive. However, it is important that employees know what the rules about sickness absenteeism are (Arboportaal, 2013). The sickness absenteeism policy also affects the absenteeism culture in the organisation. Therefore it is important that this policy is known (Geurts et al., 1994). The way employees are guided by the return to work and the amount of contact between the sick employees and the organisation also did not turn out to be very positive, while this is described on paper in the absenteeism policy.

It is therefore recommended to clarify the sickness absenteeism policy and to create more awareness of using the sickness absenteeism policy as it is intended. It is recommended to emphasise the importance for employees and direct leaders of compliance with the existing policy and to create more clarity about the roles and responsibilities of the different parties. In addition, it came forward that the HR-manager could also play a role in the contact between sick employees and the organisation. Since he or she can be experienced as ‘more objective’ than the direct leader in the rapid return of the sick employee. Therefore, roles and responsibilities of the employees, direct leaders and HR-manager in using the sickness absenteeism policy must be clear.

Attention could be paid to clarifying the sickness absenteeism policy and creating more awareness of using the sickness absenteeism policy in the weekly work meeting with the whole organisation. Also, attention could be paid this within the team meetings. This way the whole organisation is involved and is informed about the problems concerning sickness absenteeism and the use of the sickness absenteeism policy. This may be beneficial for a greater compliance with the existing absenteeism policy.

5.2.1.2 Stricter enforcement of the sickness absenteeism policy

It is also advisable to ensure a stricter enforcement of the sickness absenteeism policy. The analysis showed that the sickness absenteeism culture is not that strict or severe as intended and that the sickness absenteeism threshold is experienced as too low. It emerged that sick reports are too easily accepted, not thoroughly enough is asked about the reason for absence and that understanding of the impact for colleagues and the organisation because of reporting sick lacks. However, this is very important because employees feel more obliged to go to work when they know the consequences of their absence (Johansson & Lundberg, 2004). Also, a tolerant sickness absenteeism culture ensures that employees report sick more easily (Geurts et al., 1994). This is reinforced when it is quite easy to report sick, when there is no control and no one knows the consequences of reporting sick for others. When employees are not obliged to report sick by their supervisor, but for example at the HR-manager or the reception, this will reduce the absenteeism threshold (Bastiaanssen et al., 2008; Jehoel-Gijsbers, 2007). It is better when employees are required to report sick to their direct leader. So reporting sick should not be too easy (Arboportaal, 2013). More questions should also be asked when reporting sick instead of just accepting that an employee is sick and it should be ensured that employees are more aware of the consequences for colleagues of their sick reports.

It has also appeared that employees experience nuisance of the absence of sick employees. Employees are not very positive about whether vacancies are filled quickly enough and whether replacement is well regulated when there are sick reports. This again emphasises that it is important that the sickness absenteeism threshold is high enough and that the absenteeism policy is 'stricter'.

Thus it is recommended that the organisation strengthens the process of reporting sick so that a more strict sickness absenteeism culture arises. Also, it is important to monitor the procedure of reporting sick more strictly, since there is already a procedure how employees are required to report sick. It is good to bring it back into the spotlight and make it stricter. It should be more strictly ensured that employees, HR-managers and the direct leaders comply with the sickness absenteeism policy.

5.2.2 Recommendations concerning the (cognitive) work load

5.2.2.1 More movement between the work activities

With respect to the physical and environmental factors it turned out the organisation can make some improvements in the extent to which working with the computer is sufficiently alternated with other work. This static posture should be often alternated with breaks and other tasks to prevent health problems that may cause sickness absenteeism (ArboPortaal 2013; Bakhuys Roozeboom et al., 2008; Burdorf et al., 2008). The document analysis showed that it is already stated in the sickness absenteeism policy that the organisation pursues this. Officially, employees may not do more than six hours computer work on a day with no more than two hours consecutive (Arbeidsvoorwaarden, 2013; Bedrijfsregelement, 2013; Intranet of the organisation, 2013). However, the question is to what extent employees actually comply with these rules.

Related to this, employees do not clearly experience that they are stimulated by the organisation to move sufficiently on a working day. Lack of exercise can also cause health problems which may lead to sickness absenteeism (Burdorf et al, 2008). Therefore, more exercise between the work activities can be both beneficial for the alternation in working with the computer as for a healthy lifestyle of employees with sufficient movement. Here both the initiative of the organisation as of the employees is important. The organisation may pay attention more clearly to these rules for alternating the work and interim movement and may check more frequently if employees comply with these rules. In addition, more alternation in

the work and more movement can also be stimulated by dividing work into smaller tasks which give more possibilities to alternate the work activities. Also using 'pause software' can be stimulated that reminds the employee to alternate the work activities or to move more frequently. In addition, it is important that the employee himself also understand the importance and pays more attention to sufficient alternation and movement between the work activities. With these measures more movement between the work activities may be realised. This may result in a lower (cognitive) work load which may contribute to reducing the sickness absenteeism at the organisation. Therefore, it is recommendable that the organisation realises more movement between the work activities.

5.2.2.2 Small enclosed working spaces

Another point that emerged concerning the working environment is that the temperature in the workplace and discomfort caused by disturbing sounds was the least highly valued. These factors should form a good working climate, and should not lead to unnecessary health complaints (Arboportaal, 2013). The organisation is now a large open space where employees work. It is advisable, when the need appears, to make a number of small enclosed working spaces available where the noise and temperature can be better regulated. For example, a kind of 'quiet area or quiet rooms'. This may ensure that employees can focus better and that they can work in the working environment they prefer that time. This may ensure that less (cognitive) work load arise which is beneficial for reducing the sickness absenteeism in the organisation. It is therefore advisable that the organisation creates small enclosed working spaces.

5.2.2.3 Monitoring of the (cognitive) work load

Based on the results regarding the psychological factors it can be concluded that it is advisable when the organisation spends more attention to monitoring the high (cognitive) work load of employees in order to reduce the sickness absenteeism. The analyses showed that employees perceive that the work requires pretty much concentration, they have to pay attention to many things at once and that the work needs a lot of thinking. The questionnaire with frequently and long-term sick employees also showed that the work load was seen as the main cause for sickness absenteeism. It came forward that both the organisation and the employee should watch over the work load and should reduce the work load whenever necessary.

However, from the measured self-efficacy it turned out that employees consider themselves relatively able to perform their work, to deal with difficulties in their work and to meet the requirements of their work. This could be an indication that employees are able to deal well with the work load and cognitive load of their work by themselves. However, it is important that the organisation monitors this high cognitive load and work load because it is an important source of sickness absenteeism (Bakhuys Roozeboom et al., 2008; North et al., 1996; Hopstaken, 1994) and despite of the measured self-efficacy it turned out to be present in the organisation. Therefore, this experienced high (cognitive) work load is seen as a serious factor which should be improved to reduce the sickness absenteeism.

