
Wageningen University – Department of Social Sciences

Management Studies Group

Employability;

how to differentiate between the needs for
employability of employees in a knowledge
intensive organization

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Abstract

Motivation: Different social-demographic trends like individualisation, increasing unemployment and an ageing workforce require individualized HR-policies. Employers who can identify and meet the different needs of their employees will be most successful in the current labour market.

Problem statement: The aim of the research is two folded. On one hand, the objective of this research is to gain insight in the concept of employability in knowledge intensive organizations. On the other hand, the results are used to advice Wageningen UR in order to improve the alignment of its HR-policy to the needs of its employees.

Approach: Preliminary research gains insight in employability in knowledge intensive organizations and the variables which might be suitable to categorize employees in order to gain insight in their needs for employability. The insights of the preliminary research are used to develop an employee survey, that is an assessment of the needs for employability of employees of Wageningen UR. 712 employees participated in the survey.

Main results and conclusion: Employees have most needs for HR-instruments related to personal flexibility and occupational expertise. Employees are most satisfied about management interventions related to the work-life balance. The effect of the characteristics of employees of a knowledge intensive organization on the needs for employability appears to be small. The variables, generations and labour market transitions, are not suitable to make distinctive categories of employees. The focus of the HR-policy needs to be on specific HR-instruments and management interventions instead of categories of employees.

Management Summary

The objective of this research is to gain insight in the concept of employability in knowledge intensive organizations. The result of the research is used to advice Wageningen UR in order to better align its HR-policy to the needs of its employees.

Preliminary research gains insight in employability in knowledge intensive organizations on one hand and in variables which might be suitable to categorize employees in order to gain insight in their needs for employability on the other hand. The insights of the preliminary research are used to develop an employee survey, which is an assessment of the needs for employability of employees of Wageningen UR, a knowledge intensive organization. 712 employees participated in the survey, indicating a response rate of 36.8%, which is sufficient.

The need of employees for HR-instruments assigned to employability dimensions is determined, just as their satisfaction with management interventions assigned to employability dimensions. The employability dimensions are occupational expertise, personal flexibility, balance, corporate sense and anticipation and optimization.

Differences in needs for employability of knowledge workers and members of the supporting staff are explored to gain insight in the influence of the characteristics of employees of a knowledge intensive organization. Differences in needs for employability of different generations and groups of employees expressing different priorities for activities of life are explored to determine the ability of these variables to make distinctive categories of employees. The results and conclusions of the research are described below.

In general, employees have most needs for HR-instruments related to personal flexibility and occupational expertise. A striking 70% of the employees has a need for the opportunity to organize own work activities. Employees have also expressed a need for the opportunity to participate in job- or discipline related education (31%), acknowledgement of acquired competencies (26%), job enrichment (25%) and the opportunity to participate in projects (24%).

HR-instruments related to the work-life balance, like care leave, special arrangements for older workers and agreements with the supervisor on the care of children (i.e. flexible working hours) are in general needed the least (by less than 10%). On the contrary, employees are most satisfied about management interventions related to the work-life balance. They are satisfied about the support they receive from their supervisor concerning their work-life balance.

The effect of the characteristics of employees of a knowledge intensive organization on the needs for employability appears to be small. On average, knowledge workers show more needs for employability. The main differences (i.e. more knowledge workers expressing a need compared to members of the staff) are determined for 'the opportunity to participate in projects', 'the opportunity to be coached by the supervisor', 'the transfer of knowledge of the older generation to the younger generation' and 'the performance and development interview (P&D interview)'. There appears to be a

small difference in the valuation of management interventions between knowledge workers and members of the staff. So both groups of employees are equally satisfied.

With regard to the variables to categorize employees to gain insight in their needs for employability, i.e. generations and activities of life, the results of the empirical research show a low ability of the variables when categorizing employees. The variables are not suitable for making distinctive categories of employees with regard to every employability dimension.

In general, this research can underpin the intention of Wageningen UR to better align its HR-policy with the needs of its employees. Employers that identify and meet the needs of their employees are expected to be most successful. Unfortunately, making categories of employees using a single variable seems to be difficult. Besides, with regard to generations as a variable, the result of the literature study already showed there are little differences at work between generations.

In order to enable Wageningen UR to better align its HR-policy with the needs for employability of its employees, it is recommended to change their approach. Instead of making distinctive categories of employees to gain insight in their needs for employability, Wageningen UR should focus at each HR-instrument and management intervention separately and gain insight in the employees that need these HR-instruments and management interventions.

Preface

This thesis reflects a research of six months, performed at Wageningen UR and supervised by the Management Studies Group and Education and Competence Studies Group of Wageningen University. It is part of the master *Management, Economics and Consumer Studies*.

While performing this research, I have received support and feedback from various people. I want to thank all those people since their support and feedback kept me motivated and inspired me to stay ambitious and to keep improving.

First, I would like to thank my supervisors from Wageningen UR: dr. Renate Wesselink and dr. Vincent Blok. Their combined knowledge and experience has definitely supported me during this research.

Second, I would like to thank my supervisors from Corporate HR at Wageningen UR: drs. Romke Kuindersma and Mr. Jackie Burger. They have given me a great opportunity to perform a research at Wageningen UR and, at the same time, to take a look behind the scenes of the organization and their department.

While developing the employee survey, I have got support and feedback from Mr. John Peeters, also employed at Corporate HR of Wageningen UR. I would like to thank him for his time and contribution to my research.

The empirical research had never succeeded without the participation of over 700 employees of Wageningen UR, therefore I would like to thank all participants.

