

Radboud University

Stimulating Employability

Examining the moderating effect of job characteristics on the relationship between training and development willingness, job proactivity and employability.

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Master Thesis

12 September 2018



Radboud University

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Abstract

The topic of employee development and employability has become of great importance in most organizations. The growing interest in employability is caused by the increasing need for organizations to be flexible and secondly, due to the shift to lifelong employability, which requires employees to continuously develop to remain employable. In this study on employability it is examined if and how the characteristics of the job affect the relationship between the willingness to participate in development activities, job proactivity and employability. The research is conducted in an energy network organization in the Netherlands. A questionnaire was used to gather the data, which resulted in a sample of 268 respondents, distributed throughout the organization. Significant effects of both training and development willingness and job proactivity on employability are found, but not all moderating effects of autonomy, task variety and workload have been proven in this study. The results give insights into the current employability of employees in the organization and the factors affecting employability, and make a contribution to the theory on this topic.

Keywords: Employability, Training and development willingness, Job proactivity, Job characteristics, Energy industry.

Chapter 1. Introduction

In recent years, the topic of employability has become of great importance in most organizations. Employability can be defined as the ability of employees to continuously develop their competences in order to stay employable on the internal and external labour market (Forrier & Sels, 2003; Van der Heijde & Van der Heijden, 2006). There are two main reasons to explain the importance of employability. One of these reasons is the very dynamic environment in which organizations are operating nowadays. It forces them to be flexible and adapt to fast technological developments, increasing customer demands and besides this, respond to the shrinkage of the overall workforce and the increasing number of workers in higher age groups (Van Dam, 2004; Veldhoven & Dorenbosch, 2008). These current developments require a workforce that will participate longer in the labour market and can be deployed flexible in the organization to where they are needed (Brookfield Global Relocation Service, 2010). To cope with the fluctuations and the demand for longer work participation, organizations are more and more looking to influence the behavior and employability of their permanent employees, instead of using temporary staff (Legge, 1995; Van der Heijde & Van der Heijden, 2006). For this reason, it is of great importance for organizations to stimulate the continuous development of their employees and enhance the employability. One of the industries that has made large investment into employability in the past, is the energy industry (Manuel, 2014). In recent years, this resulted in an increase of the organizational flexibility and still today, energy organizations are investing a lot of time, money and effort to improve the employability of their workforce.

In addition to this perspective of employability as a mean for organizations to become more flexible and anticipate to developments, employability is also becoming of greater importance at the individual level. The traditional career of lifetime employment within the same organization is disappearing and it is replaced with the concept of lifelong employability (Forrier & Sels, 2003). This refers to the development that changing employer or profession is becoming more and more common. The transition to lifelong employability enhances the importance for employees to be more flexible in their deployment, and requires them to constantly adjust and develop their skills and competences in order to remain employable (Berntson, Sverke & Marklund, 2006; Van der Heijden, De Lange, Demerouti & Van der Heijde, 2009).

Deriving from this, employability is beneficial for both the employee and the organization (Van der Heijden, Boon, Van der Klink & Meijs, 2009; Rothwell & Arnold, 2007) and therefore, it is of great value to gain insights into the factors that affect, stimulate or hinder employability. Several factors are influencing the employability of employees, both individual and organizational factors. Many scientific studies have addressed individual factors such as age, gender or employee's attitudes towards employability (e.g. Van der Heijden, De Lange, Demerouti & Van der Heijde, 2009; Van Dam, 2004), but organizational factors are also important to consider, since they set the environmental conditions which can facilitate or hinder the development and employability of employees. By providing a work context in which employees have the opportunity to deploy and develop their competences, skills and abilities, employability can be enhanced (Martínez-Sánchez, Vela-Jiménez, Pérez-Pérez. & De-Luis-Carnicer, 2008). Therefore, both individual and organizational factors are included in this master thesis research to study their effects on employability.

Several authors describe the importance of the employees' willingness to participate in development activities as a relevant factor to stimulate employability (Van Dam, 2004; Clarke, 2008; Van Vianen, Dalhoeven & De Pater, 2011). Therefore, the first factor that will be addressed in this research is the employees' training and development willingness. This concept refers to a behavioral intention of the employee to participate in training, learning and development activities in response to a request from the organization (Van Vianen, Dalhoeven & De Pater, 2011). As stated earlier, continuous development is important to enhance employability, and according to Clarke (2008), this starts with the employee's willingness to develop. In other words, it is expected that a positive attitude towards training and development will promote the actual participation in development activities and through this, will stimulate the employee's employability.

The second individual factor included in this research is job proactivity. The importance of proactivity to enhance employability has been highlighted in literature many times (e.g. Fugate, Kinicki & Ashforth, 2004). The general concept of proactivity refers to the anticipatory action that employees take to impact themselves and/or their environments (Grant & Ashford, 2008), which is the opposite of passive behavior and waiting until one must respond. In this research, specifically job proactivity is included, referring to the extent to which employees actively engage in solving inefficiencies that arise in continuously changing work processes (Veldhoven & Dorenbosch, 2008). It is expected that a proactive approach

towards the continuous changing work processes, will stimulate the development of employees in the workplace, and hence, their employability.

Besides these individual factors, the organizational factor of job characteristics is included to study the importance of the organizational context in which employees perform their work, in relation to employability. Job characteristics, such as job autonomy and task variety, can facilitate a work environment in which employees are able to improve their skills and competences (e.g. Martínez-Sánchez, et al., 2008). Since job characteristics set the contextual conditions in which employees carry out their work and develop their abilities, it is likely that they affect the relationships between training and development willingness, job proactivity and employability. By adding the perspective of the organizational context in the relations between training and development willingness, job proactivity and employability, it seems that this master thesis offers an additional view in the employability literature (Van der Heijde & van der Heijden, 2006; Van Emmerik, Schreurs, de Cuyper, Jawahar & Peeters, 2011).

In the following paragraph the research objective and research question of this master thesis are presented, followed by a short description of the organizational context and the relevance of this research.

1.1. Research Objective & Research Question

Employability is a much discussed topic and as described above, it is of great importance for both organizations and employees. Therefore, gaining knowledge about how individual factors and the work context influence, stimulate or hinder employability can be of great value. By adding the concept of job characteristics, a moderating effect on the relationships between training and development willingness, job proactivity and employability is measured. The objective of this research is to gain insight into these effects on employability, in order to contribute to the theory of employability, and to provide the organization with relevant and current insights. To achieve this objective, the following research question will be addressed in this master thesis:

What is the effect of training and development willingness and job proactivity on employability and how do job characteristics influence these relationships in an energy network organization?

In order to answer the research question above, information will be gathered through a literature research and a questionnaire. The questionnaire is a combination of several existing and validated scales, such as the employability questionnaire of Van der Heijde & Van der Heijden (2006), parts of the questionnaire of Van Dam (2003) to measure the training and development willingness and thirdly, parts of the Short Inventory to Measure Psychosocial Hazards (SIMPH) questionnaire (Notelaers, De Witte, Van Veldhoven & Vermunt, 2007), which measures the job characteristics. By analyzing the gathered data, the effects of job characteristics on the relationships between training and development willingness, job proactivity and employability are measured.

1.2. Organizational context

Since the energy industry has been making large investments into employability (Manuel, 2014), it appears to be an interesting context to study employability. Therefore, this research is conducted in a Dutch energy network organization, which provides the distribution of gas and electricity and connects customers to the energy network in a large part of the Netherlands. The organization is very aware of their social responsibility and their important role in the energy transition to sustainable energy. Because of this, the organization feels and acknowledges the necessity to stimulate employability in order to anticipate to the developments in the environment, such as the shortage of technically skilled workers and longer work participation. Although there were already a lot of activities to enhance employability, last year the organization started an employability program to make employees more of aware of the need and their own responsibility to remain employable. Enhancing the employability is beneficial for both the employees and the organization, since it contributes to career success, organizational flexibility and the ambition of the organization to be a good employer.

1.3. Relevance

In the previous paragraphs the relevance of this research has already been mentioned shortly. Besides the increasing importance of employability for organizations and employees (e.g. Van der Heijde & Van der Heijden, 2006; Forrier & Sels, 2003), this study is also relevant for scientific literature (Van Emmerik, et al., 2011). A lot of research has been done on the topic of employability, but in the scientific literature that was in reach of this research, the possible effect of work characteristics on the relationships between training and development willingness, job proactivity and employability was not discussed. Therefore, this research

provides a contribution to the existing theory of employability. Subsequently, conducting this research in the context of an energy network organization will provide current insights to the scientific literature. By using several validated questionnaires, as for example the employability questionnaire of Van der Heijde & Van der Heijden (2006) to test the hypotheses, a contribution is made to the generalizability of these instruments.

Besides a scientific relevance, this master thesis research is also valuable for practice. The energy network organization in which the study is conducted, acknowledges the importance of employability and offers various possibilities for employee development. Gaining understanding into the relationship of individual attributes and employability and the role of job characteristics in these relationships, will provide the organization with valuable information, which can help them to create a work context that facilitates opportunities to enhance employability. Therefore, this research provides relevant insides for the organization and can lead to useful recommendations to improve employability and with that the organization's capacity to be flexible and anticipate to future developments and challenges.

1.4. Outline of the thesis

In this first chapter an introduction on the research topic and its relevance for both practice and science are described. This has led to the formulation of the research objective and research question. To answer the research question of this master thesis, the second chapter provides a theoretical framework in which related theories will be discussed, and a theoretical lens is developed to study the formulated hypotheses. The research method used to collect the data and to conduct a reliable research, is discussed in chapter 3. Next, the fourth chapter of this master thesis gives an overview of the results gathered in the organization, including the accepting or rejecting of the formulated hypotheses. In chapter 5 a conclusion based on the collected results is described, which leads to an answer to the research question of this master thesis. Additionally, chapter 5 contains a discussion and reflection of the research, supplemented by recommendations for future studies into this topic of employability.

Chapter 2. Theoretical Framework

In this chapter a theoretical framework is presented based on the existing literature of i.e. employability. It provides the theoretical lens used to study the possible effect of job characteristics on the relationships between training and development willingness, job proactivity and employability. First, the theory of employability will be described, in which the competence-based approach of Van der Heijde and Van der Heijden (2006) has a central place. Secondly, the concepts of training and development willingness and job proactivity will be explained. At the end of this chapter, the role of job characteristics is discussed, followed by the conceptual model which visualizes the studied hypotheses.

2.1. Employability

The concept of employability was developed in de 1950's. Over time, the focus of the concept has changed and many different definitions have been formulated. In the beginning employability was seen as the individual's potential to become employed. Nowadays, the concept of employability still refers to the individual's characteristic, but its theory is supplemented to include organizational factors that impact the individual's employability. Van der Heijde & Van der Heijden (2005) combined both the individual and organizational perspective and defined employability as "the continuous fulfilling, acquiring or creating of work through the optimal use of competences" (p. 143). Although this is an inclusive definition of employability, there are other authors who define employability more extensive, such as Sanders and De Grip (2004). They define employability as "the capacity and the willingness to be and to remain attractive in the labour market by anticipating changes in tasks and work environment and reacting to these changes in a proactive way" (Sanders & De Grip 2004, p. 76). In this definition, not only the ability of employees to remain employable is taken into account, but also their willingness is emphasized. Multiple authors, including Sanders and De Grip (2004), make a differentiation into the internal labour market and the external labour market. Employability in the internal labour market refers to the ability and willingness of employees to remain employable in the current job or a different job within the same organization. Secondly, an employee can be able and willing to switch to a job outside the current organization, to the external labour market.

Based on the definitions above, in this research the concept of employability is defined as the ability and willingness to continuously develop and use competences in order to remain employable in the internal and external labour market. (Sanders & De Grip, 2004; Van der Heijde & Van der Heijden, 2005; Forrier & Sels, 2003). Employability can be studied from different perspectives, first the individual perspective will be discussed.

Employability is becoming of greater importance at the individual level. One of the causes of this is the disappearance of the traditional career of lifetime employment within the same organization and its replacement with the concept of lifetime employability (Forrier & Sels, 2003). The transition to lifeting employability enhances the importance for employees to be more flexible, which requires them to constantly adjust and develop their skills and competences in order to remain employable (Berntson, Sverke & Marklund, 2006; Van der Heijden, De Lange, Demerouti & Van der Heijde, 2009). In the individual perspective of employability applied by Fugate, Kinicki & Ashforth (2004), the responsibility to develop knowledge, skills and behavior that are valuable in the changing work context, lies with the individuals themselves. They are responsible for their own career and development. Viewing form this perspective, employability is studied using personal characteristics, as for example personal adaptability, age and gender.

However, the role of organizations and employers in stimulating employability has gained importance, since investing and facilitating employees' employability is also beneficial the organization (Van der Heijden, Boon, Van der Klink & Meijs, 2009; Rothwell & Arnold, 2007). Therefore, the second perspective is the organizational perspective. In chapter one, the importance of employability for the organization and its flexibility was briefly described. Organizations are operating in a very dynamic environment, in which the globalization of the world economy, rapid technological developments and social changes demand flexibility in the workplace and workforce (De Lange & Thunissen, 2000; Kalleberg, 2001). Verburg & Den Hartog (2008) state that employability is the basis of a flexible organization, since it allows the organization to allocate employees easily within the organization to where they are needed (Rönnmar, 2006; Michie & Sheehan-Quinn, 2001; Valverde, et al., 2000). Hence, with employees that are broadly employable, the organization is better able to respond to the continuously changing market. In this organizational perspective, employability serves as an instrument to realize the strategic goals of the organization. Therefore, it is important for the organization to invest in the employability of its workforce (Van Dam, 2004). In this

perspective, employability is studied using organizational aspects such as support provided by the organization and tenure.

2.1.1 A competence-based approach

The individual and organizational perspective described above, are combined in the competence-based approach of Van der Heijde and Van der Heijden (2006). They developed an operationalization for employability consisting of multiple competences, which form the dimensions of the model. The following five dimensions of employability are distinguished in the model.

Occupational Expertise

The first dimension of employability is occupational expertise. This dimension refers to the professional knowledge and skills that a person possesses and can be develop for the job that he or she performs. It involves the expertise needed to perform the tasks and responsibilities of a job adequately. Employees with occupational expertise are experiencing greater benefits from career opportunities in the organization. This in contrast to the employees that are lacking occupational expertise, who are most likely to be redundant in times of recession (DeFillippi & Arthur, 1996).