An employee can have a positive impact on this (cognitive) work load by taking regularly breaks, good planning, daring to say 'no' to tasks and to ask for help when needed (Arboportaal, 2013). Besides this, the organisation might regularly discuss the work load with employees, letting colleagues help out, alternating busy periods with less busy periods or offering employees a course in time management to learn how to deal well with the high work load (Arboportaal, 2013). The organisation could also pay extra attention to the (cognitive) work load by discussing it frequently within teams and by paying attention to it in performance appraisals. This way the organisation may monitor the (cognitive) work load

better and may take action when needed. It is difficult to identify when employees have reached their 'personal limits' or go over their 'personal limits'. It is therefore important that team leaders regularly assess how employees experience this. It must be clear to employees and direct leaders what can be done by both parties when an employee experience a too high (cognitive) work load or a disturbed work-life balance.

The results of the questionnaire with frequently and long-term sick employees also showed that employees should be able to discuss the work load with the ('more objective') occupational health physician or with the HR-manager, because it may be to 'threatening' to discuss the work load with their direct leader. It is advisable to facilitate this. It is also important that the organisation explores where the high work pressure comes from and what measures can be taken by the employee and the organisation. It is also advisable that team leaders follow a course for signalling and dealing with a too high work load for employees. In this way they can better respond to the health complaints which employees may risk.

5.2.2.4 Monitoring the work-life balance

The work-life balance is perceived very differently by the employees. It turned out that almost half of the employees experience a disturbed work-life balance. This involves whether employees can easily let go their work problems or that they take work related problems home. When this balance is disturbed this can lead to health problems or an experienced higher (cognitive) work load (Van Hooff et al., 2005; Goff et al., 1990; Schaufeli et al., 2009). An organisation can take the balance between the work and private life of employees into account by giving them flexibility in their working hours. The experienced disturbed work-life balance seems not to be caused by these working times. Employees seem relatively positive about the extent to which they can determine their start and end times of their working days and when they take a break. The document analysis showed that the organisation finds it also important that employees have this freedom, as long as they announce their working hours and these working hours do not interfere with the work process.

So it seems as if the perceived disturbed work-life balance is not caused by the given flexibility in working hours. It could also be that employees find it hard to let their work problems go and take them home because of the experienced high cognitive load and work load. No significant relation was found between these two factors. However, this might be a possible explanation. Perhaps it may be beneficial, as for the (cognitive) work load, when the direct leader regularly discusses the experienced work-life balance with employees so that when necessary measures can be taken. This could also be discussed in performance appraisals. As with the work load, it might be beneficial here to allow discussing this with the occupational health physician or the HR-manager because it can be perceived as 'threatening' when this is discussed with the direct leader. In this way the organisation may monitor the work-life balance better and may take action when needed. This may ensure that less (cognitive) work load arises which is beneficial for reducing the sickness absenteeism.

5.2.2.5 Encouraging feedback moments

The results also showed that employees experience that they get social support from their relationship with colleagues and direct leaders. However, it turned out that they experience less social support by the amount of information and feedback they receive. This may result in a high experienced (cognitive) work load. Sufficient feedback is important because it is a form of social support which may help to reduce sickness absenteeism (Michie & Williams, 2003). When employees regularly receive feedback on their work this may also contribute to the development and effectiveness of the employee. This can ensure that an employee feels competent, confident and can carry out its work more motivated. This is also positive for the work load an employee experiences (Tweehuysen, 2007). It is therefore recommended to

stimulate direct team leaders to increase the number of moments where employees receive feedback on their work because employees do not experience that they receive sufficient feedback now. Direct leaders of a team may incorporate more feedback moments into weekly consultations or meetings. In addition, employees may also be encouraged by their direct team leaders to give their other team members more feedback in an informal way when they are working together. When these feedback moments are encouraged it is important to discuss how employees prefer to receive feedback of others on their work, so that it is seen as 'constructive' and not as criticism. This way encouraging feedback moments can help to diminish the amount of (cognitive) work load which may reduce the sickness absenteeism at the organisation.

5.2.2.6 Making career perspectives more insightful

This study showed that the organisation can make improvements concerning the experienced career opportunities. Employees perceive their job chances on the labour market, the provided opportunities for training, their financial growth opportunities and their possibilities for promotion not as very positive. In this area, the organisation can still make improvements. Career opportunities are seen as a possibility to obtain energy from the work and to form a buffer for potential sources of work stress or a too high (cognitive) work load (Tweehuysen, 2007). Therefore it is important that employees experience these career opportunities, stay motivated, and get no health complaints. It would be advisable if the organisation set out more clearly with the employee what career opportunities there are and where the employee can grow to. The document analysis revealed that the organisation already makes use of personal development plans, but this seems not to be enough. It might be advisable to make the career prospects even clearer.

This may be related to the perceived reward by employees in the organisation. The measurement of the job satisfaction in the organisation showed that employees seem to enjoy their work. However, there is less positive thought about the reward that employees receive for their work. When employees perceive their reward not as proportionate or fair compared to others or given their own investments in time and energy in carrying out their work, this can ensure that they are less motivated to be present (Geurts et al., 1999). This may also cause that they are more quickly absent when they experience some health complaints. However, the document analysis shows that the organisation, besides the individual salaries, makes only use of group bonuses and not of individual extra rewards in addition to the salary. This way, the organisation tries to treat all employees equally.

When the organisation makes the career opportunities for employees more insightful and clearer, the perceived reward may also be improved. The organisation could make clearer where the employee can grow to and which rewards come with this. More insight in the career opportunities and corresponding reward can make employees more motivated to move forward. It should be ensured that career opportunities and growth are possible and achievable. It is therefore recommended that a direct leader discusses the career opportunities and rewards with the employees on a regular basis. This can be coupled to the annual performance appraisal, but this is only once a year. It is recommended to plan this more frequently. However, the study also showed that employees should get more feedback on their work. Since it is important to have more frequently feedback conversations with employees this can be combined with more regularly talking about career opportunities and rewards. It is therefore recommended to combine this in more frequently scheduled meetings. So it is advisable that the organisation makes the career perspectives more insightful because this may contribute to the career prospects that the employees experience and how employees may appreciate the corresponding reward. This way a lack of career opportunities and

dissatisfaction with received rewards may not result in diminished motivation which is not beneficial for the experienced (cognitive) work load.