During my college years I have got great support from my family and friends. My parents have always supported me and the choices I made. I really appreciate their support and trust, which has been indispensable to me. My family and friends have always been willing to listen to me when I wanted to discuss my research. I would like to thank everybody for those (pep)talks.

Last, but not least, I would like to thank Erik. His infinite trust and support is of great value to me.

Performing this research has learned me a lot about employability and the needs of employees. I hope you enjoy reading this thesis.

Margot Baas, 2012

Content

Abstract.....	5
Management Summary	6
Preface	8
List of Tables and Figures	11
1. Introduction.....	13
2. Wageningen UR	14
3. Problem Analysis.....	17
3.1 Problem definition	17
3.2 Research objective	18
3.3 Research questions	18
3.4 Relevance of the research.....	19
3.5 Research framework	19
3.6 Definition of concepts	20
4. Employability and knowledge intensive organizations	22
4.1 Definition of employability	22
4.2 Dimensions of employability	24
4.3 Employees of knowledge intensive organizations.....	28
4.4 Summary	30
5. Variables to categorize employees	32
5.1 Generations	32
5.2 Labour market transitions	34
5.3 Summary	37
5.4 Hypotheses	38
6. Research Design.....	39
6.1 Population and sampling	39
6.2 Instrumentation	40
6.3 Validity and reliability	41
6.4 Analysis	42
7. Results.....	44
7.1 The response group	44

7.1.1	Education and work	44
7.1.2	Demographics.....	46
7.1.3	Priority for activities of life	47
7.2	Results of the assessment of needs for employability	48
7.2.1	Occupational expertise	49
7.2.2	Personal flexibility	51
7.2.3	Balance	52
7.2.4	Corporate sense	53
7.2.5	Anticipation and optimization.....	54
7.2.6	Summary	56
7.3	Testing the hypotheses	60
7.3.1	Influence of the characteristics of employees of a knowledge intensive organization on the needs for employability.....	60
7.3.2	Generations as a variable to categorize employees	63
7.3.3	Priorities for activities of life as a variable to categorize employees	66
7.3.4	Generations vs. priorities for activities of life	69
8.	Conclusion and Recommendations	72
8.1	Conclusions	72
8.2	Recommendations for Wageningen UR.....	77
9.	Discussion	83
	References	85
	Appendices	88
I.	E-mail to employees of Wageningen UR	89
II.	Questionnaire	90
III.	HR-instruments assigned to the different employability dimensions.....	99
IV.	Management interventions assigned to the different employability dimensions	100
V.	Results related to management interventions per group	101
VI.	Results of the assessment	108
VII.	Additional information for Wageningen UR	116

List of Tables and Figures

Tables.

Table 1 Definitions of employability.....	23
Table 2 Controlling for division and job category, in percentages and number of employees.....	45
Table 3 Men and women per generation, in percentages and number of employees.....	47
Table 4 Family composition and children, in percentages and number of employees.	47
Table 5 Cronbach's α for each employability dimension.....	48
Table 6 Results of HR-instruments assigned to occupational expertise.....	49
Table 7 Results of HR-instruments personal flexibility.....	51
Table 8 Results of HR-instruments balance.....	53
Table 9 Results of HR-instruments assigned to corporate sense.....	54
Table 10 Results of HR-instruments assigned to anticipation and optimization.....	55
Table 11 Total familiarity with, use made of and need for employability dimensions*.....	56
Table 12 Average score for management interventions assigned to the employability dimension.	58
Table 13 Top five HR-instruments per familiarity, use and need.....	59
Table 14 Knowledge workers and members of the staff having a need for one or more HR-instruments per employability dimension, in percentages.....	61
Table 15 Average scores of knowledge workers and members of the staff, per employability dimension.....	62
Table 16 Need for employability per generation, in percentages.....	63
Table 17 Result of Games-Howell test for generations (<i>HR-instruments</i>).....	64
Table 18 Average scores of different generations, per employability dimension.....	65
Table 19 Result of Games-Howell test for generations (<i>management interventions</i>).....	65
Table 20 Need for employability per priority for activities of life, in percentages.....	66
Table 21 Result of Games-Howell test for activities of life (<i>HR-instruments</i>).....	67
Table 22 Average scores of activities of life, per employability dimension.....	68
Table 23 Result of Games-Howell test for activities of life (<i>management interventions</i>).....	68
Table 24 Priority for activities of life per generation.....	70
Table 25 Significant effects of generations and activities of life on the need for employability dimensions.....	70
Table 26 Average need of employees for each employability dimension.....	73
Table 27 Average score of employees for management interventions for each employability dimension.....	74
Table 28 The opportunity to organize own work activities.....	78
Table 29 The opportunity to participate in job- or discipline related education.....	79
Table 30 Acknowledgement of acquired competences.....	79
Table 31 The assessment of skills and knowledge.....	80
Table 32 The opportunity to receive career advice and get help with career planning.....	80
Table 33 The opportunity to be coached by the supervisor.....	80

Table 34 The transfer of knowledge and skills.....	81
Table 35 Special leave due to exceptional circumstances.....	81
Table 36 Care leave.	81
Table 37 The introduction meeting for new employees.	82
Table 38 HR-instruments and management interventions assigned to employability dimensions.....	99
Table 39 Management interventions assigned to employability dimensions.	100
Table 40 HR-instruments in descending percentages of employees that have a need for that instrument.....	109
Table 41 The difference between knowledge workers and members of the staff per HR-instrument.	110
Table 42 The difference between generations per HR-instrument.	112
Table 43 The difference between activities of life per HR-instrument.....	114
Table 44 The difference between academic staff and PhD's per HR-instrument.	117
Table 45 Average need of academic staff and PhD's per employability dimension (in terms of HR-instruments).....	118
Table 46 Average score for academic staff and PhD's per employability dimension (in terms of management interventions).....	118

Figures.