Anticipation and Optimization

Anticipation and optimization is the second dimension of the employability model of Van der Heijde and Van der Heijden (2006). This refers to a competence in which employees have the ability to prepare for future work changes in a personal and creative manner, and strive for the best possible job and career outcomes. Due to the complexity of work and the difficulty of predicting the content of future work, employees have to increasingly define and perform their jobs and professional life themselves. The importance of this competence is e.g. supported by Fugate et al. (2004), who state that "person centered active adaptation and optimization conceptually underpin the construct of employability" (p.16). They argue that employees who anticipate more actively, are more successful in their adaptability and have a higher employability.

Personal Flexibility

The third dimension is personal flexibility, which refers to the adaptability of employees to changes in work and changes in the internal and external labour market, for which the employee hasn't chosen and has no direct influence (Van der Heijde & Van der Heijden 2006). Employees with high personal flexibility will obtain greater benefits and career

development from different experiences, because they welcome changes. Flexible employees expose themselves more easily to changes and have a better understanding of how to take advantage of these changes. In contrast to the second dimension of anticipation and optimization, which is an active competence and about acting in advance, personal flexibility is a more an adaptive and passive competence.

Corporate Sense

The fourth dimension of employability is corporate sense. This competence refers to the extent to which employees participate and perform in different work groups, being organizations, teams and other networks such as industry networks or occupational communities. It is desirable that employees participate more as member of an integrated team, identify with the corporate goals and accept the collective responsibility in decision-making, which involves sharing responsibilities, knowledge, feelings and goals with others (Van der Heijde & Van der Heijden, 2006; Van der Heijden, Boon, Van der Klink & Meijs, 2009). Having a high degree of corporate sense can lead to additional commitment and effort of the employee which will benefit the organization.

Balance

The last dimension of the competence-based approach of employability is balance. Van der Heijde and Van der Heijden (2006) define balance as "compromising between opposing employers' interests as well as one's own opposing work, career and private interests and between employers' and employees' interests" (p. 455-456). According to Paauwe (1997), employability requires an honest exchange relationship between the employee and employer, in which both parties balance their profits and investments. This balance is a relevant concept in multiple areas, such as the balance of the employees work and private life, a balance between specialization and de-specialization and balance between being highly flexible and also highly committed. To balance these areas is becoming increasingly complex, but it is of great importance to ensure lifelong employability (Van der Heijden, et al., 2009).

From the above, it has become clear what employability is and which approach of employability is used in this research. Given the importance of employability in today's society for both the employees and organizations, it is essential to understand and study which factors promote or hinder employability. In the following paragraphs two individual factors

which are expected to enhance employability are discussed. Additionally, the work context is taken into account, by including several job characteristics.

2.2 Individual Attributes

As shortly mentioned in the introduction, many scientific researches on employability have studied if and how individual attributes are of influence on employability. A lot of attention has been paid to individual characteristics such as age, gender and education (e.g. Van Emmerik, Schreurs, De Cuyper, Jawahar & Peeters, 2012; Van der Heijden, et al., 2009; Van Dam, 2004). In this master thesis research the following two individual concepts are included: training and development willingness and job proactivity. In the paragraphs below, these two concepts will be explained.

2.2.1 Training and Development Willingness

The subject of training and development willingness is an individual attribute, which can be defined as "the employee's attitude towards a request from the organization to participate in learning and training activities" (Van Vianen, Dalhoeven & De Pater 2011, p.226). Training and development willingness refers to a behavioral intention, which is a predictor of the actual behavior of an individual to develop skills, knowledge etc. The willingness differs from the motivation to participate in training and development activities, since motivation is the employee's attitude towards training and development regardless of the organizations objectives or pressures (Van Dam, 2003). The willingness can be influenced by for example the age, self-beliefs and position of the employee, support of the supervisor, pressures from the organization and work characteristics (Van Dam, 2003; Van Vianen, Dalhoeven & De Pater, 2011).

According to Clarke (2008), this attitude and behavior towards learning and development is of great importance to remain employable. By only providing employees with development opportunities, will not result in high employable employees. It also requires employees to be open to the development opportunities and that their attitude towards learning, change and development is in line with the development possibilities that are offered by the organization (Van der Klink, Brouwers, Bultmann, Udorf, Shaufeli, Van der Wilt & Zijlstra, 2010). For this reason, it can be expected that a positive attitude towards training and development will promote employability and therefore, is a relevant condition for employability.

To test this relationship, the following hypothesis is formulated:

Hypothesis 1 a t/m e: Training and development willingness is positively related to employability [occupational expertise (H1a), anticipation & optimization (H1b), personal flexibility (H1c), corporate sense (H1d) and balance (H1e)].

2.2.2 Job proactivity

The second individual concept included in this research is job proactivity. According to Frese and Fay (2001), the general concept of proactivity means having a long-term focus and not waiting until one must respond, but consider and anticipate actively to new opportunities, demands or future challenges. In line with this, proactivity is defined as "a set of self-starting, action-orientated behaviors aimed at modifying the situation or oneself to achieve greater personal or organizational effectiveness" (Unsworth & Parker 2003, p. 177). It refers to an attitudinal component and the accompanying behaviors of an individual, such as goal-directness, persistence and long-term focus.

Proactivity is an important concept for today's organizations for several reasons. First of all, it is proposed that in the modern work situation, job structures are becoming more ambiguous, more poorly defined and malleable. This leaves employees with little (or no) structure and guidance to perform their tasks. These ambiguous situations require a higher degree of initiative and a proactive approach to work, to help employees identify their tasks and the goals of the organization (Frese & Fay, 2001). Secondly, employees who take a proactive approach in different facets of their work, are expected to deliver sustained productivity in fast and dynamic work contexts (Veldhoven & Dorenbosch, 2008), which is central in dealing with the increasing demands of flexibility and extended work participation (Frese & Fay, 2001; Unsworth & Parker, 2003).

There are different ways in which employees can express proactive behavior at work, as for example in pursuing personal and organizational goals, adapting to changes and new environments, implementing ideas, solving problems and building social networks (Grant & Ashford, 2008). Based on the different ways to express proactive behavior, Veldhoven and Dorenbosch (2008) have distinguished two forms of proactivity; development proactivity and job proactivity. Development proactivity refers to "the scanning of new work environments for developmental needs and seeking to learn and acquire new skills and knowledge" (p. 113).

This form of proactivity has some similarities to what in this research is defined as anticipation and optimization, one of the dimensions of employability. Both concepts include taking an active approach to develop skills and knowledge. Because of this similarity, development proactivity is not included in this research.

The second form of proactivity is defined as job proactivity (or on-the-job proactivity), which is "the extent to which employees actively engage in solving inefficiencies that arise in continuously changing work processes" (Veldhoven & Dorenbosch 2008, p. 113). This form of proactivity refers to the proactive behavior of employees towards their tasks, work environment and processes to improve the situation. Examples of such behavior are taking initiative to improve ineffective work methods, challenging the status quo and discussing work processes with the supervisor (Veldhoven & Dorenbosch, 2008).

In this master thesis research, job proactivity is included to study its possible effect on employability. As discussed in the paragraph on employability, employees need to continuously anticipate to changes and developments in their environment in order to remain employable (Van der Heijden, et al. 2009). In the current environment in which changes occur all the time, employees need to take a proactive approach on the job to stimulate an effective and profitable work environment that contributes to the goals of the organization (Frese & Fay, 2001). In doing that, employees are required to look ahead and act in advance, adjust, be flexible and acquiring new knowledge and skills when making the intended impact in the work environment. Hence, when taking a proactive approach, employees are contributing to their employability by anticipating, adapting, continuously developing. Therefore, it is expected that job proactivity has a positive effect on employability. To study this assumption, the following hypothesis is formulated:

Hypothesis 2 a t/m e: Job proactivity is positively related to employability [occupational expertise (H1a), anticipation & optimization (H1b), personal flexibility (H1c), corporate sense (H1d) and balance (H1e)].

2.3. Job characteristics

In the previous paragraphs, the concepts of training and development willingness and job proactivity are discussed. These refer to individual (intentional) behavioral attributes and involve participating in development activities, anticipating to future demands and actively making improvements at work. As written above, it is expected that these two concepts have a positive effect on employability, but in order for the employees to take initiative and to learn, develop and apply their knowledge skills and competences, they should also get the possibility to do so. For this reason, the concept of job characteristics is included to study its effect on the relationships described above.

Job characteristics, or job resources, can be described as "the physical, psychological, social or organizational aspects of a job that are functional in achieving work goals" (Van Emmerik, Schreurs, Cuyper, Jawahar and Peeters 2012, p. 106). Some examples of job characteristics are feedback, autonomy, task variety and management support. In this research the following four job characteristics are used to measure the possible moderating effect of job characteristics on the relationships between training and development willingness, job proactivity and employability: autonomy, participation, task variety and workload. Autonomy refers to the amount of freedom and independence that employees have when performing their tasks (Morgeson & Campion, 2003). It answers the question to what extend the employee can decide himself how to conduct his work (Bos, Donders, Schouteten & Van der Gulden, 2013). The second job characteristic is participation, which is quite similar to autonomy, since it refers to the amount of employee participation in decision making at work (Notelaers, et al., 2007). Task variety is the third job characteristic included in this study. It involves the performing of multiple tasks that require a wide range of abilities and skills (Morgeson & Campion, 2003). The fourth job characteristic is the concept of workload, which is the gap between the demands of a task and a person's ability to cope with these demands (MacDonald, 2003); does an employee have enough time to complete the tasks appointed to him? These four job characteristics are included because of their importance to cope with job demands (Van Veldhoven & Sluiter, 2009; Van Emmerik, et al., 2012) stimulate proactivity (Parker, Williams & Turner, 2006) and developing and deploying competences in the work environment (e.g. Harten, Knies & Leisink, 2016; Van Emmerik, et al., 2012).

As discussed in the earlier paragraphs of this chapter, it is expected that being willing to participate in training and development activities and taking a proactive approach at work, has a positive effect on employability. But in order for employees to take initiative and to learn,

develop and apply their knowledge skills and competences, they should also get the possibility to do so (e.g. Martínez-Sánchez, et al., 2008; Van der Heijden, et al., 2009). In other words, the organization should create a work environment in which employees get the freedom and opportunity to apply these behaviors and stimulate employability. Therefore, it is proposed that job characteristics are critical contextual factors in the relationship between the individual behavioral attributes and employability, since they can hinder or facilitate a stimulating work environment in which employees have the opportunity to develop and deploy their knowledge, skills and competences, and hence their employability (Van der Heijden, et al., 2009; Hackman & Oldham, 1975). To test this assumption, the following hypotheses are formulated.

Hypothesis 3 a t/m d: The relation between training and development willingness and employability is moderated by (H3a) autonomy, (H3b) participation, (H3c) task variety and (H3d) workload.

Hypothesis 4 a t/m d: The relation between job proactivity and employability is moderated by (H4a) autonomy, (H4b) participation, (H4c) task variety and (H4d) workload.

Based on the theory and hypotheses above, the following conceptual model will be used to research what the effect is of training and development willingness and job proactivity on employability, and the moderating role of job characteristics on these relationships.

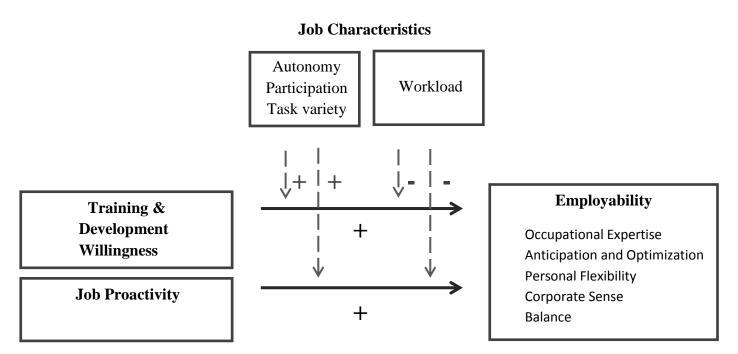


Figure 1. Conceptual model

Chapter 3. Research Methodology

The aim of the research is to gain insight into the relationships between training and development willingness, job proactivity and employability, and the moderating effect of job characteristics on these relationships. In order to achieve this objective, this third chapter will explain the choices made with regard to the research approach. First, the approach used in this research and the data collection will be discussed. Secondly, a description of the research ethics is given, followed by explanation of the measurement instrument. Finally, the approach to analyze the data is discussed.

3.1 Research Approach and Data Collection

The aim of this study is to test the formulated hypotheses derived from theory, and therefore this research can be described as a deductive study. In a deductive study the researcher reasons from the universal to more specific situations (Vennix, 2011). In this case, the hypotheses are derived from theory and tested in the specific context of a Dutch energy network organization. The different variables training and development willingness, job proactivity, employability and job characteristics have been studied often, but the specific effect of job characteristics on the relationships between training and development willingness, job proactivity and employability have not been addressed before. For this reason, the aim of this research is to test these relationships.

To conduct this research and test the hypotheses, a quantitative research method is used. A quantitative research focuses on the collection of numerical material, statistics. The data is collected by means of a structured questionnaire, using an online questionnaire tool named Qualtrics. A questionnaire enables the researcher to reach a large number of respondents to participate in the research and measure the constructs at one moment in time (Bleijenbergh, 2013; Vennix, 2011). Since the questions in the measurement instrument are recorded in advance, all respondents will receive the same questions. This increases the reliability of the data collection (Bleijenbergh, 2013).

As briefly described in the introduction of this master thesis, the research is conducted in a Dutch energy network organization. In total, 7200 employees are working in this organization, of which 5011 are internally employed. It was chosen to only include employees that are internally employed, and therefore the research population is 5011. To calculate the minimum sample size needed for this research, the formula of Green (1991), as applied by

Field (2009) is used: N = 104 + k, in which k is the number of all independent variables. Using this formula, the minimum sample size is 110. Since it was expected that the response rate would be low, and because it was possible to distribute the questionnaire to a large number of employees, 600 employees were invited to participate in the research. They were asked to complete the questionnaire by sending them a request by email, which included the link to the online questionnaire. To make sure that the sample would be a representative distribution of the employees in the energy network organization, it was chosen to randomly derive the 600 employees from the personnel system, accounting for the distribution of business units, support and operational staff, and the distribution of men and women in the organization. To clarify, for each business unit the same percentage (12,5%) of employees were invited to participate in the questionnaire, no matter the size of the business unit. This way, the distribution of business units in the sample would be similar to reality. The same was done for gender and the distribution of operational and support staff. In doing so, it was important to select respondents randomly, meaning all members of the population had an equal chance to end up in the sample.