5.2.3 General recommendations

This study also leads to a number of additional implications and recommendations for practice. First of all, it turns out that there are various subjects which a team leader should regularly discuss with his or her team members to prevent that problems or dissatisfaction for these factors arise by an employee. This applies for the experienced career opportunities, reward, amount of feedback, (cognitive) work load and work-life balance. It is therefore recommendable that a team leader schedules a monthly meeting with each of his or her team members to discuss these subjects. In this way the team leader stays informed about how the employee experiences these subjects. Besides, preventive measures can be taken earlier and the progress can be monitored more easily. It is recommended to make a schedule with the topics that should be discussed as a supporting tool for the team leader. It is also important that the employee sees the value of this. This way attention is paid on a regular basis to important subjects about sickness absenteeism. This will give a team leader valuable information about how the employee is doing. In addition, each employee has a kind of personal coach.

It may also be beneficial when the organisation give the occupational health physician and the HR-manager a clearer role in the organisation. Because of their independence it is for employees more accessible to talk with one of them about for example their perceived (cognitive) work load or disturbed work-life balance instead of talking with their direct supervisor. A clearer role may ensure that these ‘independent persons’ may earlier (or easier) be approached. Also having more regular contact with sick employees could be carried out by the HR-manager because he or she can be experienced as ‘more objective’ in the rapid return of the sick employee. For reporting sick the HR-manager must not be approached because this lowers the absenteeism threshold. More clearly emphasising and increasing of the roles of the HR-manager and the occupational health physician is therefore recommended.

In addition the analysis showed that some very long long-term sick employees have a very great impact on the sickness absenteeism rate. They raise the sickness absenteeism percentage strongly. Of course these employees are also a part of the total sickness absenteeism rate. However, when they are removed from the analysis, this may give a better impression of the sickness absenteeism which the organisation might influence. To get more insight into the sickness absenteeism statistics it is therefore recommended analysing the sickness absenteeism statistics also without these long-term sick employees on which the organisation has no influence.

Besides this, it may also be beneficial when the organisation register their sickness absenteeism statistics in more detail. In the analysis it turned out that it is not known if the sickness absenteeism is mainly caused by physical health complaints, mental health complaints or a combination of the two. When the organisation registers these causes of the sick reports, more specified actions can be taken to reduce the sickness absenteeism. This may give the organisation more insight in how the sickness absenteeism can be reduced in a way that matches with the needs of the employees. The program with which the organisation registers their sick reports, the IT&Care database of Human Capital Care Arbozorg B.V., contains a function where these causes can be registered. However, this is not used accurately now. Also, it was recommended that more questions should be asked when reporting sick instead of just accepting that an employee is sick. This is to raise the sickness absenteeism threshold for reporting sick. Therefore, it is recommended that this more detailed way of reporting sick, by asking more questions, is used to register in more detail the cause of

sickness in the program. In this way the organisation knows what type of sickness absenteeism they should reduce.

Furthermore, it is recommended that the organisation spends more time and attention to the available sickness absenteeism statistics. Now these statistics are not thoroughly analysed on a regular basis. It is advisable that, for example, every two weeks an overview of the most recent sickness absenteeism statistics is analysed by the HR-manager. This way the sickness absenteeism of employees in the organisation can be better monitored. When it turns out that an employee is frequently sick or for a longer period, actions can be taken to prevent more sickness absenteeism in the future. In addition, it can be valuable to hold conversations with these frequently of long-term sick employees. This may give valuable information why an employee was or is absent and possible causes may be identified more easily. This way the organisation can better respond to the needs of the sick employees.

Finally it is recommendable to organise a meeting with the team leaders, HR-managers and the management of the organisation to discuss how the found measures on organisational level to reduce the sickness absenteeism can be implemented. In this study several factors came forward which are important in reducing the sickness absenteeism. However, these organisational measures should be supported by these stakeholders. Without their support these factors could not be implemented and the sickness absenteeism cannot be reduced. Besides this, their knowledge of the way of working in the organisation can be a valuable contribution in implementing these measures. Therefore, it is advisable to involve these stakeholders in implementing the measures to reduce the sickness absenteeism at the organisation.

5.3 Summary

The main research question in this study was: "H*ow can the sickness absenteeism rate at the organisation be reduced with measures at organisational level which are in line with the existing way of working?*". To answer this main research question it can be concluded that the organisation should reduce the sickness absenteeism rate by reducing their short-term sickness absenteeism. The organisation should focus on measures at organisational level concerning the compliance with the existing absenteeism policy and the high (cognitive) work load in reducing the short-term sickness absenteeism. Regarding a greater compliance with the existing absenteeism policy, it is advisable that the organisation communicates their sickness absenteeism policy more clearly and creates more awareness about the existence and importance of their sickness absenteeism policy. Also a stricter enforcement of the sickness absenteeism policy is recommended to raise the sickness absenteeism threshold and to stimulate an absenteeism culture where reporting sick is not too easy. For lowering the (cognitive) work load, it is advisable that the organisation ensures that more alternation and movement between the work activities occurs. Also it is recommended that employees have the possibility to use small enclosed working spaces when they prefer to work in such a working climate. In addition it is advisable that the organisation pays more attention to the monitoring of the (cognitive) work load and the work-life balance of employees by discussing this on a regular basis with employees. It is also beneficial when the organisation increases the number of moments for employees to receive feedback on their work. Finally, it is recommended that the organisation makes the career perspective for employees more insightful. These measures at organisational level concerning a greater compliance with the existing absenteeism policy and lowering the high (cognitive) work load may cause that fewer employees report sick. With these measures the organisation may reduce the sickness absenteeism in the organisation.

6. Reflection

In this final chapter the findings will be discussed and recommendations for further research will be presented. Firstly, some recommendations will be given for improving this research (6.1). Secondly, attention will be paid to a number of recommendations for more in-depth research (6.2).

6.1 Recommendations for improving this research

Based on the implementation and the results of this study a number of recommendations for further research can be given. First, there are opportunities for improvement of this study which are related to the used literature and the used methodology.

As described, in order to get an answer to the main research question first a literature study is carried out on what sickness absenteeism means, what possible causes for sickness absenteeism are and which factors may reduce sickness absenteeism in an organisation. For all these three sub-questions, sickness absenteeism is primarily examined as 'one concept'. In the literature there was not always a clear distinction in sickness absenteeism concerning mental health complaints and physical health complaints. In addition, sickness absenteeism was often not specified into short-term and long-term sickness absenteeism. Therefore, for example, causes and factors for sickness absenteeism were found for sickness absenteeism as one 'broad' concept, without the possibility to further specify this in causes or factors that affect short-term or long-term sickness absenteeism. When only literature was used where these distinctions had been better specified, this had led to a more specified literature study. However, this literature was difficult to find.

Regarding the used methodology, also some improvements for this research can be noticed which can be seen as recommendations for further research. First, the data of this study is not analysed by a second researcher. By systematically analysing the data it is tried to analyse the data as reliable as possible. However, for the reliability of the data analysis it is advisable for further research that the data is analysed by a second researcher so it can be examined if the analyses lead to the same results.