Figure 1 Organisation chart of Wageningen UR. ("About", 2010).....	14
Figure 2 Age distribution of employees.....	15
Figure 3 Research framework.....	20
Figure 4 Heuristic model of employability (Fugate et al., 2004, p.19).....	25
Figure 5 "Lepak and Snell's 'HR architectural perspective' " (Boxall & Purcell, 2008, p.102).....	29
Figure 6 Schematic representation of hypothesis 1.....	38
Figure 7 Schematic representation of hypothesis 2.....	38
Figure 8 Priorities for activities of life, in percentages.....	47
Figure 9 Example of a boxplot.....	101

1. Introduction

Employability is a concept studied by many researchers from different perspectives and distinct levels (like De Grip, Van Loo & Sanders, 2004; Fejes, 2010; Fugate, Kinicki & Blake, 2004; Van Dam, Van der Heijden & Schyns, 2006; Van der Heijde & Van der Heijden, 2006). The interest in employability has aroused by many societal changes, such as individualisation, increasing unemployment rates, increased international competition, etcetera. In this research, the interest in employability has aroused by a shift in career development. More specific, a shift from the bounded career (i.e. 'lifetime employment' with a single employer) to the 'boundaryless career' (i.e. "a pattern of varied experiences in education, training, work in several organizations and changes of occupational field") (De Grip et al., 2004, p.211). A 'boundaryless career' requires employees to become or remain employable in order to remain attractive for the labour market. On the other hand, a 'boundaryless career' requires employers to put more effort in attracting and keeping employees because it is no longer taken for granted that employees are loyal to one employer for a lifetime.

Employability is defined as "*the capacity and willingness of workers to remain attractive for the labour market, by reacting to and anticipating changes in tasks and work environment, facilitated by the human resources development instruments available to them*" (De Grip et al., 2004, p.216). This definition states employability to be a shared responsibility of employers and employees. In most literature on employability, the individual (i.e. the employee) is taken as main unit of analysis. This research focuses at the responsibility of the employer to meet the needs for employability of its employees. Current times of individualisation make this a challenging task. Individuals increasingly see themselves as "creators of their own, non-collective life", which results in a critical mass of separate individual interests (Schmid, 1998). So the organization should adjust its HR-policy to the different needs for employability of its employees, in order to attract and keep them.

The reference company of this research is Wageningen University and Research Centre (hereafter: Wageningen UR), which will be introduced in the next chapter. This chapter also presents the exact motive of Wageningen UR to initiate this research.

The thesis is structured as follows:

- Chapter 2: Describes the background of the research, providing more insight on Wageningen UR.
- Chapter 3: Presents the problem analysis and the relevance of this research.
- Chapter 4 & 5: Present the literature study which results in the conceptual model.
- Chapter 6: Presents the method used to conduct this research.
- Chapter 7: Presents the results of the empirical research.
- Chapter 8: Presents the conclusions and recommendations made to Wageningen UR.
- Chapter 9: Presents the discussion and recommendations made for further research.

2. Wageningen UR

This chapter introduces the research context by providing background information about Wageningen UR. Wageningen UR is a collaboration between *Wageningen University, Dienst Landbouwkundig Onderzoek Foundation* (hereafter: the DLO Foundation) and *Van Hall Larenstein, University for Applied Sciences*. The joint mission statement is “to explore the potential of nature to improve quality of life” (“About”, 2011). This mission statement is met by providing education and performing research in three interconnected core areas: ‘health, lifestyle and livelihood’, ‘food and food production’ and ‘living environment’ (“About”, 2011). This chapter gives more insight in Wageningen UR.

The organization.

The field of expertise of Wageningen UR includes five sciences groups in which education and research is performed: i) Agrotechnology & Food Sciences, ii) Animal Sciences, iii) Environmental Sciences, iv) Plant Sciences and v) Social Sciences. Eight specialized research institutes perform research in these fields of expertise and together form the DLO Foundation. Van Hall Larenstein operates independently within Wageningen UR, taking account of the framework set by the executive board. Four sections of Wageningen UR are not connected to the sciences groups, namely Wageningen International, IMARES, Wageningen Business School and RIKILT. Wageningen International is the contact point for all international activities of Wageningen UR. IMARES is focused on strategic and applied marine ecological research. Wageningen Business School organizes post-graduate programs and courses within the domain of Wageningen UR. RIKILT conducts legal research tasks in the field of safe and healthy food. The organisation chart of Wageningen UR is presented in Figure 1.