The final research sample consists of 289 respondents. After the exclusion of unfinished responses, the data of 268 employees were used to run the analyses, which makes the response rate 44,7%. In Table 1. some statistics about the population and its distribution are presented, supplemented with the sample statistics. Due to the concern for anonymity of the employees, only basic information about the characteristics of the population is available. Based on the statistics shown in Table 1, it can be concluded that the distributions of gender, business units and job type are not that different from the actual distributions in the population. This suggests that the sample is fairly representative, and the results of this research can be applied not only to the sample on which the results are based, but also to a wider population from which the sample is derived. Despite the representative characteristics of the sample, generalizability of results is limited. Since data was gathered within one specific context of an energy network organization, it is important to be cautious when generalizing the findings.

Table 1. Population and sample statistics.

	Popula	ation	Samp	le
N	5011		268	
			(44,7	% response rate)
Gender				
Man	4036	(80.5%)	206	(76,9 %)
Woman	975	(19.5%)	62	(23,1%)
Mean Age	-		45.12	
Business Unit				
Support Staff Unit	1064	(21,2%)	57	(21,3%)
Business Unit 1	949	(18,9%)	49	(18,4%)
Business Unit 2	2998	(59,8%)	161	(60,3%)
				1 missing
Job type				
Operational	2327	(46,4%)	106	(39.6%)
Support	2684	(53,6%)	152	(56.7%)
Unknown			10	(3.7%)

3.2 Research Ethics

This research was conducted in line with the American Psychological Associations (APA) ethical guidelines (APA, 2010), which include the objectivity, integrity, confidentiality and transparency of the researcher and the research. During the introduction of the questionnaire the goal and procedures of the research were explained (see Appendix 2.). This, to provide the respondents with a clear view of the research in which they are participating, and for what purpose their input and the results will be used. In order to clarify possible confusions and to answer questions of the respondents, the contact information of the researcher was included in the introduction. Additionally, it was pointed out that participation in this master thesis research was on a voluntary basis and that the anonymity of the respondents is guaranteed. Participants were only asked to indicate their age group, job and department, and therefore respondents are not identifiable by name. Moreover, the confidentiality of the results was guaranteed, since the collected data was handled with care and will only be used in this master thesis. Finally, it was explained that the responses of the employees do not lead to any consequences for their job and they could indicate if they wanted to be informed about the results of the research.

3.3 Questionnaire

The questionnaire used to measure the effect of job characteristics on the relationships between training and development willingness, job proactivity and employability, consists of five parts. Since all respondent are native Dutch speakers, all questions and correspondence were translated and provided in Dutch. This, to prevent translation errors or misunderstandings of the constructs and questions, and to increase the validity of the measurement. Furthermore, the validity of the measurement was ensured through the use of four existing and validated scales to compose the final questionnaire. The full questionnaire is available in Appendix 2. In the following paragraphs the five components of the questionnaire are discussed.

3.3.1. Control variables

The first part of the questionnaire consist of general questions about the respondent such as: age, gender, business unit and job level. These are control variables, which are included in the research to control for possible determinants that could affect the relations between the individual attributes and employability, and the moderating effect of job characteristics. The control variables of age, gender and job scale are included in line with previous research on employability (e.g. Froehlich, Beausaert & Segers, 2016; Berntson, Sverke & Marklund, 2006; Forrier & Sels, 2003). The business unit is included to test if the distribution of the sample is similar to the distribution in the population. To measure the control variables multiple choice questions are formulated, except for age, which is measured using an openended question. In Appendix 2, these control variables and the corresponding questions of the questionnaire are shown.

3.3.2. Dependent Variable: Employability

The dependent variable in this research, employability, is measured using the questionnaire constructed by Van der Heijde and Van der Heijden (2006). It was chosen to use this questionnaire, since it contains both the employee perspective on employability with a focus on the individual's career and the organizational perspective with a focus on flexibility. Using this competence-based approach will provide a broad view of employability in the organization. This questionnaire is provided in English and Dutch, and therefore no translation was needed. The full questionnaire of Van der Heijde and Van der Heijden (2006) includes 47 items, measuring the four dimensions of employability. To prevent the questionnaire from including too many items, the shortened and validated version of the

questionnaire is used, containing 22 items, measured on a 6-point Likert scale. questionnaire measures the dimensions of occupational expertise (During the past year, I was, in general, competent to perform my work accurately and with few mistakes), anticipation & optimization (How much time do you spend improving the knowledge and skills that will be of benefit to your work), personal flexibility (How easily would you say you can adapt to changes in your workplace?), corporate sense (I share my experience and knowledge with others), and the dimension of balance (My work and private life are evenly balanced). The response categories vary, depending on the question. For example, the response categories can range from 1.'Very bad' to 6.'Very good', or 1. 'Never' to 6. 'Very often'. The respondents' score of employability is determined by calculating the mean score of all items, and additionally the mean score for the five separate dimensions. The higher the score, the more employable the respondent is. In this research a Cronbach Alpha of .88 is measured for the entire employability scale. The Cronbach's Alpha's of the five separate dimensions are: occupational expertise .78, anticipation & optimization .79, personal flexibility .81, corporate sense .7 and balance .72. Since all of these values are above .7, the internal consistency of this scale is sufficient.

3.3.3. Independent Variable: Training and Development Willingness

Training and development willingness is one of the two independent variables in this study. This concept is measured using a 5-item scale, derived from Van Dam's (2003) lager scale to measure functional flexibility attitude. The items are provided in both English and Dutch, and therefore no translation was needed. An example of the items to measure training and development willingness is: If it is necessary for the organization, I am prepared: 'To receive education to broaden my professional knowledge.' The items are measured on a 5-point Likert scale ranging from 1. 'Strongly disagree' to 5. 'Strongly agree'. The score of training and development willingness for each respondent is determined by calculating the mean score of the five items. A high score on this scale is an indication for a higher degree of training and development willingness. In the current study a Cronbach's Alpha of .87 was measured, exceeding the criteria of >.7 for internal consistency. The histogram representing the distribution of the scores on training and development willingness shows (negative) skewness with many of the scores on the higher end, and especially many scores of 4. Therefore it was chosen to transform this variable into a dichotomous variable, consisting of two categories: low and high training and development willingness. These two categories are determined using the cumulative percentage and median. The first category, low training and development willingness, consists of 31% of the lower scores up until the score of 4. The second category of high training and development willingness includes the scores 4 and higher. This has implications for the interpretation of the results, since only statements can be made about low and high training and development willingness.

3.3.4. Independent Variable: Job Proactivity

Job proactivity is the second independent variable. To measure job proactivity 5 items are used in this research, which Veldhoven & Dorenbosch (2008) partly derived from the personal initiative scale (Frese, Fay, Hilburger, Leng & Tag, 1997) and the taking charge scale (Morrison & Phelps, 1999). The 5 items reflect the extent to which employees initiate new ways of working, solve problems, discuss improvements with their supervisor and take initiative to challenge the status quo. An example item of job proactivity is: 'When work methods or procedures are not effective, I try to do something about it'. Items were answered on a 5-point Likert scale, ranging from 1. 'Strongly disagree' to 5. 'Strongly agree'. Since the questionnaire was provided in Dutch, the items were translated to English and reviewed by peers. The Cronbach's Alpha of this scale is .8 which is a sufficient value for the internal consistency of the scale. The score of job proactivity is calculated for each respondent by calculating the mean score of the 5 items.

Since the descriptions of job proactivity and the dimension of anticipation and optimization show some similarities, an additional (exploratory) factor analysis is performed (EFA) in SPSS, to make sure these variables do not load on the same factors. In other words, it is checked if these variables are indeed two different scales, measuring different constructs. After analysing the output of the (principal axis) factor analysis (see Appendix 4.1.), using the criteria of eigenvalues >1, point of inflexion and the pattern matrix (Field, 2013), it can be concluded that job proactivity and the dimension of anticipation and optimization indeed load on two different factors.

3.3.5. Moderator: Job Characteristics

To measure the moderating effect of job characteristics, parts of the Short Inventory to Measure Psychosocial Hazards, SIMPH questionnaire are used (Notelaers, De Witte, Van Veldhoven & Vermunt, 2007). This questionnaire was developed based on a good theoretically controlled selection of scales from the Questionnaire on the Experience and Evaluation of Work (QEEW, Veldhoven & Meijman, 1994), with the goal to measure the

variables with a smaller amount of items. In this research, the following four dimensions are included in the questionnaire to measure job characteristics: (1) Autonomy, *Can you decide on the order of priorities for your work activities?* (2) Participation, *'Can you participate in decisions affecting areas related to your work?* (3) Task variety, *'Is your work varied?* (4) Workload, *'Do you work under time constraints?*. During the literature study in preparation for this research, autonomy, task variety and workload were the most commonly used job characteristics and therefore these were included in the research. Additionally, it was chosen to include the variable of participation as described by Notelaers, et al. (2007). Participation is theoretically strongly related to, and complements the characteristic of autonomy in measuring the degree to which employees can make decisions and influence the work environment. The job characteristics are all measured using three items, and with a 4-point Likert scale ranging from 'Always', 'Often', 'Sometimes' to 'Never'. Since these questions are derived from the Dutch QEEW questionnaire, no translation of the questions was needed.

As described above, the variables autonomy and participation are theoretically related and complement each other. To explore if these two variables are actually forming one scale and can be transformed into only one variable, a factor analysis was performed using the gathered data. By performing this factor analysis it can be studied if autonomy and participation are loading on only one factor and therefore are actually forming one scale (Field, 2013). Again, an EFA was conducted. After analysing the output of the (principal axis) factor analysis (see Appendix 4.2.), using the criteria of eigenvalues >1 and the point of inflexion (Field, 2013), it can be concluded that autonomy and participation are indeed loading on only one factor. This indicates that in this research the two variables can be transformed into one variable. Given the content of the constructs, the combined variable will be referred to as 'autonomy'.

Besides a factor analysis, there are also reliability analyses performed for the three job characteristics. The measured Cronbach's Alpha's of the three job characteristics are: autonomy 0.73, task variety 0.64 and a Cronbach's Alpha of 0.79 for workload. The Cronbach's Alpha of task variety does not meet the criterion of >.7, which indicates that the internal consistency of this scale is low. An explanation of this low score is the little amount of items to measure task variety (3 items). Despite the low Cronbach's Alpha it is chosen to include task variety into the analyses, due to its importance in the research. However, some caution is required in the conclusions concerning task variety. After checking the reliability of the scales, the respondents' scale scores on all job characteristics were defined by calculating the mean of the corresponding items' scores.

3.4 Data Analysis

3.4.1. Data preparation

After the data was collected, the results where downloaded from Qualtrics to the statistical analysis software SPSS. Before running an analysis, a data preparation and cleaning is needed (Field, 2013). First the exclusion criteria are checked. Respondents who did not complete the questionnaire, hence the missing values, are excluded from the sample. It is checked if these missing values are random. Secondly, it is tested if there are outliers and if excluding these outliers in the analysis, will result in differences in the results. Next the distributions of the variables are checked to study the assumption of normality, which gives an indication of how representative the sample of the population is. This assumption should be met, because a distribution that deviates from a normal distribution can influence the validity of the results (Field, 2013). Histograms are used to assess the normality, since the normality tests which can be conducted in SPSS, should only be used in small sample sizes (Field, 2013). In the histograms (Appendix 3.) it is shown that the distributions are not perfectly normal, but sufficient. As discussed in paragraph 3.3.3., the variable of training and development willingness was transformed into a dichotomous variable since it was not normally distributed. After checking these criteria, reliability analyses were conducted using Cronbach's Alfa, which measures the internal consistency of items measuring the same construct (Field, 2013). Additionally, for some variables a factor analysis was performed. The results of the reliability and factor analyses have been discussed in paragraph 3.3.

After the preparation of the data, the first correlation and regression analyses were conducted to assess the assumptions for running a linear regression analysis. Some examples of the assumptions for linear regression analyses are linearity, homoscedasticity, normal distribution of errors and no perfect multicollinearity. Linearity means that there should be linear relationships between independent and dependent variables. The second assumption of homoscedasticity indicates that the variance of the residual terms should be constant for different levels of the independent variable. Another assumption is that the residuals (or errors) should be normally distributed, which would indicate that the difference between the model and the observed data roe most frequently zero or close to zero (Field, 2013). The assumption of no perfect multicollinearity, means that there should not be high correlations (>.9) between independent variables (Field, 2013). In case these assumptions are not met, a data transformation is needed. If transforming the data does not improve the data set, non-

parametric tests should be conducted instead of linear regression analyses (Field, 2013). The assessments of these and other assumptions are discussed in paragraph 4.2.1.

3.4.2. Measurement model

To measure the moderating effect of job characteristics on the relationships between training and development willingness, job proactivity and employability, linear regression analyses are performed. When performing an analysis testing for moderator effects, three causal paths can be distinguished (Baron & Kenny, 1986). Path *a* represents the impact of the independent (or predictor) on the outcome variable. Path *b* illustrates the effect of the moderator variable on the outcome variable. And lastly, path *c* presents the interaction effect of the independent and moderator variable on the outcome variable. The interaction effect is generated by first calculating the grand means of the independent and moderating variables, which is also referred to as centering. Next the centered independent variable is multiplied with the centered moderator, resulting in the interaction term (Field, 2013). When conducting the linear regression analyses, the three paths are referred to as different models. In this research 11 models are generated for each outcome variable. An overview of the models is presented in Appendix 5.

Chapter 4. Results

In the theoretical framework the possible relations between the key variables of this research are discussed and four hypotheses are formulated. To make statements about these hypotheses, the results of the data analyses will be discussed in this fourth chapter. First, the descriptive statistics are described, which give an overall impression of the results based on a correlation matrix. Since these correlations do not make a distinction between the dependent and independent variables and the effect of other variables (Field, 2013), regression analyses are conducted. The outcomes of these regression models are described in paragraph 4.2. and will lead to the acceptance or rejection of the formulated hypotheses.

4.1. Descriptive Statistics

In Table 2 the means, standard deviations and Pearson's correlation coefficients of the research (untransformed) variables are displayed. The Pearson's correlation coefficients give a first overview of the relationship between variables, their size and significance. Before running a linear regression analysis, it is useful to check what correlations are significant. In this research a confidence interval of 95% is used, and therefore the significance level to accept or reject the hypothesis is p < 0.05. First, the mean values are discussed, followed by an exploration of the correlations regarding the hypotheses 1 and 2, the moderating variables and finally the control variables.

When analysing the means of the variables, it stands out that most means are relatively high. Especially for training and development willingness (m=4.04) and job proactivity (m=4.07), which have means close to the maximum scores. This indicates that the respondents have answered quite positively and the scores are relatively high on these variables. The high values of the means will be taken into account, during the interpretation and discussion of the results.