It should also be noticed that for a number of survey questions, the IS-scales and the 'newly developed questions', there was no existing method for the data analysis available. Therefore it was not known how the results of these questions had to be analysed. Hereby not for all factors a complete reliable scale with questions which together measure a factor was used. To improve this study it is recommended to use only reliable and validated scales with questions that measure a factor and for which it is known how these questions should be analysed.

In addition, in this research both the frequently and long-term sick employees are asked to complete the second questionnaire. This to gather as much as possible valuable information about the perceived absenteeism opportunity and the organisational factors that may be improved to reduce the sickness absenteeism. However, this research was about the short-term sickness absenteeism and not about the long-term sickness absenteeism. The involvement of the long-term sick employees may have influenced the results of this study. In this study it was difficult to make a clear separation between the long-term and short-term sick employees, because some 'long-term sick employees' also belong to the 'short-term sick employees'. Besides, when only the frequently short-term sick employees were involved this would have given very little input. However, for further research it is recommended to involve only the frequent short-term sick employees when it is possible to distinguish this group and when this group of employees is big enough. In this way the most accurate results are obtained.

Furthermore, in this study the 'personal background information' of the respondents could not be linked to the answers given by the respondents in the questionnaire. This was because some respondents did not want to give their personal information correctly because they feared that this would detriment their anonymity. Therefore, the correlation between age, gender, number of years working in the organisation or the number of contract hours per week with for example the perceived work load, social support and work-life balance could not be examined. This could have given more insight into how different groups of employees perceive these various factors related to sickness absenteeism. Given the anonymity of this study, the data about the health and the sickness absenteeism of employees could also not be linked to the 'personal background information' or the given answers in the questionnaire of the employees. This could have given insight in how employees who often have health problems or are often absent because of sickness perceive the various factors related to sickness absenteeism. Therefore it is recommended in further research to ensure that the relationship between the personal background information, the sickness absenteeism data and the health data of employees and the investigated factors concerning sickness absenteeism could be determined.

Finally, in this study only one research method was used to examine the perceived absenteeism opportunity of research question 2 and to examine the organisational factors of research question 3: written questionnaires. Data is collected with both an online questionnaire for all employees of the organisation and with an additional online questionnaire for the frequent and long-term sick employees. However, for the validity of the research it is recommended to expand the research method. When was made use of multiple research methods, data triangulation, it could be examined whether different research methods led to the same results (Saunders, Lewis & Thornhill, 2009). Next to the written questionnaires a qualitative research method could be used to collect data, for example individual interviews with employees. However, given the size and time frame of this study this was not possible. To improve the quality of the research it is recommended for further research to make use of both quantitative and qualitative research methods. However it should be ensured that this is not detrimental for the anonymity of the respondents.

6.2 Recommendations for more in-depth research

In addition to these improvements for further research, there are some recommendations which can give more deepening of or more insight into the subject under investigation. These recommendations are related to the factors that emerged from this research which could help to reduce the sickness absenteeism in the organisation.

First, this research actually shows which factors are important to reduce the sickness absenteeism in the organisation but it does not clearly show for each factor how this could be realised in practice. For example, results in the study have shown that the cognitive load in the organisation is experienced as high by employees, but this study does not show how the employees think that this can be reduced. Also it turned out that improvements can be made with regard to the work-life balance, the career opportunities and the absenteeism threshold which is too low. However, this study does not elaborately show how this could be realised in practice. This also raises the question whether it is possible to consciously influence all these factors. One factor will be easier to influence than the other factor. For example, creating more feedback moments to give employees more information about their work is easier to influence than improving the absenteeism culture. An in-depth study of the practical realisation of the reducing factors is therefore recommended.

In addition, this study does not show whether it is necessary that all found factors that may reduce the sickness absenteeism in the organisation should be taken into account or that the realisation of a couple of factors is sufficient to reduce the sickness absenteeism. For

example, does only reducing the cognitive load or the creating of more career opportunities lead to a reduced sickness absenteeism rate in the organisations? Or should there be more than one or should even all factors be improved in order to reduce the sickness absenteeism? It is therefore important to investigate what combination of factors can reduce the sickness absenteeism as effectively as possible. In this way the reducing of the sickness absenteeism in the organisation can be further optimised.

It would also be valuable for an in-depth follow-up study to do more with 'the situational analysis'. In this study the analysis of the sickness absenteeism statistics was anonymous. Therefore it was for example not possible to discuss with sick employees how the organisation should cope with their specific reasons for absence. This could make the research more focused and it may give valuable insights. It is therefore good to consider in in-depth follow-up research if it is possible to link the employees with the sickness absenteeism statistics. In addition, it is only investigated by a document analysis what steps the organisation takes to reduce the sickness absenteeism. However, the question is whether these measures which are described in the sickness absence policy correspond with the reality in the organisation or that it is a just an 'idealised situation'. For in-depth follow-up research it will be valuable to investigate this further, not only with a document analysis.

Furthermore, in this study it is especially investigated how the short-term sickness absenteeism can be reduced. Since short-term sickness absenteeism often turns into long-term sickness absenteeism, the factors are also important for reducing the long-term sickness absenteeism. In the questionnaire and the additional questionnaire long-term sick employees are involved. However, the focus was always on the reduction of short-term sickness absenteeism. For in-depth follow-up research it is also interesting to examine how especially the long-term sickness absenteeism could be reduced. This is in fact the largest percentage of sickness absenteeism in the organisation. The analysis of the absenteeism statistics with the occupational health physician showed that the current long-term sickness absenteeism in the organisation is difficult to reduce. But preventive research can be done how long-term sickness absenteeism can be avoided in the future as much as possible so that at least this percentage does not become higher.

This study also describes that only a small part of the sickness absenteeism can be explained by factors which can be influenced by the organisation. The organisation can only influence the sickness absenteeism for a very small part. Given this small influence, the question is therefore to what extent the described measures actually reduce the sickness absenteeism in the organisation. It was described in the literature that the health of employees (Van Deursen et al., 1997; Jehoel-Gijsbers, 2010), private and individual factors such as personality characteristics, risky habits and a stressful home situation (Geurts & Smulders, 2006; Duits et al., 2007) and many other variables also affect the existence and reduction of the sickness absenteeism in an organisation. Jehoel-Gijsbers (2007) even states that only 9% of the sickness absenteeism can be explained by the sum of the variables. Therefore the aim of the organisation to reduce the sickness absenteeism with 2% only by factors at the organisational level appears to be too high. In this study it is only examined which factors at the organisational level could reduce the sickness absenteeism. So in addition it is very valuable to investigate how factors at individual level, at sector level and at societal level may reduce the sickness absenteeism. In this way, the reduction of the sickness absenteeism is also examined from other points of view and this may ensure that the sickness absenteeism in the organisation may be reduced with a greater percentage.