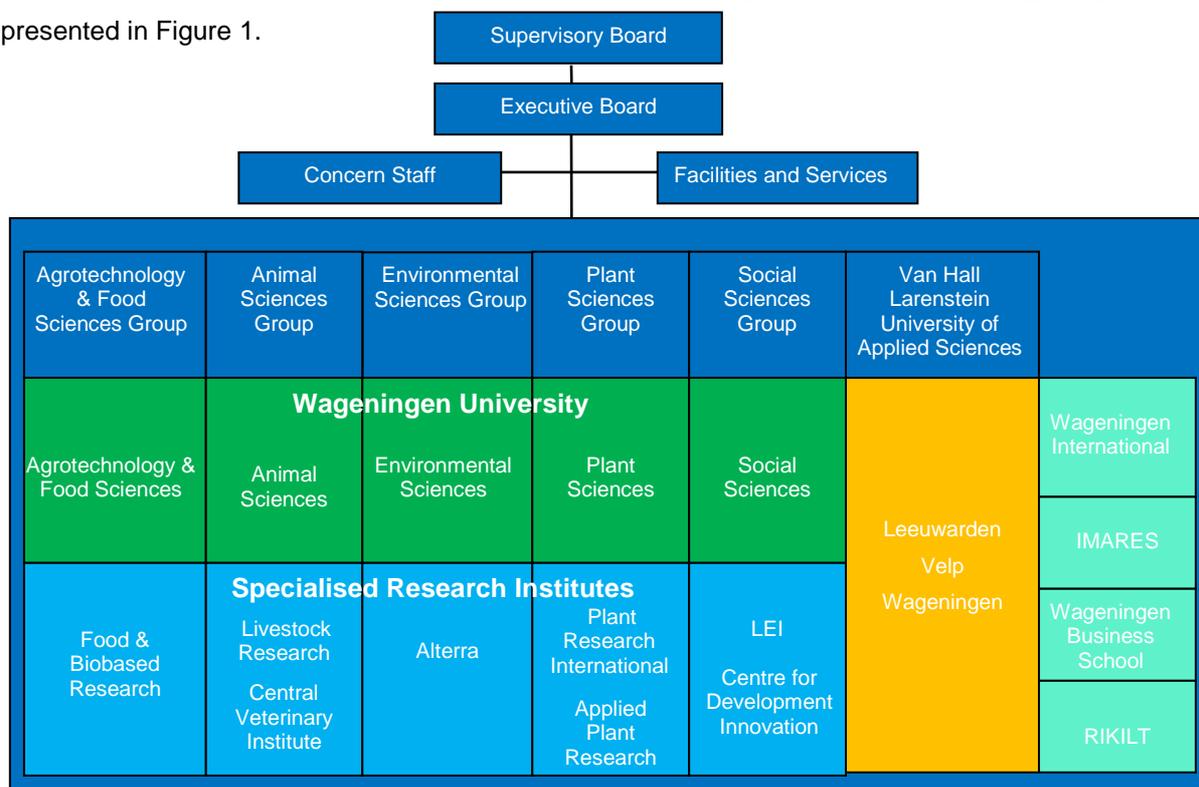


Figure 1 Organisation chart of Wageningen UR. (“About”, 2010)

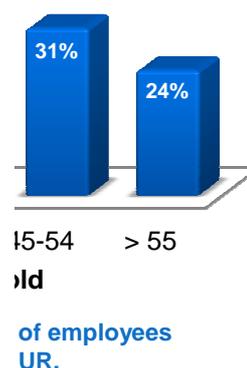
Facts and figures.

Financial figures over 2009 show a total turnover of €688 million, i.e. €286 million from Wageningen University, €351 million from the DLO Foundation and €51 million from Van Hall Larenstein. The total number of students, BSc and MSc, from over 100 countries is approximately 10.000 (year 2010). Wageningen University counts 3.559 BSc students and 2.955 MSc students. Van Hall Larenstein counts approximately 4.000 BSc students. The total staff of Wageningen UR comprises 6.500 employees (year 2010), including 1.500 PhD students. 59% of the employees is male and 41% is female. The percentage female employees has slightly increased with 0,3% compared with the year 2009.

74% of the employees is permanent employed and 26% of the employees is temporary employed. These figures have remained constant over the past few years. 61% of the employees is working full-time. 39% is working part-time, most of them are female. These figures have stayed the same over the past few years.

As shown in Figure 2, 23% of the employees is aged up to 35, 22% of the employees is aged 35-44 years old, 31% is aged 45-54 years old and 24% is aged 55 years and older. Compared to previous years, these figures show an 1,6% increase in employees aged 55 and older and a short decrease in employees aged up to 44 years old (i.e. 1,2% decrease in employees aged up to 35 years old and 0,4% decrease in employees aged 35-44 years old). (Wageningen UR, 2010a)

Age distribution



Employment conditions.

The employment conditions of Wageningen UR comprise the 'Collective Labour Agreement Dutch Universities' for employees of Wageningen University, the 'Collective Labour Agreement for Higher Professional Education' for employees of Van Hall Larenstein and the 'Collective Labour Agreement for DLO Foundation' for employees of DLO Foundation, the research centre. Employees of Wageningen University and the DLO Foundation can compile parts of the employment conditions themselves by using 'Optare', a program that enables employees to decide whether it is beneficial to be paid in money or in time for work additional to the standard. These decisions affect an employees' salary and/or leave entitlement (in number of hours). Optare is applicable to employees in permanent or temporary employment, working full-time or part-time for a fixed salary ("Optare," 2011).

Problem analysis for Wageningen UR.

Wageningen UR is committed to high quality teaching and research, taking into account changes in the various markets. This requires an organization that aims at flexibility and mobility and employees which, besides that, also aim at quality and professionalism (1). In addition, Wageningen UR wants to respond to changes in the workforce, which is becoming more diverse (2). Therefore two objectives are formulated for Wageningen UR:

- 1) Wageningen UR wants to reach employability for its employees (Wageningen UR, 2010b) and is in search of a way to support or contribute to the employability of its employees. The intention is to better align its HR policy with the needs for employability of its employees in order to reach modern labour relations with less restrictive conditions and more responsibility for employees.
- 2) The current HR-policy of Wageningen UR includes regulations specifically for senior staff. Due to the fact that the workforce is becoming more diverse, Wageningen UR is aiming at a HR-policy which includes specific regulations for all parts of the workforce, not just elderly.

These objectives lead to the next chapter, chapter 3, which elaborates on the problem definition of this research, the research objective and the research questions. The chapter continues with the scientific and societal relevance of this research, the research framework and concludes with a list of definitions of concepts.