Hypothesis 1 states that training and development willingness is positively related to employability (occupational expertise, anticipation & optimization, personal flexibility, corporate sense and balance). From the correlation matrix below, it can be concluded that training and development willingness, when not controlling for the influence of other variables, has a significant correlation with all of the employability dimensions, except for the first dimension of occupational expertise (r = 0.096, p > 0.05). This low and non-significant correlation suggests that the effect of training and development willingness on occupation expertise is lower than expected. The remaining positive correlations between training and

Table 2. Correlation Matrix

Variable	Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	45,12	11,72	21	65	-												
2. Gender	1,23	,42	1	2	- ,150**	-											
3. Job scale	7,64	2,15	2	12	- ,105	-,006	-										
4. Training & Development Willingness	4,04	,61	1	5	-,463**	,127*	,314**	-									
5. Job Proactivity	4,07	,47	2,4	5	,023	,085	,105	,160**	-								
6. Employability	4,32	,45	2,95	5,68	-,134*	-,022	,225**	,294**	,489**	-							
7. Occupational Expertise	4,8	,5	3,4	6	,052	-,099	,112	,096	,352**	.651**	-						
8. Anticipation & Optimization	3,8	,76	1	5,75	-,112	-,073	,126*	,201**	,370**	,745**	.312**	-					
9. Personal Flexibility	4,53	,59	2	6	-,251**	,134*	,194**	,333**	,392**	,737**	,404**	,383**	-				
10. Corporate Sense	4,18	,72	1	5,75	-,090	-,013	,153*	,233**	,392**	,777**	,364**	,583**	,431**	-			
11. Balance	4,12	,65	1,25	5,75	-,046	-,044	,219**	,167**	,232**	,650**	,319**	,315**	,381**	,358*	-		
12. Autonomy	2,9	,55	1,33	4	,024	-,001	,250**	,183**	,311*	,386**	,235**	,156*	,354**	,207**	,444**	-	
13. Task Variety	3,05	,53	1,33	4	-,033	-,115	,225**	,173**	,247**	,347**	,180**	,328**	,168**	,249**	,311**	,432**	-
14. Workload	2,33	,5	1	4	-,066	,035	,086	,083	,071	-,045	-,063	,105	-,020	,092	-,316**	-,266**	,106

^{**} Correlation is significant at the level of 0.01 level (2-tailed). (N=268)

st Correlation is significant at the level of 0.05 level (2-tailed).

development willingness and the dimensions of employability, suggests that indeed there is a positive effect, as suggested in hypothesis 1. Hypothesis 2 anticipates a positive effect of job proactivity on employability. Based on the significant (p<.01) and positive correlations between job proactivity and the five dimensions of employability in the correlation matrix, it can be expected that a proactive attitude at work will lead to higher employability. These proposed relations of hypotheses 1 and 2 will be explored further in the linear regression analyses later on in this chapter.

To measure a moderating interaction effect of job characteristics, the three variables of autonomy, task variety and workload are included. Based on the correlation matrix in Table 2, it can be concluded that autonomy and task variety have significant correlations with the independent and dependent variables, and are therefore relevant to test the moderating interaction effect. Workload only has a positive and significant correlations with balance (r = .316, p < .01) and autonomy.

Lastly, the control variables are assessed. Although the relevance of age for employability is mentioned often in theory (e.g. Van der Heijden, De Lange, Demerouti & Van der Heijde, 2009; Van Dam, 2004), it appears that the correlations of age are quite low in this research. Age only has (positive) significant correlations with the dimension personal flexibility (r=.256, p<.01) and training and development willingness (r=.467 , p<.01). Nevertheless, these two correlations have a medium (.30) to large (.50) effect size. The same applies to gender, but with smaller effect sizes (r=.134 and r=.127, p<.05). The third control variable included is job scale, which has several (positive) significant correlations of which the correlation with personal flexibility and corporate sense are the largest (r=.333 and r=.233, p<.01). Based on previous research and the significant correlations shown in Table 2, these control variables seem to be relevant in this research.

4.2. Regression Analysis

4.2.1 Assumptions

Before analysing the results of the linear regression analyses, the assumptions for a linear regression analysis were checked. The first assumption states that the sample has to be large enough (Field, 2013). Using the formula of Green (1991) as formulated in paragraph 3.1, the needed sample size is 110. Since the actual sample size is 268, this assumption is met. The second assumption is that here should be linearity between the independent and dependent variables. After analyzing each relation between the independent and dependent variables using the Curve Estimation analysis in SPSS, it can be stated that the modelled relations are indeed linear. The next assumption regards multicollinearity. This assumption states that there should not be (perfect) multicollinearity between independent variables, meaning that there are no high correlations (>.9) between independent variables (Field, 2013). The correlation matrix gives insights into this assumption. Correlations above .9 indicate multicollinearity. As shown in Table 2, there are no correlations above .9 and therefore, based on this correlation matrix, there is no multicollinearity. Besides this, multicollinearity can be tested using the variance inflation factor (VIF) and tolerance values. The VIF scores of all variables are far below the maximum criterion of 10 (Bowerman & O'Connell, 1990), only a few are close to five. The tolerance values are not below 0.2, which also indicates that there is no multicollinearity (Field, 2013). The fourth assumption to run a linear multiple regression analysis is the assumption of a normal distribution of the residuals (or errors), which means that the differences between the model and the observed data are most frequently zero or close to zero (Field, 2013). The generated histograms and P-Plots of the standardized residuals, show that the residuals are sufficiently normal distributed. Additionally, it was checked if the residuals are independent (or uncorrelated), using the Durbin-Watson test. In the models of this research, the values of the Durbin-Watson test vary from 1.819 to 2.089, these are very close to 2 and therefore, it can be stated that the residuals are independent (Field, 2013). The fourth assumption examined, is the assumption of homoscedasticity, meaning that the variance of the residual terms should be constant for different levels of the independent variable. This assumption is checked by generating partial plots. These plots show that the dots are evenly spaced around the line, which indicates homoscedasticity.

4.2.2. Results Linear Regression Analyses

In Appendix 5 the results of the linear regression analyses are presented. These tables report the b values, along with the associated standard error, which indicate to what extent the values would vary across different samples. For each model the R squared, the adjusted R and the R squared change are given, to report how much variability in the outcome is accounted for by the independent variables and the generalizability of the model. Given the size of these tables, it was chosen to include them in Appendix 5 and only report in this chapter the b values and significance of each effect in Table 3 to 6.

4.2.2.1 Hypothesis **1**.

Hypothesis 1 posited that training and development willingness positively affects employability (occupational, anticipation & optimization, personal flexibility, corporate sense and balance). Model 2 tests this hypothesis and the results are presented in Table 3. The regression results show that training and development willingness indeed has a medium positive effect on employability as a whole (b=.274, p=<.01), and on the dimensions of anticipation and optimization (b=.376, p =<.01), personal flexibility (b=.374, p=<.01) and corporate sense (b=.251, p=<.05). The dimensions of occupational expertise and balance have lower effect sizes, which are non-significant. The models testing this hypothesis explain between 3.7% and 16.9% of the variance in the dependent variables, and the models are all significant (p<.05 and p<.01). This indicates that the model is significantly better at predicting the outcome, than using the mean as a best guess (Field, 2013). From the results of model 2, it can be concluded that training and development willingness indeed has a significant effect on employability, and hypothesis 1 is supported. However, it has to be noted that training and development willingness does not have a significant effect on the dimensions of occupational expertise and balance. Since, there is a significant effect on most of the dimensions and the total score of employability, hypothesis 3 proposing a moderating effect of job characteristics on the relationship between training and development willingness and employability, can be tested.

Table 3. The effect of training and development willingness on employability.

	b- value	Significance
Employability	,274	p=.001
Occupational Expertise	.134	p=.069
Anticipation & Optimization	.376	p=.001
Personal Flexibility	.374	p=.001
Corporate Sense	.251	p=.011
Balance	.168	p=.073

Table 4. The effect of job proactivity on employability.

	<i>b</i> – value	Significance
Employability	.472	p=.001
Occupational Expertise	.378	p = .001
Anticipation & Optimization	.615	p =.001
Personal Flexibility	.483	p=.001
Corporate Sense	.602	p=.001
Balance	.303	p=.001

4.2.2.2. Hypothesis 2.

Hypothesis 2 states that job proactivity has a positive effect on employability. To test this hypothesis model 3 was generated using a linear regression analysis. Table 4 presents the b values and significance of the effect of job proactivity on employability and each of its dimensions. As shown in the table above, job proactivity has a quite large and positive effect on employability (b=.472, p=<.01). This indicates that responding actively to new opportunities, demands or challenges in the work environment, indeed contributes to employability. The effect of job proactivity is also significant on all five of the separate dimensions with medium to strong b-values and p-values of <.01. Job proactivity has the largest effect on the dimension anticipation and optimization (b=.615, p<0.01), which suggest that when an employee takes a proactive approach towards tasks and work processes, it will lead to more active behavior towards their development. Besides this, job proactivity also has a strong effect on corporate sense (b=.602, p<.01). This indicates that being proactive on the job, positively influences the participation in different groups and being member of an integrated team. All the models used to test hypothesis 2 are significant (p<.01) and explain between 9.8% and 29.3% of the variance in the dependent variables. Based on these results, it can be concluded that there is significant support to accept hypothesis 2. Since both hypotheses 1 and 2 are supported by the results of the linear regression analysis, the moderating effects of job characteristics on the relationships between training development willingness, job proactivity and employability can be studied.

Table 5a. Interaction effect autonomy and training and development willingness. (* indicates a significant Δ R² compared to the models without the interaction effects)

Autonomy*T&D Willingness	<i>b</i> - value	Significance	R ²	Δ \mathbf{R}^2
Employability	065	p=.585	.233	.107*
Occupational Expertise	312	p =.028	.095	.058*
Anticipation & Optimization	.036	p =.868	.089	.014
Personal Flexibility	161	p=.291	.265	.096*
Corporate Sense	.117	p=.567	.092	.028*
Balance	.081	p=.636	.220	.158*

Table 5b. Interaction effect task variety and training and development willingness

Task variety*T&D	<i>b</i> - value	Significance	\mathbb{R}^2	Δ \mathbf{R}^2
Willingness				
Employability	031	p=.760	.217	.091*
Occupational Expertise	060	p =.625	.060	.024*
Anticipation & Optimization	185	p =.294	.168	.093*
Personal Flexibility	.131	p=.335	.191	.022*
Corporate Sense	114	p=.509	.114	.050*
Balance	.039	p=.798	.133	.070*

Table 5c. Interaction effect workload and training and development willingness

Workload * T&D	<i>b</i> - value	Significance	\mathbb{R}^2	Δ \mathbb{R}^2
willingness				
Employability	035	p=.771	.130	.004
Occupational Expertise	070	p =.618	.042	.005
Anticipation & Optimization	096	p =.648	.085	.010
Personal Flexibility	.073	p=.639	.172	.003
Corporate Sense	089	p=.655	.072	.007
Balance	189	p=.263	.178	.116*

4.2.2.3. Hypothesis 3.

Hypothesis 3 proposes that the relationship between training and development willingness is moderated by the job characteristics autonomy, participation, task variety and workload. Since autonomy and participation were transformed into one variable of autonomy, the moderating effects of only three job characteristics are studied. First hypothesis 3A will be discussed, which proposes that having a higher degree of autonomy will positively affect the relationship between training and development willingness and employability. Model 5, of the regression analysis tests this moderating effect. In Table 5 above, the b-values and significance of the interaction terms (or moderating effects) are shown. Table 5a shows that the effect of the interaction term autonomy and training and development willingness is rather low and non-significant for employability (b=-.065, p=.585) and four of the dimensions. However, this interaction term does has a significant and negative effect on the dimension occupational expertise (b = -.312, p = <.05). This suggests that having a higher degree of autonomy negatively influences the effect of training and development willingness on the professional knowledge and skills needed to perform the job adequately. The results show a significant Δ R² for this particular model, which indicates that this model proving the moderating effect of autonomy on the relationship between training and development willingness and occupational expertise, explains significantly more of the variance in the dependent variable compared to model 2 without the interaction term. The models testing this moderating effect, explain between 8.9% and 26.5% of the variance in the dependent variables of employability and its dimensions. Although only one moderation effect was found, it appears that all models are significant (p < .01), which indicates that the models are significantly better at predicting the outcome, than using the mean as a best guess (Field, 2013).

The second interaction term included, is the interaction of task variety and training and development willingness. It is proposed in hypothesis 3C that having more task variety will have a positive effect on the relation between training and development willingness and employability. This interaction effect is tested in model 6 of the regression analysis. As is shown in Table 5b, the interaction effect is low on all outcome variables and non-significant. For this reason it can be concluded that task variety does not moderate the relationship between training and development willingness and employability. The models 6, testing this hypothesis explain between 6% and 21.7% of the variance in the dependent variables, and the models are all significant (p<.05 and p<.01).

Hypothesis 3D states that workload has a moderating effect on the relationship between training and development willingness and employability. The interaction of workload and training and development willingness is tested in model 7. Between 4.2% and 17.8% of the variance in the dependent variables is explained by these models. Most models are significant (p<.05 and p<.01), except for the model testing the interaction effect of workload and training and development willingness on the dimension occupational expertise (p=.081). This indicates that this model is not significantly better at predicting the outcome, than using the mean as a best guess. The effect sizes of the interaction term workload and training and development willingness are low and besides this, also non-significant in all models (Table 5c). For example, the effect on employability is -.035 (p=.771). This suggests that workload does not influence the relation between training and development willingness and employability. Based on these results it can be concluded that there is no significant support to fully accept hypothesis 3.

In the last column of tables 5a to 5c the change in R^2 compared to the models without the interaction terms, are shown. Some are significant (denoted with *), which indicate that the models including the interaction terms explain significant more of the variance in the dependent variable compared to the models without them. Since most models do not prove a moderating effect of the job characteristics on the relationship between training and development willingness and employability, it is quite surprising that some have a significant ΔR^2 . These significant ΔR^2 can be explained by the direct and significant effects of some of the job characteristics on employability, through which more of the variance in employability can be explained.

Table 6a. Interaction effect autonomy and job proactivity. (* indicates a significant Δ R² compared to the models without the interaction effects)

Autonomy * Job proactivity	<i>b</i> - value	Significance	\mathbb{R}^2	Δ \mathbb{R}^2
Employability	.054	p=.523	.340	.047*
Occupational Expertise	.195	p =.062	.171	.024*
Anticipation & Optimization	.285	p =.073	.182	.011
Personal Flexibility	085	<i>p</i> =.459	.294	.053*
Corporate Sense	.210	p=.161	.188	.011
Balance	333	p=.010	.244	.147*

Table 6b. Interaction effect task variety and job proactivity.