Finally, it is interesting for further research to involve comparable organisations from the same sector and of comparable size in the research. Given the size and time frame of this study this was not possible in the current study. Firstly it is interesting to see how comparable organisations deal with sickness absenteeism and what measures they take to reduce the

sickness absenteeism. Next to this, the results of the written questionnaires could then be compared with the results of other organisations. In particular the VBBA-scales are actually designed to compare the results with other organisations and not to use them within one organisation. Otherwise it is not known how at a national level or how similar groups score on the factors. This study gives actually not a good impression if an obtained score is actually high or low. Perhaps certain factors should be high or low. For in-depth follow-up research it is therefore interesting to involve comparable organisations. This can provide new insights and may make the results more meaningful.

7. References

Arbeidsvoorwaarden. (2013). Retrieved on February 12, 2013, from the intranet of the organisation: http://intranet of the organisation

Arboportaal. (2013). Retrieved on February 12, 2013, from Website Ministerie van Sociale Zaken en Werkgelegenheid: http://www.arboportaal.nl/types/wetgeving?/onderwerpen/arbowet--en--regelgeving/verzuim

Aronsson, K., Gustafsson, M., & Dallner, M. (2000). Sick but yet at work. An empirical study of sickness presenteeism. *Epidemiol Community Health, 54,* 502-509.

Baarda, D.B., & De Goede, M.P.M. (1997). *Methoden en technieken: Praktische handleiding voor het opzetten en uitvoeren van onderzoek.* Houten: Stenfert Kroese.

Baarda, D.B., De Goede, M.P.M., & Kalmijn, M. (2000*). Enquêteren en gestructureerd interviewen: Praktische handleiding voor het maken van een vragenlijst en het voorbereiden en afnemen van gestructureerde interviews.* Houten: EPN.

Baarda, D.B., De Goede, M.P.M., & Teunissen, J. (1995). *Kwalitatief onderzoek: Praktische handleiding voor het opzetten en uitvoeren van kwalitatief onderzoek.* Houten: Educatieve Partners Nederland bv.

Bakhuys Roozeboom, M., Gouw, P., Hooftman, W., Houtman, I., & Klein Hesselink, J. (2008). *Arbobalans 2007/2008. Kwaliteit van de arbeid, effecten en maatregelen in Nederland.* Hoofddorp: TNO Kwaliteit van Leven.

Bakker, A.B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology, 22,* 309-328.

Bartelds, J.F., Kluiter, H., & Van Smeden, K.G. (1978). *Enquête-adviesboek.* Groningen: Wolters-Noordhoff.

Bastiaanssen, M., Kuis, M.Y., Burdorf, A., & Van der Velde, C. (2008). *Dossier Verzuim en Re-integratie.* Den Haag: Ministerie van Sociale Zaken en Werkgelegenheid.

Beckers, G.J., Van der Linden, D., Smulders, P.G.W., Kompier, M.A.J., Van Veldhoven, M.J.P.M., & Van Yperen, N.W. (2004). Working overtime hours: Relations with fatigue, work motivation, and the quality of work. *Journal of Occupational and Environmental Medicine, 46*(12), 1282-1289.

Bedrijfsregelement. (2013). Retrieved on February 12, 2013, from intranet of the organisation: http://intranet of the organisation

BRAVO Company Check (2013). Retrieved on May 6, 2013, from Website SKB: http://www.skb.nl

Briggs, S.R., & Cheek, J.M. (1986). The role of factor analysis in the development and evaluation of personality scales. *Journal of Personality, 54,* 106-148.

Burdorf, L., Van den Berg, T., & Elders, L. (2008). *De invloed van gezondheid en arbeidsomstandigheden op duurzame inzetbaarheid van oudere werknemers.* Rotterdam: Erasmus MC.

CBS. (2013). Retrieved on March 21, 2013, from Website Centraal Bureau voor de Statistiek: http://www.cbs.nl/nl-NL/menu/themas/arbeid-sociale-zekerheid/publicaties/arbeidsmarkt-vogelvlucht/korte-termijn-ontw/2006-arbeidsmarkt-vv-ao-zv-art.htm

Cohen, J.W. (1988). *Statistical power analysis for the behavioral sciences (2nd edn).* Hillsdale, New York: Lawrence Erlbaum Associates.

Creswell, J.W. (2002). *Educational Research: Planning, conducting, and evaluating quantitative and qualitative research.* London: Pearson Education Ltd.

De Bie, S.E., & Dijkstra, W. (1989). *Interviewen cursusboek*. Amsterdam: Vereniging van Onderzoek Instituten.

De Jonge, J., Reuvers, M.E.N., Houtman, I.L.D., Bongers, P.M., & Kompier, M.A.J. (2000). Linear and nonlinear relations between psychosocial job characteristics, subjective outcomes, and sickness absence: Baseline results from SMASH. *Journal of Occupational Health Psychology, 5*, 256-268.

De Lange, A. H. (2005). *What about causality? Examining longitudinal relations between work characteristics and mental health. Dissertatie.* Nijmegen: Radboud Universiteit.

DeVellis, R.F. (2003). *Scale Development: Theory and applications (2nd edn).* Thousand Oaks, California: Sage.

Diehl, P.J., Koenders, H., & Stoffelsen, J.M. (2007). *Handboek integraal gezondheidsmanagement: Hoe te komen tot effectief gezondheidsmanagement.* Alphen aan den Rijn: Kluwer.

Drenth J.D., & Sijtsma, K. (1990). *Testtheorie: Inleiding in de theorie van de psychologische test en zijn toepassingen*. Houten/Antwerpen: Bohn, Stafleu & Van Loghum.

Duits, S.F.A., Kant, I., Swaen, G.M.H., Van den Brandt, P.A., & Zeegers, M.P.A. (2007). A meta-analysis of observational studies identifies predictors of sickness absence. *Journal of Clinical Epidemiology, 60*, 11.05-1115. doi: 10.1016/j.jclinepi.2007.04.008

Dwyer, D. J., & Ganster, D. C. (1991). The effect of job demands and control on employee attendance and satisfaction. *Journal of Applied Psychology, 86*, 499-512.

Expertises of the organisation. (2013). Retrieved on February 12, 2013, from Website of the organisation: http://website of the organisation

Fink, A. (2003). *How to ask survey questions?* Thousand Oaks: Sage.

Gadourek, I. (1972). *Sociologische onderzoekstechnieken*. Deventer: Van Loghum Slaterus' Uitgeversmaatschappij.

Gaillard, A. (2003). *Stress, productiviteit en gezondheid.* Den Haag: Sdu Uitgevers.

Geurts, S.A.E., Buunk, A.P., & Schaufeli, W.B. (1994). Social comparisons: A structural modeling approach. *Journal of Applied Social Psychology, 24*, 1871-1890.