3. Problem Analysis

The third chapter defines the problem of this research (§3.1) which leads to the research objective (§3.2) and research questions (§3.3). Thereafter the scientific and societal relevance of this research is presented in §3.4. The research framework is presented in §3.5. The chapter ends with an overview of defined concepts of this research in order to make clear what is understood by the concepts (§0).

3.1 Problem definition

Different social-demographic trends like individualisation, increasing unemployment and an ageing workforce cause changing conditions under which labour markets operate (Schmid, 1998; Price, 2007). First of all, individualisation has made people increasingly see themselves as “creators of their own, non-collective life” which leads to “a critical mass of separate individual interests” (Schmid, 1998, p.3). Demographic trends strengthen the individualisation. People live longer and therefore have increasingly long periods of life which can be organised to suit individual wishes (Schmid, 1998).

Secondly, a shift from the bounded career to the boundaryless career has occurred. As stated in the introduction, due to this shift it is no longer taken for granted for employees to be loyal to one employer. Employers should pay more attention to attract employees by offering, for example, an individualized HR-policy. The previous discussed individualisation emphasises the need for individualized HR-policies. After all, “employers who can identify and meet the different needs of their employees will be most successful in the current labour market” (Price, 2007, p.143).

The emerging questions are what the needs for employability of employees are and how employers can meet these different needs for employability. Therefore the focus of this research is two-sided.

First, this research will identify needs for employability of employees of a knowledge intensive organization, which can be fulfilled by the employer. By this is meant HR-instruments and management interventions offered by the employer that can contribute to becoming or staying employable in the current labour market. Insight in needs for employability is needed because of the ageing and diverse workforce, as stated above.

Special attention is paid to knowledge intensive organizations which are described as “companies where most work can be said to be of an intellectual nature and where well qualified employees form the major part of the workforce” (Alvesson, 2000). Knowledge intensive organizations have one substantial source of competitive advantage, the knowledge and brain-power of its employees (Kinnie *et al.*, 2006 cited by Boxall & Purcell, 2008). These so called ‘core workers’ are of strategic importance for an organization and “have distinctive needs concerned with multiple identities¹” (Boxall & Purcell, 2008, p.99). Employers should be able to identify and meet these distinctive needs, in order to attract and keep these core workers of strategic importance.

¹ ‘Multiple identities’ refers to whether the employee identifies with its employer, its major client, its team or its profession (Swart, 2007, cited by Boxall & Purcell, 2008).

Since the reference company, introduced in the previous chapter, suits the definition of a knowledge intensive organization the focus will be on needs for employability of employees of a knowledge intensive organization.

Secondly, this research will compare two variables for their ability to categorize employees according to their needs for employability. The employees need to be categorized into manageable groups to enable an organization to better align its HR-policy with the needs for employability. Collective labour agreements therewith become a framework for individual agreements between the employer and employee.

3.2 Research objective

The objective of this research is to gain insight in the concept of employability in knowledge intensive organizations, by making an assessment of the needs for employability of employees of a knowledge intensive organization, and to indicate a variable which is most suitable to categorize the employees according to their needs for employability. The outcome of this research is used to advice Wageningen UR in order to better align its HR-policy with the needs of its employees.

3.3 Research questions

The research objective leads to the formulation of the general research question of this research and related research questions.

The general research question of this research:

What are the needs for employability of employees of a knowledge intensive organization and what variable can be used best when categorizing employees according to these needs?

The research questions:

- 1) What is employability?
- 2) What is characteristic for employees of a knowledge intensive organization concerning employability?
- 3) What conditions for employability are valued most by employees of a knowledge intensive organization?
- 4) Which variables can be distinguished for making distinctive categories of employees according to their needs for employability?
- 5) Which variable is most suitable when categorizing employees according to their needs for employability?

3.4 Relevance of the research

Scientific relevance

This research gains insight in employability with respect to knowledge intensive organizations. A literature study and an empirical study are conducted to gain these insights. This research contributes significantly to the body of scientific knowledge since hardly any literature was found on the responsibility of employers with regard to the needs for employability of employees of knowledge intensive organizations. Literature does emphasize the employability of an employee to be a shared responsibility of the employer and employee. But the exact interpretation of what that responsibility encompasses is not yet discussed in literature.

Societal relevance

The needs for employability of employees of the knowledge intensive organization participating in this study are generally applicable to employees of other knowledge intensive organizations. This can be of use for other knowledge intensive organizations when formulating their HR-policy, for example to determine which HR-instruments or employability dimensions are of importance.

3.5 Research framework

The research is conducted in six months time. The research starts with a preliminary research on different topics. Gaining insight in the reference company is one part of the preliminary research. The results are presented in chapter 2 and used as input for the empirical research. The other part of the preliminary research includes a literature study. Literature is gathered using the databases *Scopus* and *Web of Knowledge*. Special attention is paid to review articles since these articles sum up the current state of the research on a specific topic. After a search, articles are selected with a relevant abstract or summary. When the selected articles are read and indeed contribute to the literature study, the references are checked for other relevant articles which are read if relevant. The theoretical framework of this research is presented in chapter 4 and 5.

The results of the literature are used as well as input for the empirical research. The empirical research contains an employee survey, further explained in chapter 6. The results are presented in chapter 7. All together these chapters lead to the conclusion, recommendations and discussion in chapter 8 and 9. A schematic overview of this research is presented in Figure 3 on the next page.

This chapter concludes with a short list of definitions of concepts relevant for this research. Thereafter the report continues with the literature study in chapter 4 and 5. These chapters discuss the concepts defined below in more detail.