Task variety * Job	<i>b</i> - value	Significance	\mathbb{R}^2	Δ \mathbf{R}^2
proactivity				
Employability	055	p=.532	.329	.037*
Occupational Expertise	.255	p =.038	.165	.018
Anticipation & Optimization	111	p =.489	.219	.047*
Personal Flexibility	187	p=.127	.251	.009
Corporate Sense	044	p=.775	.194	.017
Balance	198	p=.162	.152	.054*

Table 6c. Interaction effect workload and job proactivity.

Workload * Job proactivity	<i>b</i> - value	Significance	\mathbb{R}^2	Δ \mathbf{R}^2
Employability	124	p=.160	.308	.015
Occupational Expertise	140	p =.186	.160	.013
Anticipation & Optimization	266	p =.096	.185	.013
Personal Flexibility	063	p=.598	.248	.007
Corporate Sense	215	p=.155	.186	.009
Balance	.055	p=.675	.221	.124*

4.2.2.4. Hypothesis 4.

Hypothesis 4 proposes a moderating effect of autonomy, task variety and workload on the relation between job proactivity and employability. To test this hypothesis, models 8, 9 and 10 are included in the linear regression analysis. In Table 6a, b and c the *b*-values and significance of the moderating effects are presented.

Model 8 of the regression analysis tests hypothesis 4A, the interaction effect of autonomy and job proactivity. The interaction effects are for employability (b=,054, p=.523) and four of its dimensions, low and non-significant. However, it appears that autonomy does moderate the relationship between job proactivity and balance in a negative direction (b = -.333, p < .01). This is a quite surprising result, since autonomy was expected to have a positive influence. Although job proactivity has a positive effect on balance (b=.303), including the moderating effect of autonomy shows that having a high degree of autonomy negatively influences the effect of job proactivity on balancing work and private interests. A possible explanation is that having a proactive approach on the job along with a high degree of autonomy, might lead to more effort at work and less time and energy for the employee's private life. As is shown in Table 6a, model 8 testing the moderating effect of autonomy on the relationship between job proactivity and balance, has a significant Δ R². This indicates that this model explains significantly more than model 3, which tests the relationship between job proactivity and balance without the moderating effect of autonomy. All the models testing hypothesis 4A are significant (p<.01), and the variance explained in the outcome variable is between 17.1% and 34%.

Hypothesis 4C proposed a positive moderating effect of task variety on the relationship between job proactivity and employability, which is tested in model 9 of the regression analysis. Between 15.2% and 32.9% of the variance in the dependent variables is explained by these models, and all models testing this hypothesis are significant (p<.01). As is shown in Table 6b, the interaction effects are quite low, negative and non-significant for employability (b= -.055, p=.532), anticipation & optimization (b= -.111, p= ,489), personal flexibility (b= -.187, p=,127), corporate sense (b= -.044, p=.775) and balance (b= -.198, p=.162). However, the interaction effect of task variety and job proactivity has a positive and significant effect on the dimension occupational expertise (b=,255, p<.05). This indicates that being proactive towards tasks and processes and additionally, having a high degree of task variety will enhance the employee's professional knowledge and skills. Quite surprisingly, the Δ R² in Table 6b show that although a moderating effect of task variety was found on the relationship

between job proactivity and the dimension occupational expertise, it appears that this specific model does not explain significantly more variance in the outcome variable of occupational expertise, compared to the model without the interaction term of task variety. An explanation for this is, that the effect size of the interaction term is smaller (b=.255) than the effect of job proactivity on occupational expertise without the moderating effect (b=.378).

The last moderating effect that is tested in this research, is the moderating effect of workload on the relationship between job proactivity and employability. This hypothesis 4D is tested using model 10. Table 6c presents the *b*-values and significance of the effects. There are no significant effects in this model and the effects are rather low, with a negative direction. As for the total score of employability the *b*-value is -.124, with a *p*-value of .160. This indicates that workload does not have a moderating effect on the relationship between job proactivity and employability. The models 10 of the regression analysis, testing this hypothesis, are all significant and explain between 16% and 30.8 % of the variance in the outcome variable employability.

Against the expectations, only three moderating effects are found on the relationships between training and development willingness, job proactivity and employability. However, the analysis confirm that autonomy (r=.244, p<.01) and task variety (r=.165, p<.01) have a (direct) positive effect on employability. This indicates that having a higher degree of autonomy and variety in tasks, results in a higher employability. The third job characteristic of workload only effects the dimension of balance, with a negative effect of r = -3.62 (p<.01). If employees have (too) little time to complete all the tasks appointed to them, it will negatively affect the balance between the work and private life, because more time and effort is spent on work. These results show that although not many moderating effects are found, job characteristics are relevant factors to consider in employability research and in enhancing employability

Based on the discussed results, it can be concluded that hypotheses 1 and 2 are accepted, but unfortunately there is not enough significant support to accept hypothesis 3 and 4. This indicates that there is no moderating effect of these three job characteristics on the relationships between training and development willingness, job proactivity and the overall construct of employability. In chapter 5, a more extensive conclusion of the reported results will be discussed.

Chapter 5. Discussion

In this research, the aim was to study the moderating effects of job characteristics on the relationships between job proactivity, training and development willingness and employability. It was expected that being willing to participate in development activities and having a proactive approach towards tasks and work processes, would positively influence the employee's employability (e.g. Van Dam, 2004; Van Vianen, Dalhoeven & De Pater, 2011; Fugate, Kinicki & Ashforth, 2004). Additionally, it was suggested that these positive effects on employability could be facilitated or hindered by characteristics of the job (e.g. Martínez-Sánchez, et al., 2008), such as autonomy, variety in tasks and workload. To study these expected effects, the following research question was formulated:

What is the effect of training and development willingness and job proactivity on employability, and how do job characteristics influence these relationships in an energy network organization?

To answer this research question, a study was conducted in a Dutch energy network organization. Data was gathered using a questionnaire, resulting in a research sample of 268 respondents. In the next paragraph, the findings of the research will be discussed, followed by a description of the theoretical and practical implications and lastly, the limitations and directions for future research.

5.1. Findings

Hypothesis 1 proposed that training and development willingness is positively related to employability and each of its separate dimensions. A significant positive effect was found, which indicates that training and development willingness indeed has a positive influence on employability in this context of an energy network organization. More specifically, this means that employees who are more willing to participate in development activities after a request of the organization, will have a higher employability. As proposed by Clarke (2008), it is likely that a higher willingness to participate in development activities, will lead to actual participation and development, and therefore will enhance employability. However, the analyses show that although there are effects on the overall construct of employability, not all five dimensions of employability are influenced by training and development willingness. The analysis of the data shows significant effects of training and development willingness on three of the employability dimensions. As expected, a positive effect of training and

development willingness on the dimension of anticipation and optimization was found. As participating in development activities can be seen as one of the ways to anticipate and optimize the employees skills and knowledge, it seems quite logically that when employees have a higher willingness to participate in development activities, they also have a higher willingness to anticipate beforehand to meet the current and future requirements in the work environment, and to strive for the best possible outcomes. The same implies for the relationship between training and development willingness and personal flexibility. Being more willing to take part in development activities, also relates to the willingness of employees to adapt to changes in the internal and external labour market, hence their personal flexibility. The third dimension of employability that is positively affected by training and development willingness is corporate sense. This result tells us that if employees have a higher willingness to participate in training and development activities, they are also more likely to be involved in different and integrated work groups throughout the organization and industry. As stated by Van der Heijden, et al. (2009), this participation can lead to the sharing of responsibilities and knowledge, and additionally result in higher employability, more commitment and effort, which will benefit the organization.

The results of this research show that training and development willingness has no significant effect on the occupational expertise. This suggests that being more willing to participate in development activities if requested by the organization, does not positively, nor negatively, influence the professional knowledge and skills which employees need to perform their job adequately. This is a rather surprising outcome, since it can be expected that a higher willingness will lead to actual development and improvement of the needed expertise to perform tasks. Besides this, the results show that training and development willingness does not affect the dimension of balance, which refers to comprising and balancing the interests of the employer and employee (Van der Heijde & Van der Heijden, 2006).

The results of the linear regression analysis show a significant effect of training and development willingness on the overall construct of employability, and therefore hypothesis 1 is accepted.

Hypothesis 2 states that job proactivity positively affects employability. It was proposed that employees need to take a proactive approach towards their tasks and work processes in order to adapt to the continuous changing work environment, and to remain employable (Van der Heijden, et al., 2009). The results of the analyses show that job proactivity has medium to

strong effects on employability. These effects are positive, indicating that when the employee is more proactive on the job, the employability will increase. The results illustrate that all five dimensions of employability are positively affected by job proactivity. Based on these results, it can be concluded that job proactivity is indeed positively related to employability in the context of an energy network organization and therefore, hypothesis 2 can be accepted. Since job proactivity appears to be an important attribute to enhance employability, it would be very interesting and useful to examine in more depth how this individual attribute can be stimulated.

An important part of this research was to study if the relationships described above are facilitated or hindered by characteristics of the job. It was chosen to include the characteristic of autonomy, participation, task variety and workload into this research. Based on theoretical grounds and a factor analysis, the variables of autonomy and participation were transformed into one variable named autonomy. Besides this, it also has to be noted that the interpretation of the results regarding task variety, should be done with care, since the Cronbach's Alpha of task variety was low.

Hypothesis 3 proposed that autonomy, task variety and workload would moderate the relationship between training and development willingness and employability. To test this hypothesis, the interaction effects of autonomy, task variety and workload and the independent variable of training and development willingness on employability were analysed. No significant interaction effect was found on the outcome variable employability, which indicates that the three job characteristics do not moderate the relationship between training and development willingness and employability. However, one unexpected significant effect was found. The results show that autonomy negatively moderates the relationship between training and development willingness and the dimension of occupational expertise (hypothesis 3A). This indicates that the effect of training and development willingness on the professional knowledge and skills which employees need to perform their tasks, will decrease if the degree of autonomy increases. Autonomy is generally expected to result in higher motivation, satisfaction and performance (e.g. Langfred & Moye, 2004; Emmerik, et al., 2012), but also negative effects of autonomy have been found (Farh & Scott, 1983). According to the study of Langfred and Moye (2004) there are several factors influencing the effect of autonomy on performance, such as individual differences, preferences and other job characteristics. Asking individuals to focus more on decision making, merely drains the cognitive resources and distracts them from their task performance.

This could also be a possible explanation for the negative moderating effect of autonomy on the relationship between training and development willingness and occupational expertise and should be studied more thoroughly in future research.

To test hypothesis 4, the interaction effects of the three job characteristics autonomy, task variety and workload and the independent variable of job proactivity were studied. In this research no significant moderating effects of job characteristics on the overall construct of employability are found in the energy network organization of our research. However, the results do show a moderating effect of autonomy (hypothesis 4A) on the relationship between job proactivity and balance. It could be interpreted that having a proactive approach on the job along with a high degree of autonomy, might lead to more effort at work and less time and energy for the employee's private life, which relates to today's relevant topics of stress and burnouts in organizations. Besides this, a positive moderating effect of task variety on the relationship between job proactivity and the dimension of occupational expertise was found, relating to hypothesis 4C. This result indicates that the positive effect of job proactivity on the knowledge and skills of employees, is dependent on how varied the tasks of the employees are. Being proactive towards tasks and processes and additionally, having a high degree of task variety will enhance the employee's professional knowledge and skills. This result was expected, since performing multiple tasks requires and will provide the employee with more expertise. The Cronbach's Alpha of task variety in this research is below the criterion of .7. Therefore, this result should be interpreted with care and additional research has to confirm this moderating effect.

It was stated in the theoretical framework that in order to take initiative, learn and develop, employees should also get the possibility to do so. For this reason, it appeared relevant to include job characteristics, since they set the contextual conditions in which employees work and develop (e.g. Martínez-Sánchez, et al., 2008). It is surprising that only three moderating effects of job characteristics are found in this study. A possible explanation for this is that the individual attributes of both the willingness to participate in development activities and job proactivity are not subject to these characteristics of the job, but this should be studied more extensively. Based on these results, there is not enough proof to fully accept hypothesis 3 and 4.

5.2. Theoretical contribution

As was mentioned in the introduction of this master thesis research, the topic of employability is of increasing importance for organizations and their employees (e.g. Van der Heijde & Van der Heijden, 2006; Forrier & Sels, 2003). For this reason, many studies have been focusing on employability in the last decades. However, in this research it was specifically studied if and how characteristics of the job affect the relationships between training and development willingness, job proactivity and employability. This has not been addressed in scientific literature before and therefore, it provides a contribution to the existing theory of employability

In the scientific literature on employability it was stated that training and development willingness (Van Dam, 2004; Clarke, 2008; Van Vianen, Dalhoeven & De Pater, 2011) and job proactivity (e.g. Fugate, Kinicki & Ashforth, 2004) positively affect employability. This research confirms these effects in this specific context of the energy network organization. Although the effects of training and development willingness and job proactivity on the construct of employability have been proven, there is not enough support to fully proof the moderating effects of job characteristics on these two relationships in the context of the energy network organization. This contradicts with the statement of Martínez-Sánchez, et al. (2008) that job characteristics set the contextual conditions in which employees get the possibility to learn and develop and that these factors can facilitate or hinder the relations between individual characteristics and employability. Based on this research, the chosen job characteristics of autonomy, task variety and workload are not that influential as was suggested. However, the results show that autonomy and task variety have a direct effect on employability, indicating that having a higher degree of autonomy and variety in tasks results in a higher employability. This confirms that although no moderating effect is found, job characteristics are relevant factors to consider in employability research and in enhancing employability.

5.3. Practical implications

As mentioned in the introduction, this research is of great practical relevance since organizations are increasingly paying attention to stimulate employability to benefit the organization itself and their employees. Previous research has shown that organizations in the energy industry already pay close attention to the development of their employees and facilitating employability (Manuel, 2014). Also in the energy network organization in which

the study is conducted, the importance of employability is acknowledged and various possibilities for employee development are available. The results and arguments generated in this research regarding the proven and unproven effects, contain some interesting practical implications. First of all, the results show that the employability of the employees who participated in this research, is relatively high, all scores are between three and six on a 6-point Likert scale. This gives a snapshot of the current employability in the organization, which can be evaluated as quite good. To keep track of the possible progress of employability, it is recommended to assess the employability again in the future.