Geurts, S.A.E., Schaufeli, W.B., & Rutte, C. (1999). Absenteeism, turnover intention, and inequity in the employment relationship. *Work and Stress, 13*, 253-267.

Geurts, S., & Smulders, P. (2006). *De psychologie van arbeid en gezondheid: Ziekteverzuim en arbeidsongeschiktheid.* Houten: Bohn Stafleu van Loghum. doi: 10.1007/978-90-313-6556-2_20

Giesen, D., Meertens, V., Vis-Visschers, R., & Beukenhorst, D. (2010). *Vragenlijstontwikkeling.* Den Haag: Centraal Bureau voor de Statistiek.

Gimeno, D. Benavides, F.G., Amick, B.C., Benach, J., & Martínez, J.M. (2004). Psychosocial factors and work related sickness absence among permanent and non-permanent employees. *Epidemiol Community Health, 58*, 870-876. doi: 10.1136/jech.2003.016634

Goff, S. J., Mount, M. K., & Jamison, R. L. (1990). Employer supported childcare, work/family conflict and absenteeism: A field study. *Personnel Psychology, 43*, 793-809.

Grinyer, A., & Singleton, V. (2000). Sickness absence as risk-taking behaviour: A study of organisational and cultural factors in the public sector. *Health, Risk & Society, 2*(1), 7-21.

Hansen, C.D., & Andersen, J.H. (2008). Going ill to work: What personal circumstances, attitudes and work-related factors are associated with sickness presenteeism? *Social Science & Medicine, 67*, 956-964. doi:10.1016/j.socscimed.2008.05.022

Hemp, P. (2004). Presenteeism: At work-but out of it. *Harvard Business Review*, *82*(10), 49-58.

Hopstaken, L. E. (1994). "*Willens en wetens": Ziekmelden als beredeneerd gedrag*. Meppel: Krips Repro.

Intranet of the organisation. (2013). Retrieved on February 12, 2013, from Intranet of the organisation: http://intranet of the organisation

IT&Care. (2013). Retrieved on April 16, 2013, from Website Human Capital Care Arbozorg B.V.: http://www.itandcare.nl

Jehoel-Gijsbers, G. (Ed.). (2007). *Beter aan het werk: Trendrapportage ziekteverzuim, arbeidsongeschiktheid en werkhervatting.* Den Haag: Sociaal en Cultureel Planbureau.

Jehoel-Gijsbers, G. (Ed.). (2010). *Beperkt aan het werk: Rapportage ziekteverzuim, arbeidsongeschiktheid en arbeidsparticipatie.* Den Haag: Sociaal en Cultureel Planbureau.

Johansson, G., & Lundberg, I. (2004). Adjustment latitude and attendance requirements as determinants of sickness absence or attendance: Empirical tests of the illness flexibility model. *Social Science & Medicine, 58*, 1857-1868. doi:10.1016/S0277-9536(03)00407-6

Karasek, R.A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*, 285-308.

Kivimäki, M., Head, J., Ferrie, J.E., Hemingway, H., Shipley, M.J., Vahtera, J., & Marmot, M.G. (2005). Working while ill as a risk factor for serious coronary events: The Whitehall II study. *American Journal of Public Health, 95*, 98-102.

Klein Hesselink, D.J., Van der Klink, J.J.L., & Vaas S. (2001). *Maatregelen werkdruk en werkstress: Catalogus ontwikkeld in het kader van arboconvenanten, stand der wetenschap*. Den Haag: Ministerie van Sociale Zaken en Werkgelegenheid.

Lagerveld, S.E., Blonk, R.W.B., Brenninkmeijer, V., & Schaufeli, W. (2010). The role of self-efficacy on return to work among employees on sickness absenteeism with common mental disorders. *Work & Stress: An International Journal of Work, Health & Organisations*, *24*(4), 379-375. doi: 10.1080/02678373.2010.532644

Leiter, M.P. (1993). Burnout as developmental process: Consideration of Models. In W.B. Schaufeli, C. Maslach & T. Marek. (Eds.). (1993). *Professional Burnout: Recent developments in theory and research.* London: Taylor & Francis.

Magnavita, N., & Garbarino, S. (2013). In absence related to work stress? A repeated cross-sectional stydy on a special police force. *American Journal of Industrial Medicine,1*, 1-11. doi: 10.1002/ajim.22155

McKevitt, C., Morgan, M. Dundas, R., & Holland, W.W. (1997). Sickness absence and 'working through' illness: A comparison of two professional groups. *Journal of Public Health Medicine, 19*(3), 295-300.

Medewerkersonderzoek (2013). Retrieved on April 25, 2013, from Website Internetspiegel TNS NIPO: http://www.internetspiegel.nl

Melchior, M., Niedhammer, I., Berkman, L.F., & Goldberg, J. (2003). Do Psychosocial work factors and social relations exert independent effects on sicknesss absence? A six year prospective study of the GAZEL cohort. *Epidemiol Community Health*, *57*(4), 285-289.

Michie, S., & Williams, S. (2003). Reducing work related psychological ill health and sickness absence: A systematic literature review. *Occupational Environmental Medicine, 60*, 3-9.

Miles, M., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook.* London: Sage.

North, F.M., Syme, S.L., Feeney, A., Shipley, M., & Marmot, M. (1996). Psychosocial work environment and sickness absence among British Civil Servants: The Whitehall II Study. *American Journal of Public Health, 86*(3), 332-340.

Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods*. Thousand Oask: Sage Publications, Inc.

Philipsen, H. (1969). *Afwezigheid wegens ziekte*. Groningen: Wolters-Noordhoff.

Rentsch, J. R., & Steel, R. P. (1998). Testing the durability of job characteristics as predictors of absenteeism over a six-year period. *Personnel Psychology, 51*(1), 165-190.

Robson, C. (2002). *Real World Research.* Oxford: Blackwell.

Rossi, P.H., Wright, J.D., & Anderson, B.A. (1983*). Handbook of Survey Research*. Orlando: Academic Press INC.

Rousseau, V., & Aubé, C. (2013). Collective autonomy and absenteeism within work teams: A team motivation approach. *The Journal of Psychology: Interdisciplinary and Applied, 147*(2), 153-175.

Sagie, A. (1998). Employee absenteeism, organizational commitment, and job satisfaction: Another look. *Journal of Vocational Behavior, 52*, 156-171.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*, *Fifth Edition*. Harlow: Pearson Education Limited.

Schaufeli, W.B., & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*, 293-315. doi: 0.1002/job.248

Schaufeli, W.B., & Bakker, A.B. (2007). *De psychologie van arbeid en gezondheid: Burnout en bevlogenheid*. Houten/Diegem: Bohn Stafleu Van Loghum.