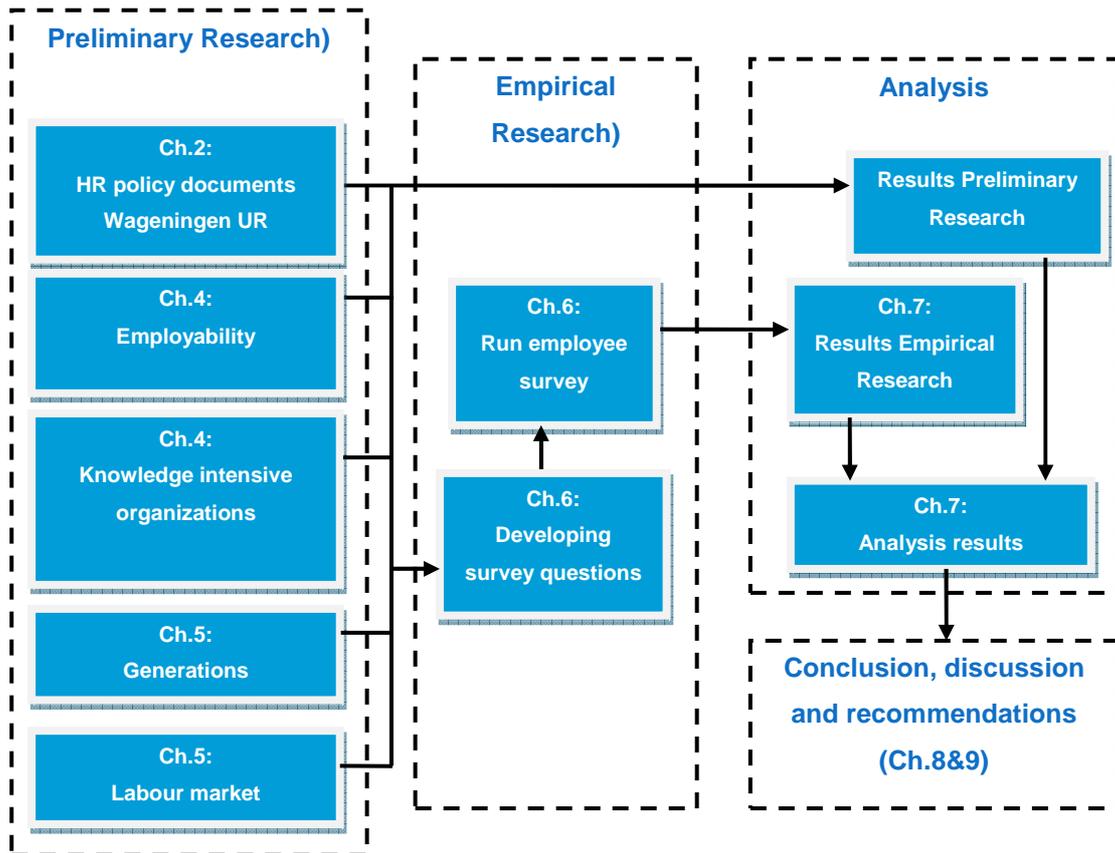


Figure 3 Research framework.

3.6 Definition of concepts

The concepts presented in this section are discussed in more detail in chapter 4 and chapter 5.

Employability: "...the capacity and willingness of workers to remain attractive for the labour market (supply factors), by reacting to and anticipating changes in tasks and work environment (demand factors), facilitated by the human resources development instruments available to them (institutions)" (De Grip et al., 2004, p. 216).

Knowledge intensive organization: "a company where most work can be said to be of an intellectual nature and where well qualified employees form the major part of the workforce" (Alvesson, 2000)

Generation: group of people based on birth who have experienced the same historical events within the same time period. (Strauss & Howe, 1991)

Baby Boom generation (1943-1960);

Generation X (1961-1981);

Millennials (1982-2003)

Stereotyping: beliefs and expectations about workers based on their membership in a particular group (Posthuma & Campion, 2009). The beliefs and expectations are "...based on hearsay, preconceived ideas or unfounded assumptions and incorrectly infer that all members of that group are the same" (Fiske & Taylor, 1991 cited by Posthuma & Campion, 2009).

Labour market transitions: five critical events over the life course, namely i) transitions between various working time regimes; ii) transitions between unemployment and employment; iii) transitions between education or training and employment; iv) transitions between private work activities and gainful employment; and v) transitions from employment to retirement. (Schmid, 1998)

This report continuous with chapter 4 and 5, which presents the literature study on the different topics of this research. The literature study answers research question 1, 2 and 4. The results of both parts of the literature study are used as input for the empirical research. After chapter 5, the report continuous with chapter 6 which presents the methods used to conduct this research.

4. Employability and knowledge intensive organizations

The literature study is divided in two chapters, each chapter addresses a different part of the research. The first part, chapter 4, presents a literature study to provide more insight in the concept 'employability', in general and in the context of a knowledge intensive organization in particular. As explained in §3.1, the focus of this research is on knowledge intensive organizations. The substantial source of competitive advantage for a knowledge intensive organization is a set of employees referred to as 'core workers'. This research will determine whether or not this group of employees has specific needs for employability.

Chapter 4 will answer the first two research questions:

- 1) *What is employability?*
- 2) *What is characteristic for employees of a knowledge intensive organization concerning employability?*

In addition to answering these research questions, the insights on employability in the context of a knowledge intensive organization are used in chapter 6 to set up the empirical research. Finally, the insights in employability in knowledge intensive organizations will contribute when formulating recommendations at the end of the research.

§4.1 defines the concept 'employability'. §4.2 presents different sets of employability dimensions. A final set of dimensions is chosen to operationalize the concept for the empirical part of this research. §4.3 discusses different HR systems in order to define which HR system best suits a knowledge intensive organization, in order to determine the influence of the characteristics of employees of a knowledge intensive organizations on the needs for employability. This chapter is concluded in §4.4 which presents a short summary.