In the results of the research, it is discussed that being willing to participate in development activities and having a proactive attitude, contributes to the employability of the organizations employees. The organization would do well to stimulate and encourage these individual attributes and could take these individual attributes into account when developing HR policies. Although it appeared that the chosen job characteristics do not have a moderating effect on the relationships between training and development willingness, job proactivity and employability, a direct effect of autonomy and task variety on employability has been found. At the moment, the organization is developing and experimenting with new organizational structures, in order to anticipate to the future developments and challenges. Since autonomy and task variety positively affect employability, it is recommended to include these job characteristics in developing new work structures.

Furthermore, it is advised to invest in more research to gain more understanding into these and other factors that facilitate development and employability. More knowledge will help to support employees to grow and if needed, to move to other jobs and profession within and outside the organization. This is currently a much discussed topic in the organization, especially for employees in vulnerable professions, such as administrative occupations, which are becoming redundant due to digitalization. Gaining more knowledge about individual attributes and the role of job characteristics to facilitate employability will provide the organization with valuable information, which can help them to create a work context that facilitates development opportunities for employees and enhance employability.

5.4. Limitations and directions for future research

Although the choices that were made in this study are well considered, the research was subject to some limitations. These limitations offer some interesting indications for future research. One of the limitations is the external validity of the research. Conclusions cannot solely be made based on this study, since the relationships are only examined within this sample gathered in one organization. Besides this, the data was collected at one moment in time, which raises the question how well the data represents the actual situation (Levin, 2006). It would be ideal to repeat this research and compare the results over time to improve reliability, but in the scope of this research, this is not feasible. Although the research sample is fairly large and representative for the organization, the generalizability of the results is limited, because the data was gathered in only one energy network organization in the Netherlands. To make statements about the findings it would be best to repeat this research in more organizations within the same industry and country, as well as outside the industry and country culture. In consultation with the organization it was chosen not to include employees working in a higher job level. Bases on the above, it is recommended to include employees working in higher job levels in future research into this topic, compile a sample in multiple organizations and industries and gather data at two or more moments in time, to improve generalizability.

Another limitation concerns the operationalization of the concept of training and development willingness. In this research training and development willingness is defined as "the employee's attitude towards a request from the organization to participate in development activities" (Van Vianen, Dalhoeven & De Pater 2011, p.226). This definition is quite narrow, since it does not include the wish and motivation of the employee his or herself to participate in development activities. When including this perspective, the concept of training and development willingness will be more complete, and it will increase the validity of the construct and the research. Besides this, the amount of items used to measure training and development willingness, job proactivity and the job characteristics, are fairly low. As was mentioned in chapter 3 of this master thesis, only three items were used to measure each job characteristic, as derived from the Short Inventory to Measure Psychosocial Hazards (Notelaers, et al., 2007). Although these constructs are validated (Notelaers, et al., 2007), the low amount of items to measure these constructs could affect the validity. The same implies for training and development willingness and job proactivity, which are both measured using

five items. The decision to use these validated scales with a low amount of items was well considered, since the length and duration of the questionnaire should not be too long to keep participation attractive for respondents. A total of six variables were included in the research, and therefore it was chosen to use the shortened scales for job characteristics and employability. For future research on this topic, it is advised to include a more complete definition of training and development willingness and scales with more items to measure the constructs, in particular to measure job characteristics.

While analysing the data, it appeared that no low scores on the constructs of training and development willingness, job proactivity and employability were obtained. Although this is a good result and positive for the respondents and the organization, it is a limitation for the research. This, because no analyses could be performed on the low scores of these constructs, and no statements can be made concerning the relationships of the constructs on the lower ends of the scales. In future research on this topic, it is advised to pay close attention to include diverse scores, including the lower scores on training and development willingness, job proactivity and employability.

The last suggestion for future research comes from a practical point of view, to include practical implications that can be applied by organizations and their employees. In doing a literature research, it seemed that scientific research has paid little attention to the actual practices that can be applied in organizations to enhance and stimulate employability and the factors related to employability. It would be very helpful for organizations to study and translate the theoretical research into practical recommendations and activities.

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Appendices

Appendix 1. Operationalization

Table 1. Operationalization Control Variables

Control variable	Question		
Department	In which department or in which team do you work?		
Job level	In what job level are you?		
Job	Do you have an operational or staff function?		
Gender	Are you male or female?		
Age	What is your age?		
Working hours	How many hours do you work during the week?		

 Table 2. Operationalization Training & Development Willingness

	Question
Training and Development Willingness	If it is necessary for the organization, I am prepared to: To attend a course that lies outside of my field of expertise. To attend multiple studies, courses and trainings. To receive education to broaden my professional knowledge. To receive education to improve my general skills. To do something new.

 Table 3. Operationalization Job Proactivity

	Question		
Job proactivity	In my work, I make suggestions to improve the way we work.		
	When work methods or procedures are not effective, I try to do something about it.		
	When something is not right in the way work is done around here, I try to improve it.		
	I take initiative even when others don't.		
	I discuss work methods with my supervisor, when I think they could be improved.		

 Table 4. Operationalization Employability

	Dimension	Question
	Occupational Expertise	During the past year, I was, in general, competent to perform my work accurately and with few mistakes.
bility		During the past year, I was, in general, competent to take prompt decisions with respect to my approach to work.
Employability		In general, I am competent to distinguish main issues from side issues and to set priorities.
Em		I consider myself competent to weigh up and reason out the 'pros' and 'cons' of particular decisions on working methods, materials and techniques in my job domain.
		How would you rate the quality of your skills overall?

	Anticipation and Optimization	How much time do you spend improving the knowledge and skills that will be of benefit to your work?
		I consciously devote attention to applying my newly acquired knowledge and skills.
		During the past year, I was actively engaged in investigating adjacent job areas to see where success could be achieved.
		During the past year, I associated myself with the latest developments in my job domain.
	Personal flexibility	How easily would you say you can adapt to changes in your workplace?
		I adapt to developments within my organization.
		How quickly do you generally anticipate and take advantage of changes in your work environment?
		How much variation is there in the range of duties you aim to achieve in your work?
		I have a (very negative-very positive) attitude to changes in my function.
ity	Corporate Sense	I support the operational processes within my organization.
Employability		In my work, I take the initiative in sharing responsibilities with colleagues.
Empl		In my organization, I take part in forming a common vision of values and goals.
		I share my experience and knowledge with others.
	Balance	My work and private life are evenly balanced.
		My work efforts are in proportion to what I get back in return (e.g. through primary and secondary conditions of employment, pleasure in work).
		The time I spend on my work and career development on the one hand and my personal development and relaxation on the other are evenly balanced.
		I achieve a balance in altering between reaching my own work goals and supporting my colleagues.

 Table 5. Operationalization Job Characteristics

	Dimension	Question
	Job Autonomy	Do you have an influence on the pace of work? Can you interrupt your work if you find it necessary to do so? Can you decide on the order of priorities for your work activities?
Job Characteristics	Participation	Can you participate in decisions affecting areas related to your work? Can you consult satisfactorily with your direct boss about your work? Can you participate in deciding what does and what does not pertain to your tasks?
Job Char	Job Variety	Is your work varied? Does your work require personal input? Does your work make sufficient demands on your skills and capacities?
	Workload (Pace of Work)	Do you have to work extra hard in order to complete a task? Do you work under time constraints? Do you have to hurry at work?

Appendix 2. Questionnaire

Introductie (email)

Sinds een aantal maanden loop ik stage bij het programma Duurzame Inzetbaarheid van Alliander. Naast het meewerken in dit programma werk ik aan een afstudeeronderzoek voor mijn Master Organisational Design and Development aan de Radboud Universiteit. Het doel van dit afstudeeronderzoek is om inzicht te krijgen in hoe de ontwikkelbereidheid en proactiviteit invloed hebben op de duurzame inzetbaarheid. Hierbij wordt ook gekeken naar de wijze waarop het werk is ingericht en hoe dit de eerdere relaties faciliteert.

Om de benodigde data te verzamelen zoek ik respondenten die een vragenlijst willen invullen. Het invullen van de vragenlijst duur slechts 10 minuten. Er wordt uiteraard vertrouwelijk omgegaan met de antwoorden en de verzamelde resultaten worden alleen gebruikt om een antwoord te geven op de vraagstelling van dit afstudeeronderzoek. Daarnaast zijn de antwoorden anoniem en is je deelname geheel vrijblijvend. Door deel te nemen aan deze vragenlijst geef je toestemming voor het gebruik van jouw antwoorden voor wetenschappelijk onderzoek.

Wil	l jij mij	helpen	afstuderen	door	deze	vragenlijs	t in te	vullen?
Via	onder	staande	link kom je	e bij d	le vra	genlijst in	Qualt	rics.

Alvast hartelijk bedankt voor je moeite!

Ben je geïnteresseerd in mijn onderzoek, ben je benieuwd naar de resultaten of heb je vragen? Dan kun je mij bereiken op telefoonnummer 06 ******* of een email sturen naar k.smeets@student.ru.nl.

Met vriendelijke groet,

Kelly Smeets

Stagiaire Duurzame Inzetbaarheid

1. In welk bedrijfsonderdeel ben je werkzaam?					
(Meerkeuze antwoordopties)					
2. Wat is je functie?					
(Meerkeuze antwoordopties)					
3. Wat is je functieschaal?(Meerkeuze antwoordopties)					
(Weerkeuze antwoordopties)					
4. Ben je man of vrouw?	☐ Man ☐ Vrouw				
5. Wat is je leeftijd?					
6. Hoeveel uur werk je in de week?	☐ 35 uur per week of meer ☐ 20-34 uur per week ☐ 12-19 uur per week ☐ Minder dan 12 uur per week				
Functie karakteristieken 1= Altijd; 2= Vaak; 3= Soms; 4= Nooit					
7. Heb je invloed op het werktempo? 8. Kun je het werk even onderbreken als je dat nod 9. Kun je zelf de volgorde van je werkzaamheden in 10. Kun je meebeslissen over dingen die met je wer 11. Kun je met uw directe leiding voldoende overleg 12. Kun je meebepalen wat wel en wat niet tot jouw 13. Is je werk gevarieerd? 14. Vraagt je werk een eigen inbreng? 15. Doet je werk voldoende beroep op al je vaardigh 16. Moet je extra hard werken om iets af te krijgen? 17. Werk je onder tijdsdruk? 18. Moet u zich haasten tijdens het werk?	bepalen? k te maken hebben? ggen over je werk? taak behoort? heden en capaciteiten?				

Ontwikkelbereidheid

1= Mee oneens; 2= Enigszins mee oneens; 3= Noch oneens/noch mee eens; 4= Enigszins mee eens; 5= Mee eens

Als het voor de organisatie nodig is, ben ik bereid om:

- 19. Een opleiding te volgen die buiten mijn vakgebied ligt.
- 20. Meerdere opleidingen, cursussen en trainingen te volgen.
- 21. Opleidingen te volgen om mijn vakkennis te verbreden.
- 22. Opleidingen te volgen om mijn algemene vaardigheden te verbeteren.
- 23. Jets nieuws te doen.

Werk Proactiviteit

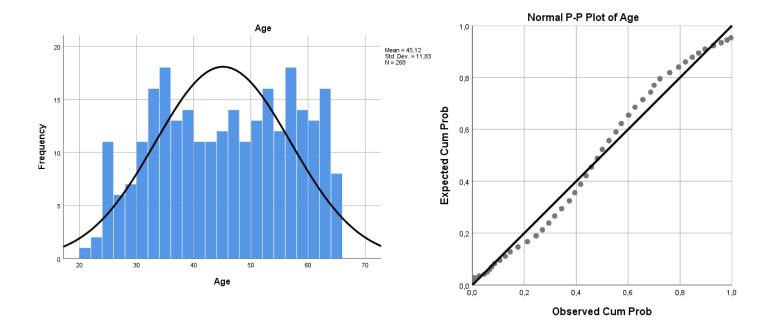
1= Zeer oneens; 2= Oneens; 3 = Noch oneens/noch mee eens; 4= Mee eens; 5= Zeer mee eens

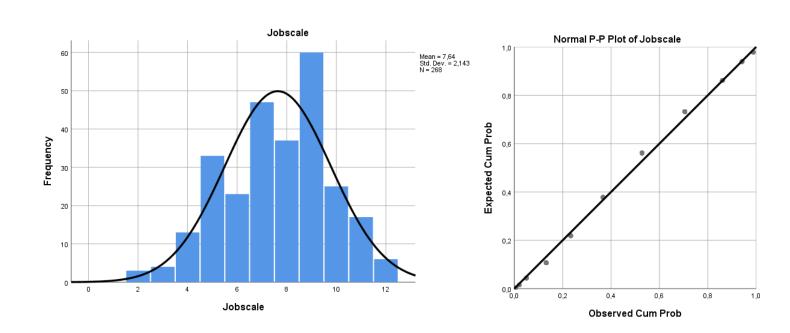
- 24. In mijn werk maak ik suggesties om de manier waarop we werken te verbeteren.
- 25. Wanneer werkmethoden of procedures niet effectief zijn, probeer ik er iets aan te doen.
- 26. Wanneer er iets niet klopt in de manier waarop hier wordt gewerkt, probeer ik het te verbeteren.
- 27. Ik neem initiatief, zelfs als anderen dat niet doen.
- 28. Ik bespreek de werkmethoden met mijn leidinggevende als ik denk dat ze kunnen worden verbeterd.