Schaufeli, W.B., Bakker, A.B., & De Jonge, J. (2003). *De Psychologie van Arbeid en Gezondheid*. Houten/Mechelen: Bohn Stafleu Van Loghum.

Schaufeli, W.B., Bakker, A.B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior, 30*, 893-917. doi: 10.1002/job.595

Schyns, B., & Von Collani, G. (2002). A new self-efficacy scale and its relation to personality constructs and organizational variables. *European Journal of Work and Organizational Psychology, 11*, 219-241.

SER (2009). *Een kwestie van gezond verstand: Breed preventiebeleid binnen arbeidsorganisaties.* Den Haag, Sociaal Economische Raad.

Smulders, P.G.W., & De Winter, C.R. (1993). De voorspellende waarde van arbeidssituatie en gezondheid voor ziekteverzuim en arbeidsongeschiktheid. In M.J. Schabracq, & J.A.M. Winnubst (Eds.). (1993). *Handboek arbeid en gezondheidspsychologie. Deel 2:Toepassingen*. Utrecht: LEMMA.

Tweehuysen, H. (Ed.). (2007). *Dossier Werkdruk.* Den Haag: Ministerie van Sociale Zaken en Werkgelegenheid.

Väänänen, A., Toppinen-Tanner, S., Kalimo, R., Mutanen, P., Vahtera, J., & Peiró, J.M. (2003). Job characterstics, physical and psychological symptoms, and social support as antecedents of sickness absence among men and women in the private industrial sector. *Social Science & Medicine*, 57, 807-824.

Van Bekkum P., & Gouw A. (2007). *Werkdruk en stress*. Den Haag: Sdu Uitgevers.

Van den Berg, J. (2010*). Ziekte overkomt je, verzuim is een keuze.* Alphen aan den Rijn: Kluwer.

Van den Bossche, S.N.J., Hupkens, C.I.H., De Ree, S.J.M., & Smulders, P.G.W. (2006). *Nationale Enquête Arbeidsomstandigheden 2005: Methodologie en globale resultaten.* Hoofddorp: TNO Kwaliteit van Leven/Arbeid.

Van der Klink, J.J.L., Blonk, R.W.B., Schene, A.H., & Van Dijk, F.J.H. (2003). Reducing long term sickness absence by an activating intervention in adjustment disorders: A cluster randomised controlled design. *Occupational Environmental Medicine, 60*, 429-437.

Van Deursen, C., & Koenders, P. (2007). Een gezonde leefstijl geeft een lager verzuim. *Economische Statistische Berichten, 9*2(4515), 468-470.

Van Deursen, C.G.L., Smulders, P.G.W., & Bongers, P.M. (1997). Vormt een slechte gezondheid een ziekteverzuimrisico? *Tijdschrift voor Sociale Gezondheidszorg, 75*, 157-16.

Van Dijk, F.J.H., Van Dormolen, M., Kompier, M.A.J., & Meijman, T.F. (1990). Herwaardering model belasting-belastbaarheid. *Tijdschrift Sociale Gezondheidszorg, 68*, 3-10.

Van Hooff, L.M., Geurts, S.A.E., Taris, T.W., Kompier, M.A.J., Dikkers, J.S.E., Houtman, I.L.D., & Van den Heuvel, M.M. (2005). Disentangling the causal relationships between work-home interference and employee health. *Scandinavian Journal of Work, Environment & Health, 31*(1), 15-29.

Van Rossum, B. (2001). *Privé en werk: een wankel evenwicht?* Oostzijde BV.

Van Veldhoven, M. (1993). *PBGO-factormodule psychosociale arbeidsbelasting: Tussenrapport 2, schaalconstructie-onderzoek en ontwikkeling van de vragenlijst beleving en beoordeling van de arbeid (VBBA).* Amsterdam: NIA.

Van Veldhoven, M. (1996). *Psychosociale arbeidsbelasting en werkstress (dissertatie).* Lisse: Swets & Zeitlinger.

Van Veldhoven, M., Broersen, J.P.J., & Fortuin, R.J. (1999). *Werkstress in Beeld: Psychosociale arbeidsbelasting en werkstress in Nederland.* Amsterdam: Stichting Kwaliteitsbevordering Bedrijfsgezondheidszorg.

Van Veldhoven, M., Meijman, T.F., Broersen, J.P.J., & Fortuin, R.J. (2002). *Handleiding VBBA.* Amsterdam: SKB Vragenlijst Services.

Wester, F. (1987). *Strategieën voor kwalitatief onderzoek*. Muiderberg: Coutinho.

Appendix A - Demand letter (online questionnaire 1)

Beste collega's,

Op dit moment ben ik voor de organisatie bezig met een onderzoek naar het ziekteverzuim binnen de organisatie. Dit doe ik voor mijn afstudeeronderzoek van mijn studie Human Resource Management aan de Universiteit Twente. Ik onderzoek hoe de arbeidsomstandigheden binnen de organisatie verder geoptimaliseerd kunnen worden, zodat het ziekteverzuim mogelijk terug gedrongen kan worden. Hiervoor is jouw input ook van groot belang.

Zoals ook vandaag in het werkoverleg aangekondigd is, willen we daarom alle medewerkers van de organisatie vragen vandaag een online vragenlijst in te vullen. De vragenlijst is via de volgende link te vinden:

-*link*-

De antwoorden zullen geheel anoniem verwerkt worden. Deze vragenlijst is daarom absoluut *niet* bedoeld om persoonlijke gegevens te koppelen aan de antwoorden. De resultaten worden alleen op organisatieniveau bekeken.

De vragenlijst bestaat uit een vrij lange reeks vragen. Het zijn echter alleen meerkeuzevragen welke snel ingevuld kunnen worden. Het invullen van de vragenlijst zal daarom maximaal een half uur duren.

Het zou erg fijn zijn als je **vandaag** de vragenlijst wilt invullen. Het is voor jou immers ook van persoonlijk belang dat er geïnventariseerd kan worden op welke punten de organisatie de arbeidsomstandigheden nog verder kan verbeteren.

Bij voorbaat dank!

Met vriendelijke groet,
Jacqueline Aalbers

Appendix B - Introductory text (online questionnaire 1)

Welkom!

Bedankt dat je tijd vrij wilt maken om deze vragenlijst in te vullen.

Je bent nu ingelogd in de vragenlijst. Op iedere pagina vind je vragen over diverse aspecten van je werk. Je kunt deze vragen beantwoorden door met je muis te klikken in het rondje met het antwoord dat voor jou van toepassing is. Er zijn geen goede of foute antwoorden. Kies steeds het antwoord dat het beste jouw mening benadert. Je antwoorden zullen geheel anoniem worden verwerkt.