4.1 Definition of employability

In the course of history many definitions have been attributed to the concept 'employability'. The concept is introduced in 1909 by Beveridge (1909). It started out as "dichotomic employability", referring to the availability of workers with a good health (De Grip et al., 2004). In recent decades, the definition has changed to an "initiative version of employability", stating employable individuals to be permanent entrepreneurs of their own boundaryless career (De Grip et al., 2004).

Three aspects have become central to the modern concept of employability. A literature review on employability by De Grip et al. (2004) concluded that "employability is about

- 1) employees who are *willing and able*
- 2) to be as *pro-active* as possible (considering the organizational and institutional constraints)
- 3) to remain attractive for the *labour market*" (p.216).

Different definitions of employability are presented in Table 1. Each definition has incorporated one or more common aspects of employability, as mentioned on the previous page, in a different way.

Table 1 Definitions of employability.

Employability is defined as:	Reference
"the capacity and willingness of workers to remain attractive for the labour market (supply factors), by reacting to and anticipating changes in tasks and work environment (demand factors), facilitated by the human resources development instruments available to them (institutions)"	De Grip et al., 2004, p.216
"a psycho-social construct that embodies individual characteristics that foster adaptive cognition, behavior, and affect and enhance the individual-work interface"	Fugate, Kinicki & Blake, 2004, p.15
"an individual's ability to gain initial employment, maintain employment, move between roles within the same organization, obtain new employment if required and (ideally) secure suitable and sufficiently fulfilling work"	McQuaid & Lindsay, 2005, p.200
"the continuous fulfilling, acquiring or creating of work through the optimal use of competences"	Van der Heijde & Van der Heijden, 2005, p.143

The definition of De Grip et al. refers to three aspects: i) the capacity and willingness of employees to remain attractive for the labour market; ii). changes in tasks and work environment; and iii) the human resources development instruments made available by institutions (De Grip et al., 2004). The responsibility of institutions and their human resource development instruments is an additional aspect of employability added by De Grip et al., that did not emerge from the literature review.

The definition by Fugate et al. (2004) emphasizes the individual employee, referring to a "major shift in responsibility for career management and development from employers to employees" (p.15). According to Fugate et al. (2004) employees should "acquire the knowledge, skills, abilities and other characteristics valued by current and prospective employers" (p.15-16). The definition mainly addresses the first two common aspects of employability, about being *willing and able* to be as *pro-active* as possible. The responsibility of the employer is not addressed by this definition of employability.

The definition of employability by McQuaid and Lindsay (2005) also emphasizes the individual, referring to the first two common aspects of employability.

Van der Heijde and Van der Heijden (2005) approaches employability from the resource-based view (RBV). 'Competences' are seen as possible resources that enables firms to reach (substantial) competitiveness (p.143). The definition of employability by Van der Heijde and Van der Heijden (2005) distinguishes itself from the other definitions because the definition refers to the optimal use of competences instead of the development of these competences or skills.

The objective of this research is to make an assessment of the needs for employability of employees which can be fulfilled by the employer. The objective of this research therewith addresses the responsibility of the employer (see §3.1). Of the four definitions of employability presented in Table 1,

the definition by De Grip et al. (2004) and Van der Heijde and Van der Heijden (2005) refer to the responsibility or role of the employer with regard to the employability of employees.

De Grip et al. (2004) states employability to be a "shared responsibility of individual workers and of the organizations that employ them" (p.216), where the employer has a facilitating role. The definition by Van der Heijde and Van der Heijden (2005) refers to the use of competences of employees by employers. A reference to the actual responsibility or facilitating role is missing.

The definition of De Grip et al. (2004) is most in line with the objective of this research, therefore this definition of employability is used in this research.

"Employability is the capacity and willingness of workers to remain attractive for the labour market (supply factors), by reacting to and anticipating changes in tasks and work environment (demand factors), facilitated by the human resources development instruments available to them (institutions)" (De Grip et al., 2004, p.216).

The next section provides more insight in the concept by discussing different sets of employability dimensions.

4.2 Dimensions of employability

Many researchers ascribe different dimensions of the concept of 'employability' in order to make the concept more tangible. The dimensions represent competences, skills and/or personal characteristics which are required to be or become employable. This section discusses different sets of employability dimensions (ranging from two to five dimensions) as by De Grip et al., 2004; Fugate et al., 2004; and Van der Heijde & Van der Heijden, 2006. These sets of employability are included in this research since they are frequently used in literature on employability. This section concludes with the choice of one set of employability dimensions which will be used further along this research.

Willingness and capacity (De Grip et al., 2004)

De Grip et al. (2004) defines employability dimensions in order to determine the current workforce employability by sector of industry. The aim is to strike a balance between individual and collective responsibility.

Two dimensions of individual employability are used, *willingness* and *capacity*. Willingness refers to someone's desire to engage in activities that keeps him attractive for the labour market. Someone's willingness is not the only thing that counts, a person should also have the power to develop his position on the labour market (i.e. someone's capacity). Together with three indicators (*mobility*, *training* and *functional flexibility*), based on employability literature, De Grip et al. (2004) define six indicators:

- i) *'the willingness to be mobile'* which is about changing jobs and locations, internally and externally. Employees staying on the same job in the same location for a long time, can damage their value on the labour market by concentration of experience.