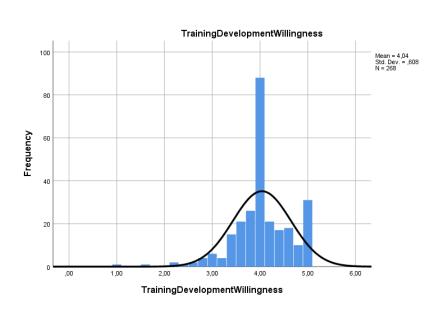
Employability

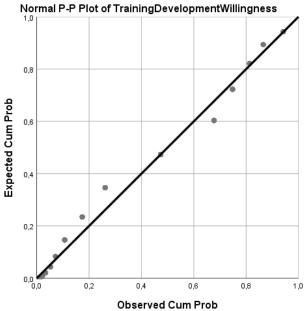
The validated employability scale of Van der Heijde & Van der Heijden (2006) can be found in 'A competency-based and multidimensional operationalization and measurement of employability' *Human Resource Management*, 45, p. 449–76

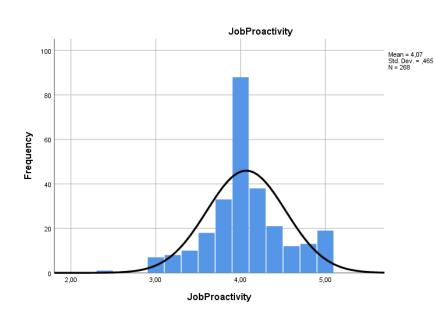
Appendix 3. Distributions

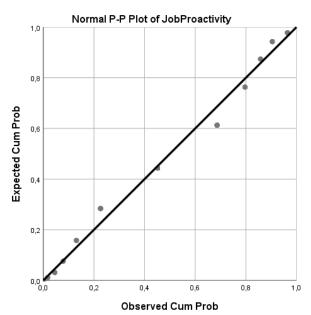


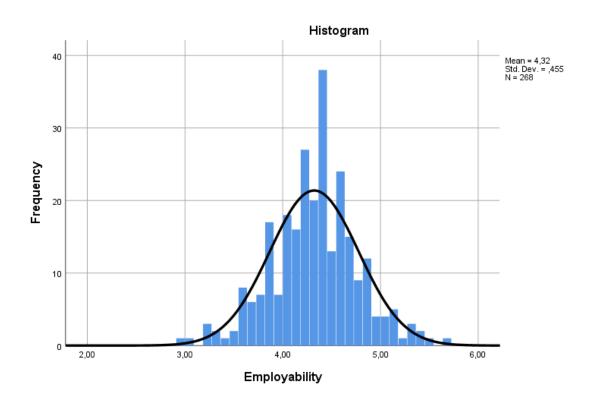




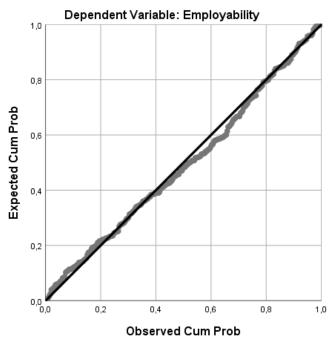


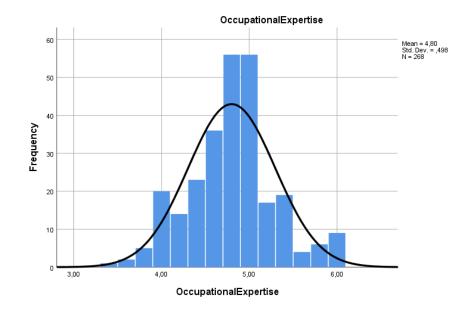


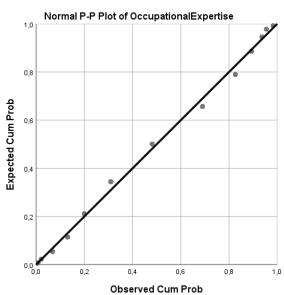


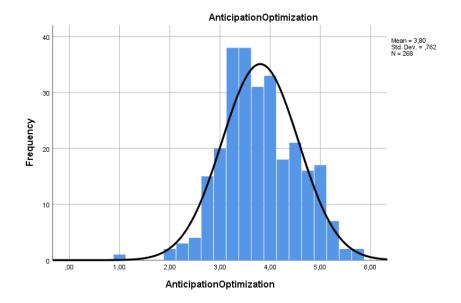


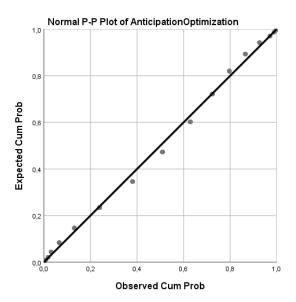
Normal P-P Plot of Regression Standardized Residual

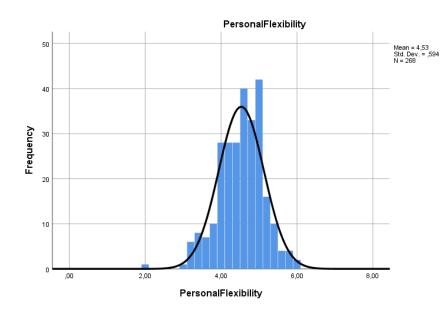


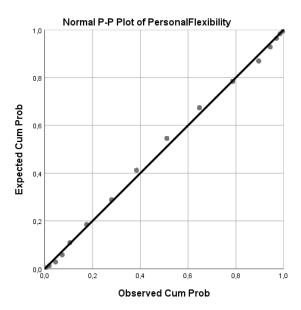


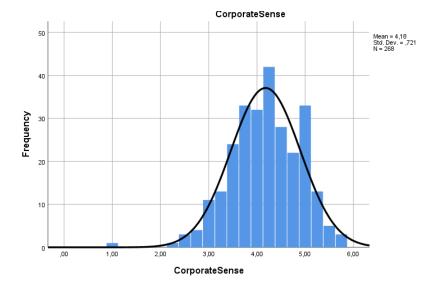


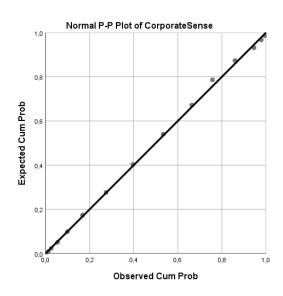


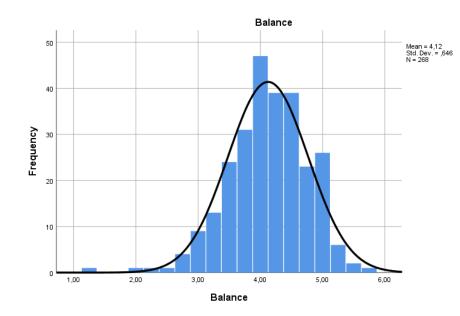


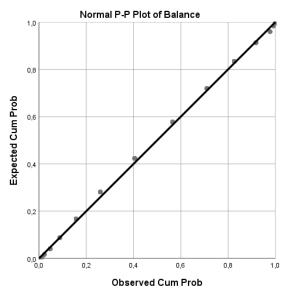


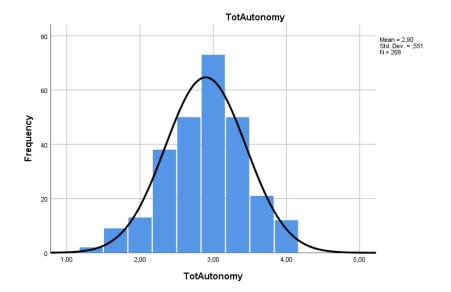


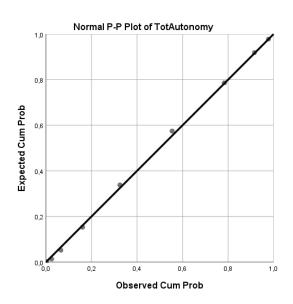


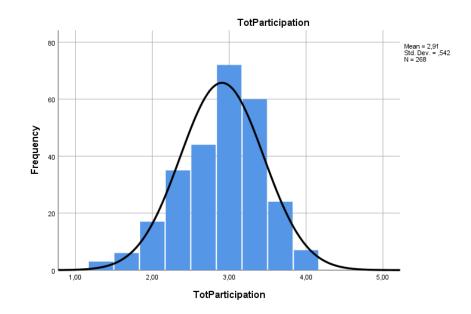


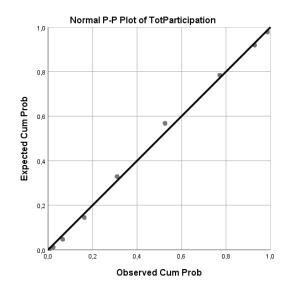


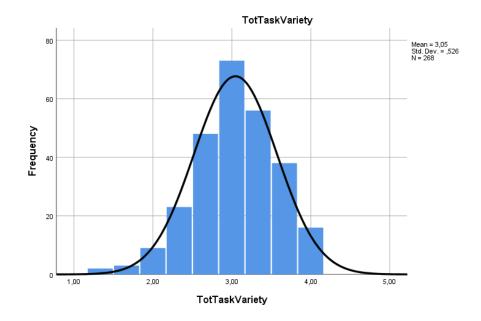


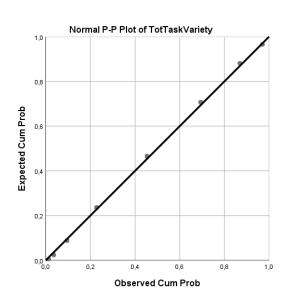


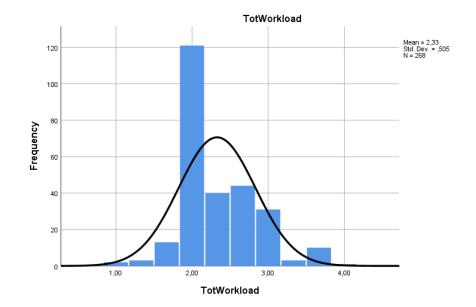


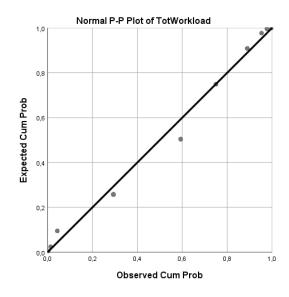












Appendix 4. Factor analyses

4.1. Factor analysis Job Proactivity and Anticipation & Optimization

Descriptive Statistics

Descripti	ive Statistic	5 3	
	Mean	Std. Deviation	Analysis N
24. In mijn werk maak ik suggesties om de manier waarop we werken te verbeteren.	4,09	,577	268
25. Wanneer werkmethoden of procedures niet effectief zijn, probeer ik er iets aan te doen.	4,14	,614	268
26. Wanneer er iets niet klopt in de manier waarop hier wordt gewerkt, probeer ik het te verbeteren.	4,07	,601	268
27. lk neem initiatief, zelfs als anderen dat niet doen.	4,03	,629	268
28. Als ik denk dat de werkmethoden kunnen worden verbeterd, bespreek ik dit met mijn leidinggevende.	4,00	,687	268
34. Ik besteed tijd aan verbetering van die kennis en vaardigheden die mijn werk ten goede komen.	3,97	,841	268
35. Ik besteed bewust aandacht aan het toepassen van door mij nieuw verworven kennis en vaardigheden.	4,09	,889	268
36. Ik ben in het afgelopen jaar actief bezig geweest met het verkennen van aangrenzende gebieden om te zien waar succes geboekt zou kunnen worden.	3,59	1,069	268
37. Ik heb in het afgelopen jaar met mijn werk aangesloten bij de nieuwste ontwikkelingen op mijn gebied.	3,56	1,071	268

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure o	,827	
Bartlett's Test of Sphericity	Approx. Chi-Square	800,164
	df	36
	Sig.	,000

Communalities

	Initial	Extraction
24. In mijn werk maak ik suggesties om de manier waarop we	,338	,386
werken te verbeteren.		
25. Wanneer werkmethoden of procedures niet effectief zijn,	,529	,632
probeer ik er iets aan te doen.		
26. Wanneer er iets niet klopt in de manier waarop hier wordt	,564	,719
gewerkt, probeer ik het te verbeteren.		
27. lk neem initiatief, zelfs als anderen dat niet doen.	,375	,420
28. Als ik denk dat de werkmethoden kunnen worden verbeterd,	,251	,278
bespreek ik dit met mijn leidinggevende.		
34. Ik besteed tijd aan verbetering van die kennis en	,421	,527
vaardigheden die mijn werk ten goede komen.		
35. lk besteed bewust aandacht aan het toepassen van	,395	,484
door mij nieuw verworven kennis en vaardigheden.		
36. lk ben in het afgelopen jaar actief bezig geweest met	,426	,524
het verkennen van aangrenzende gebieden om te zien waar succes		
geboekt zou kunnen worden.		
37. lk heb in het afgelopen jaar met mijn werk aangesloten	,363	,442
bij de nieuwste ontwikkelingen op mijn gebied.		

Extraction Method: Principal Axis Factoring.

Total Variance Explained

			. Ota. Ta.	.шоо =хр.е			
							Rotation Sums of
							Squared
		Initial Eigenvalu	es	Extracti	on Sums of Square	d Loadings	Loadings ^a
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3,647	40,527	40,527	3,151	35,013	35,013	2,730
2	1,718	19,089	59,616	1,261	14,011	49,025	2,450
3	,713	7,923	67,539				
4	,677	7,526	75,065				
5	,593	6,591	81,656				
6	,512	5,685	87,341				
7	,450	5,002	92,343				
8	,400	4,448	96,791				
9	,289	3,209	100,000				

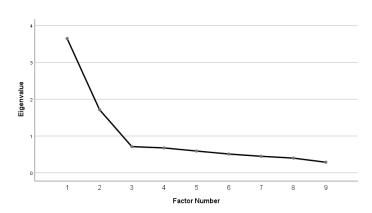
Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Pattern Matrix^a

	Factor		
	1	2	
24. In mijn werk maak ik	,547	,147	
suggesties om de manier			
waarop we werken te			
verbeteren.			
25. Wanneer werkmethoden	,839	-,128	
of procedures niet effectief			
zijn, probeer ik er iets aan te			
doen.			
26. Wanneer er iets niet	,893	-,130	
klopt in de manier waarop			
hier wordt gewerkt, probeer			
ik het te verbeteren.			
27. lk neem initiatief, zelfs	,555	,176	
als anderen dat niet doen.			
28. Als ik denk dat de	,495	,070	
werkmethoden kunnen			
worden verbeterd, bespreek			
ik dit met mijn			
leidinggevende.			
34. lk besteed tijd	,013	,720	
aan verbetering van die			
kennis en vaardigheden die			
mijn werk ten goede komen.			
35. lk besteed	-,012	,701	
bewust aandacht aan het			
toepassen van door mij			
nieuw verworven kennis en			
vaardigheden.			
36. Ik ben in het afgelopen	,086	,684	
jaar actief bezig			
geweest met het verkennen			
van aangrenzende gebieden			
om te zien waar succes			
geboekt zou kunnen worden.			
37. lk heb in het afgelopen	-,030	,676	
jaar met mijn werk			
aangesloten bij de nieuwste			
ontwikkelingen op mijn			
gebied.			

Scree Plot



Factor Correlation Matrix

Factor	1	2
1	1,000	,412
2	,412	1,000

Extraction Method: Principal Axis

Factoring.

Rotation Method: Oblimin with Kaiser

Normalization.

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 5 iterations.