Wanneer je alle vragen hebt ingevuld, kun je op ‘volgende pagina’ klikken. Je gaat dan naar het volgende vragenblok. Terugkeren naar een eerder vragenblok is niet mogelijk. In totaal zijn er 20 vragenblokken. Ieder vragenblok bevat gemiddeld 9 meerkeuzevragen. Wanneer je vergeten bent om een van de vragen te beantwoorden, zal dit worden aangegeven. De vragenlijst dient in één keer ingevuld te worden.

Veel succes bij het invullen van de vragenlijst.

Appendix C - Questionnaire for all employees of the organisation (online questionnaire 1)

The used questionnaire is not included in this anonymous version of the study. Contact the author of this study for the questionnaire.

Appendix D - Closing text (online questionnaire 1)

Hartelijk dank voor het invullen van de vragenlijst. Je antwoorden zullen geheel anoniem verwerkt worden.

We hopen dat jouw input en die van anderen inzicht geeft in hoe de arbeidsomstandigheden in de organisatie nog verder geoptimaliseerd kunnen worden.

Bedankt voor je bijdrage hieraan!

Appendix E - Reminder email (online questionnaire 1)

Beste collega's,

Iedereen die de enquête uit de onderstaande mail heeft ingevuld: hartelijk dank voor jullie hulp! Jullie mogen deze herinnering negeren.
In totaal verwachten we nu nog van 17 mensen dat ze de enquête invullen. Heb jij dit nog niet gedaan? Zou je dit dan **vandaag** willen doen!

-*link*-

Bij voorbaat dank!

Met vriendelijke groet,
Jacqueline Aalbers

Appendix F - Demand letter (online questionnaire 2)

Beste collega's,

Vorige week heb ik in het werkoverleg verteld dat ik voor de organisatie bezig ben met mijn afstudeeronderzoek naar het ziekteverzuim binnen de organisatie. Hiervoor is je toen gevraagd een online vragenlijst in te vullen, welke je per email toegestuurd is. Nu heb ik tijdens dit werkoverleg ook verteld dat ik een aantal mensen een paar extra vragen wil stellen, om zo op ideeën te komen wat de organisatie zou kunnen verbeteren om het ziekteverzuim mogelijk te kunnen reduceren.

Hiervoor heb ik jou ook geselecteerd. Met behulp van de registratietool van ziekteverzuim van de organisatie heb ik gekeken welke mensen het afgelopen jaar meer keren of langer dan gemiddeld ziek zijn geweest, zodat ik hen een aantal vragen kan stellen. Dat is de reden dat ik jouw mening ook graag wil horen. Ik zou namelijk graag willen weten hoe jij de procedure rondom ziekteverzuim ervaren hebt en wat jij denkt dat de organisatie zou kunnen doen om het ziekteverzuim te reduceren.

Hierover heb ik 7 vragen opgesteld. Deze vragen zijn via de volgende link te vinden:

-link-

Het beantwoorden van de vragen kost ongeveer 15 minuten. De vragenlijst bevat geen vragen over persoonsgegevens en alle antwoorden zullen geheel anoniem verwerkt worden. Ik ben de enige die antwoorden (geanonimiseerd) te zien krijgt en de resultaten zullen alleen op groepsniveau (dus niet op individueel niveau) door mij geanalyseerd worden.

Het zou erg fijn zijn als je deze 7 vragen **vandaag** wilt beantwoorden. Op deze manier hoop ik door jouw hulp nieuwe inzichten te verkrijgen hoe de organisatie de arbeidsomstandigheden nog verder kan verbeteren.

Mocht je vragen over mijn onderzoek hebben of redenen hebben waarom je de vragen niet wilt beantwoorden, dan hoor ik dat graag. Je kunt mij een mailtje sturen of donderdag bij mij langslopen, want dan ben ik de hele dag bij de organisatie aanwezig.

Alvast bedankt!

Met vriendelijke groet,
Jacqueline Aalbers

Appendix G - Introductory text (online questionnaire 2)

Welkom!

Bedankt dat je tijd vrij wilt maken om deze vragenlijst in te vullen.

Je bent nu ingelogd in de vragenlijst. Je vindt hier 7 open vragen welke betrekking hebben op ziekteverzuim in de organisatie. Je kunt hierbij geheel in je eigen woorden antwoorden. Er zijn geen goede of foute antwoorden mogelijk. Wanneer je op een vraag geen antwoord weet, mag je dit aangeven.

Je antwoorden zullen anoniem worden verwerkt. De vragenlijst dient in één keer ingevuld te worden.

Veel succes bij het invullen van de vragenlijst.

Appendix H - Questionnaire for long-term and frequently sick employees (online questionnaire 2)

	Individuele vragenlijst
	Ziekteverzuimprocedure (3 vragen) *(open vragen)*
1	Wat vind je goed aan de manier waarop de organisatie met ziekteverzuim omgaat?
2	Wat kan de organisatie verbeteren aan de manier waarop zij met ziekteverzuim omgaat?
3	Waar moet de organisatie volgens jou mee stoppen rondom het ziekteverzuimbeleid?
	Oorzaken ziekteverzuim (3 vragen) *(open vragen)*
4	Wat zou de organisatie voor jou persoonlijk kunnen verbeteren of veranderen zodat jij minder vaak of minder lang ziek bent?
5	Wat zou je zelf kunnen doen zodat je minder vaak of minder lang ziek bent?
6	Wat zie je als mogelijke oorzaken van het hoge ziekteverzuimpercentage bij de organisatie?
	Overig (1 vraag) *(open vraag)*
7	Is er nog iets dat je kwijt wilt rondom ziekteverzuim bij de organisatie?

Appendix I - Closing text (online questionnaire 2)

Hartelijk dank voor het invullen van deze vragenlijst. Je antwoorden zullen geheel anoniem verwerkt worden.

We hopen dat jouw input en die van anderen inzicht geeft in hoe de ziekteverzuimprocedure en de werkomstandigheden in de organisatie nog verder geoptimaliseerd kunnen worden.

Bedankt voor je bijdrage hieraan!

Appendix J - Reminder email (online questionnaire 2)

Beste collega's,

Nog lang niet iedereen heeft de 7 vragen uit de onderstaande enquête ingevuld. Ik verwacht nog …% terug. Om een beetje op schema te blijven lopen met mijn afstuderen, zou ik graag volgende week beginnen met het verwerken van jullie antwoorden.

Heb je de vragen daarom nog niet ingevuld, zou je dit dan vandaag nog kunnen doen? Je zou me hier heel erg mee helpen!

-*link*-

Voor de mensen die de enquête al wel ingevuld hebben: heel erg bedankt voor jullie input! Jullie mogen deze herinnering uiteraard negeren.

Alvast bedankt!

Met vriendelijke groet,
Jacqueline Aalbers