4.2. Factor Analysis Autonomy and Participation

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
AutQ35r	2,7985	,77682	268
AutQ44r	3,0037	,74199	268
AutQ37r	2,8881	,68870	268
ParQ42r	2,8246	,66128	268
ParQ36r	3,2090	,80796	268
ParQ38r	2,6866	,71283	268

KMO and Bartlett's Test

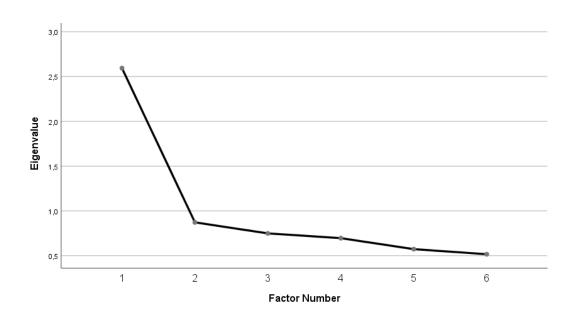
Kaiser-Meyer-Olkin Measure o	,804	
Bartlett's Test of Sphericity	Approx. Chi-Square	278,184
	df	15
	Sig.	,000

Total Variance Explained

Initial Eigenvalues				Extract	ion Sums of Square	d Loadings
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,594	43,227	43,227	1,938	32,308	32,308
2	,872	14,534	57,761			
3	,749	12,483	70,244			
4	,696	11,598	81,841			
5	,573	9,552	91,393			
6	,516	8,607	100,000			

Extraction Method: Principal Axis Factoring.

Scree Plot



Factor Matrix^a

ᆮ	_	0	۴	$\overline{}$	ì
г	а	C	ι	U	J

	1
AutQ35r	,583
AutQ44r	,511
AutQ37r	,597
ParQ42r	,684
ParQ36r	,413
ParQ38r	,585

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 6 iterations required.

Appendix 5. Results Linear Regression Analyses.

 Table 7.1. Results Linear Multiple Regression Analyses: Occupational Expertise

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Age	,002 (,003)	,004 (,003)	,001 (,002)	,003 (, <i>003</i>)	,003 (,003)	,004 (,003)	,004 (,003)	,001 (,002)	,002 (,002)	,001 (,002)	,003 (,003)
Gender	-,107 (,072)	-,122 (,073	-,146* (,068)	-,154 (,068)	-,125 (,071)	-,103 (,073)	-,121 (,073)	-,136* (,068)	-,135* (,068)	-,140* (,068)	-,140* (,069)
Job scale	,027 (,014)	,021 (,015)	,018 (,013)	,014 (, <i>014</i>)	,008 (,015)	,013 (,015)	,022 (,015)	,011 (,014)	,018 (,014)	,019 (,013)	,009 (,014)
Training & Development Willingness		,134 (,073)		,083 (,069)	,096 (,072)	,135 (,073)	,131 (,073)				,066 (,069)
Job Proactivity			,378* (,062)	,369 (,062)	454			,355* (,064)	,352* (,063)	,391* (,062	,341* (,066)
Autonomy					,451 (,123)			,127* (,064)			,306* (,134)
Task variety						,188 (,102)			,061 (,057)		,051 (,105)
Workload							-,116 (,122)			-,096 (,057)	-,052 (,121)
Interaction Autonomy* TR&D willingness					-,312* (,141)						-,316* (,157)
Interaction Task variety * TR&D willingness						-,060 (,122)					-,004 (,131)
Interaction Workload* TR&D willingness							,070 (,140)				-,041 (,141)
Interaction Autonomy* Job Proactivity								,195 (,104)			,114 (,137)
Interaction Task variety *Job Proactivity									,225* (,108)		,178 (,127)
Interaction Workload* Job Proactivity										-,140 (,106)	-,055 (,122)
\mathbb{R}^2	•	,037	,147	,151	,095	,060	,042	,171	,165	,160	,204
Adjusted R^2 ΔR^2	•	,022 ,012	,134 ,122	,135 ,127	,074 ,058	,039 ,024	,020 ,005	,152 ,024	.146 ,018	,141 ,013	,160 ,053

 Table 7.2. Results Linear Multiple Regression Analyses: Anticipation & Optimization

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Age	-,007 (,004)	-,002 (,004)	-,008* (,004)	-,004 (,004)	-,003 (,004)	-,001 (,004)	-,001 (,004)	-,008* (,004)	-,008* (,004)	-,008* (,004)	-,003 (,004)
Gender	-,160 (,110)	-,203 (,109)	-,223* (,103)	-,254* (102)	-,202 (,109)	-,145 (,105)	-,207 (,109)	-,212* (,103)	-,165 (,101)	-,220* (,102)	-,188 (,101)
Job scale	,041 (,022)	,023 (, <i>022</i>)	,026 (,020)	,013 (,020)	,013 (,022)	-,002 (,021)	,020 (,022)	,022 (,021)	,009 (,020)	,022 (,020)	-,008 (,021)
Training & Development Willingness		,376** (,110)		,297** (,103)	,359** (,110)	,380** (,104)	,382** (,110)				,327 (101)
Job Proactivity			,615** (,093)	,582** (,092)				,623** (,098)	,529** (,093)	,623** (,093)	,542 (,097)
Autonomy					,166 (,189)			,043 (,097)			-,175 (,196)
Task variety						,573** (,147)			,332** (,085)		,467 (,154)
Workload							,217 (,182)			,088 (,086)	,064 (,178)
Interaction Autonomy* TR&D willingness					,036 (,217)						,141 (,230)
Interaction Task variety * TR&D willingness						-,185 (,176)					-,166 (,192)
Interaction Workload* TR&D willingness							-,096 (,210)				-,034 <i>(,207)</i>
Interaction Autonomy* Job Proactivity								,285 (,158)			,257 (,200)
Interaction Task variety *Job Proactivity									-,111 (,160)		,226 (,186)
Interaction Workload* Job Proactivity										-,266 (,159)	-,197 <i>(,178)</i>
R^2 ,033 Adjusted R^2 ,022 ΔR^2 ,033	,061	,159	,		89 68 .4 ,	,168 ,149 093	,085 ,064 ,010	,182 ,164 ,011	,219 ,201 ,047	,185 ,166 ,013	,271 ,231 ,074

 Table 7.3. Results Linear Multiple Regression Analyses: Personal Flexibility

	Mode	l 1 Model	2 Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Age	-,011* (,003)	•	-,012** (,003)	-,007* (,003)	-,007* (003)	-,006 (,003)	-,006 (,003)	-,012** (,003)	-,012** (.003)	-,012 (,003)	-,009** (,003)
Gender	,145 (,083)	,102 (,081)	,095 (, <i>077</i>)	,063 (,075)	,101 (,076)	,131 (,080)	,103 (,081)	,099 (, <i>074</i>)	,106 (,077)	,099 (,077)	,075 (,074)
Job scale	,048* (,01 <i>6</i>)	•	,036* (,015)	,023 (,015)	,009 (,016)	,022 (,016)	,032 (,016)	,021 (,015)	,031* (,015)	,037 (,015)	,005 (,015)
Training & Development Willingness		,374** (,081)		,312** (,076)	,326** (,077)	,374** (,080)	,371** (,081)				,283** (,074)
Job Proactivity			,483** (,068)	,448** (,068)				,386** (,071)	,473** (,071)	,492 (,070)	,375** (,071)
Autonomy					,514** (,132)			,306** (,070)			,441** (,144)
Task variety						,074 (,113)			,063 (,065)		-,166 (,113)
Workload							-,111 (,135)			-,095 (,064)	-,043 (,130)
Interaction Autonom TR&D willingness					-,161 (,152)						-,171 (,169)
Interaction Task variation Task vari						,131 (,135)					,215 (,141)
Interaction Workload TR&D willingness							,073 (,156)				,061 (,152)
Interaction Autonom Job Proactivity	•							-,085 (,115)			-,059 (,147)
Interaction Task variable *Job Proactivity	·								-,187 (,122)		-,241 (,136
Interaction Workload Job Proactivity	d* 									-,063 (,119)	-,180 (,131)
\mathbb{R}^2	-	,169		88 ,20		,191	,172	,294	,251	,248	,356
$\begin{array}{ll} \textbf{Adjusted} \ R^2 \\ \Delta \ R^2 \end{array} \ ,$,156 ,067		74 ,24 86 ,09		,173 ,022	,153 ,003	,278 ,053	,233 ,009	,231 ,007	,320 ,068

 Table 7.4. Results Linear Multiple Regression Analyses: Corporate Sense

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Age	005 (,004)	,000 (,004)	-,006 (,003)	-,002 (,004)	-,001 (,004)	,000 (,004)	,000 (,004)	-,006 (,003)	-,006 (,003)	-,006 (,003)	-,002 (,004)
Gender	-,040 (,105)	-,078 (,104)	-,102 (,097)	-,128 (,096)	-,076 (,102)	-,037 (,102)	-,081 (,104)	<i>-,092</i> (,097)	-,069 (,097)	-,100 (,097)	-,096 (,098)
Job scale	,049 (,021)	,033 (,021)	,034 (,019)	,023 (,019)	,021 (,021)	,016 (,021)	,031 (,021)	<i>,028</i> (,020)	,025 (,019)	,031 (,019)	,007 (,020)
Training & Development Willingness		,329** (,104)		,251* (,098)	,309** (,104)	,331** (,102)	,334** (,104)				,269** (,098)
Job Proactivity			,602** (,088)	,574** (,087)				,585** (,092)	,552** (,090)	,609** (,088)	,528** (,094)
Autonomy					,168 (,178)			,111 (,091)			-,095 (,190)
Task variety						,387** (,102)			,188* (,081)		,273 (,150)
Workload							,182 (,174)			,061 (,081)	,071 (,172)
Interaction Autonomy* TR&D willingness					,117 (,205)						,250 (,223)
Interaction Task variety * TR&D willingness						-,114 (,172)					-,173 (,186)
Interaction Workload* TR&D willingness Interaction Autonomy*							-,089 (,200)	,210			,007 (,201) ,139
Job Proactivity Interaction Task variety	,							(,149)	-,.044		(,194) -,124
*Job Proactivity									(,154)	245	(,180)
Interaction Workload* Job Proactivity										-,215 (151)	-,205 (,173)
	029 ,065			,197	,092	,114	,072	,188	,194	,186	,235
•	018 ,051 029 ,035	•		,182 ,168	,072 ,028	,094 ,050	,051 ,007	,169 ,011	,175 ,017	,168 ,009	,192 ,037

 Table 7.5. Results Linear Multiple Regression Analyses: Balance

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Age	-,002 (,003)	,001 (,004)	-,002 (,003)	,000 (,004)	-,001 (,03)	,001 (,003)	,000 (,003)	-,003 (,003)	-,002 (,003)	-,003 (,003)	-,002 (,003)
Gender	-,072	-,091	-,103	-,116	-,089	-,041	-,074	-,104	-,052	-,093	-,061
Genuci	(,093)	(,093)	,103 (,091)	(,091)	,085)	,041 (,091)	(,087)	(,084)	(,089)	,035 (,085)	,001 (,081)
Job scale	,065**	,057**	,058**	,052**	,029	,039	,066**	,033*	,042*	,066**	,033*
	(,018)	(,019)	(,018)	(,018)	(,018)	(,018)	(,018)	(,017)	(,018)	(,017)	(,017)
Training &		,168		,129	,116	,170	,160				,114
Development		(,094)		(,092)	(,086)	(,090)	(,088)				9,082)
Willingness											
Job Proactivity			,303**	,289**				,123	,232**	,331**	,153
			(,082)	(,083)	dub			(,080)	(,083)	(,077)	(,079)
Autonomy					,467**			,524**			,244
					(,148)	240*		(,079)	201**		(,159)
Task variety						,310* (,127)			,291** (,075)		,205 (,125)
Workload						(,127)	-,288*		(,075)	-,449**	-,290*
vv oi Kioau							-,288 (,146)			-,449 (,071)	-,290 (,144)
Interaction Autonomy	*				,081		(,1 10)			(,0,1)	,065
TR&D willingness					(,170)						(,186)
Interaction Task variet	tv				,	,039					,052
* TR&D willingness	•					(,152)					(,155)
Interaction Workload*	•						-,189				-,108
TR&D willingness							(,168)				(,168)
Interaction Autonomy	*							-,333**			-,307
Job Proactivity								(,129)			(,162)
Interaction Task variet	t y								-,198		-,074
*Job Proactivity									(,141)		(,150)
Interaction Workload*	•									,055	-,150
Job Proactivity										(,132)	(,144)
\mathbb{R}^2 ,03	51 ,062	,098	,104	,220	,1	33	,178	,244	,152	,221	,335
Adjusted R ² ,04	,048	,084	,087	,202	,1	33	,159	,227	,132	,203	,298
$\Delta \mathbf{R}^2$,03		,047	,053			70	,116	,147	,054	,124	,231

Table 7.6. Results Linear Multiple Regression Analyses: Employability

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Age	005 (,002)	-,001 (,002)	-,005** (,002)	-,002 (,002)	-,002 (,002)	,000 (,002)	-,001 (,002)	-,006** (,002)	-,005** (,002)	-,006** (,002)	-,003 (,002)
Gender	-,041 (,065))	-,072 (,063)	-,089 <i>(,057)</i>	-,112* (,056)	<i>-,072</i> (,059)	-,034 (,061)	-,070 (,063)	-,083 (,055)	-,059 (, <i>056)</i>	-,084 (,056)	-,077 (,054)
Job scale	,045** (,013)	,032* (,013)	,034** <i>9,011)</i>	,025* (,011)	,015 (,012)	,018 (,012)	,034** (,013)	,022* (,011)	,025* (,011)	,034** (,011)	,009 (,011)
Training & Development Willingness		,274** (,064)		,213** i9,056)	<i>,238**</i> (,060)	,276** (,060)	,273** (,064)				,208** (,055)
Job Proactivity			,472** (051)	,448** (,050)				,410** (,052)	,426** (,052)	,485** (,051)	,385** (,053)
Autonomy					,370** (,103)			,222** (,052)			,165 (,106)
Task variety						,291** (,085)			,176** (,047)		,146 (,083)
Workload							-,032 (,106)			-,098* (,047)	-,050 (,096)
Interaction Autonomy* TR&D willingness					<i>-,065</i> (,119)						-,028 (,124)
Interaction Task variety * TR&D willingness	•					-,031 (,102)					-,004 (,104)
Interaction Workload* TR&D willingness							-,035 (,122)				-,020 (,112)
Interaction Autonomy* Job Proactivity								,054 (,085)			,029 (,108)
Interaction Task variety *Job Proactivity	,								-,055 (,088)		-,091 (,100)
Interaction Workload* Job Proactivity										-,124 (,088)	-,154 (,096)
R ² ,(064 ,1	26 ,2	.93	,329	,233	,217	,130	,340	,329	,308	,403
•			.82 .28	,316 ,265	,215 ,107	,199 ,091	,110 ,004	,325 ,047	,314 ,037	,292 ,015	,370 ,074
- 11	JU - ,U	2, کر	20	,200	,±07	,001	,007	,077	,037	,013	,07 -