- ii) *'the capacity to be mobile'* refers to the extent to which employees actually change jobs and locations. Experience gained in previous jobs largely determines this indicator. For example, someone's capacity to be mobile can be constrained by the highly specialized skills he has developed in previous jobs since these skills are only valuable in a limited number of places.
- iii) *'the willingness to participate in training'* indicates the willingness of employees to invest time, money and energy in the development of their own human capital. The willingness to invest depends on the expected return on investment, which can be an increase in earnings and, more important, an improved labour market position.
- iv) *'the capacity to participate in training'* is based on three types of knowledge which employees can or should control, "basic knowledge (determines employees' subsequent ability to learn); meta-cognitive knowledge (facilitates the process of learning); and knowledge and opinions about one's own learning capacities (may influence the decision to participate in learning)" (Bolhuis, 1995 cited by De Grip et al., 2004, p.219).
- v) *'the willingness to be functionally flexible'* points to the flexibility in a job and refers to performing tasks or duties outside the job description and to flexibility concerning hours of work.
- vi) *'the capacity to be functionally flexible'* is about the capacity to perform tasks outside the job description and results largely from actual functional flexibility in the past. Experience plays a central role here.

As stated above, De Grip et al. (2004) aims at a balanced responsibility of employee and employer with regard to employability. The contribution of employees is described as "personal conditions of effectuation" (p.221), referring to the willingness and preferences of individual employees. An employer can invest in the employability of its employees through "contextual conditions of effectuation" (p.221), referring to the general situation on the labour market, the possibilities for career counselling and the provision of training courses.

Career identity, personal adaptability and social and human capital (Fugate et al., 2004)

Fugate et al. (2004) define three employability dimensions from a person-centered perspective, *career identity*, *personal adaptability* and *social and human capital*. The conceptual commonalities of the three dimensions together give rise and value to the employability concept (Fugate et al., 2004) (see Figure 4).

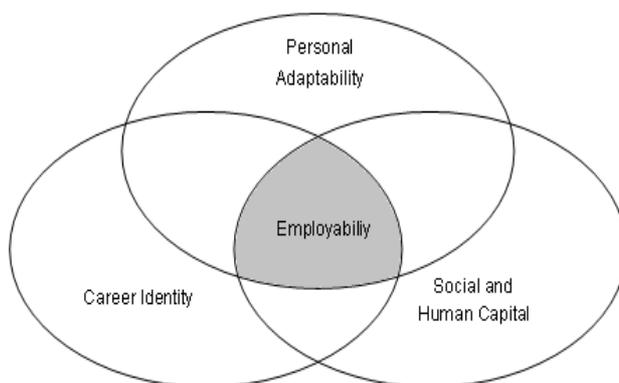


Figure 4 Heuristic model of employability (Fugate et al., 2004, p.19).

i) '*career identity*', refers to how people define themselves in a particular work context. It means "a more or less coherent representation of often diverse and diffuse career experiences and aspirations. This may include goals, hopes, and fears; personality traits; values, beliefs, and norms; interaction styles; time horizons; and so on" (Fugate et al., 2004, p.19-20).

Someone's career identity is reflected in an individual's identity style. For example someone with an "information-oriented identity style" (i.e. a person that proactively seeks and uses self-relevant information) may have a greater ability to identify and realize career opportunities. (More research on identity styles: Berzonsky's (1990, 1992); Berzonsky & Adams (1999).

ii) '*personal adaptability*' refers to be willing and able to change personal factors in order to meet the demands of continuously changing work domains. Personal adaptability contributes to organizational performance and personal career success.

Fugate et al. (2004) define five qualities an individual should acquire in order to be flexible:

i) optimism, ii) propensity to learn, iii) openness; iv) internal locus of control; and v) generalized self-efficacy.

iii) '*social and human capital*', both incorporated into an individual's career identity. "Social capital is the goodwill inherent in social networks" and greatly influences "one's ability to identify and realize career opportunities" (Fugate et al., 2004, p.23). Human capital refers to "factors that influence a person's career advancement variables" (Fugate et al., 2004, p.24), like age and education, work experience and training, job performance, organization tenure, etcetera.

Competences (Van der Heijde and Van der Heijden, 2006)

Van der Heijde and Van der Heijden (2006) state employability to be a representation of the combination of specific and more general competences related to job-related matters and broader career development, "taking into account the interests of both employees and employers" (p.454). The employability dimensions defined by Van der Heijde and Van der Heijden (2006) are formulated as competences. They are listed and explained below.

i) '*occupational expertise*' includes a high degree of knowledge and skills related to a particular professional domain and social recognition by important key figures.

ii) '*personal flexibility*', "adapting easily to all kinds of changes in the internal and external labour market". Flexible employees know better how to take advantage of changes.

iii) '*balance*' implies "compromising between opposing employers' interests and own opposing work, career and private interests". There should be "an honest exchange relationship where both parties balance their investments and profits".

iv) '*corporate sense*' "builds on social capital, social skills, and emotional intelligence. It is about sharing responsibilities, knowledge, experiences, feelings, credits, failures, goals, and the like".

v) '*anticipation and optimization*', "preparing for future work changes in a personal and creative manner in order to strive for the best possible job and career outcomes". Employees should create the future themselves instead of performing fixed tasks.

(Van der Heijde & Van der Heijden, 2006, p.454-456)

The definition of employability by Van der Heijde and Van der Heijden (2005) does not address the responsibility of the employer with regard to the employability of employees. The employability dimensions as defined by Van der Heijde and Van der Heijden (2006) can be related to the responsibility of the employer. Since competences "can [...] be developed [...] by investing in training, education and experiential programs" (Price, 2007, p.610),

The three different sets of employability dimensions illustrate slightly different approaches to the employability concept. De Grip et al. (2004) defines two dimensions of individual employability completed with three indicators, that measures the employability of a workforce. The employability dimensions as by Fugate et al. (2004) are person-centered but do resemble to some extent the employability dimensions as defined by De Grip et al. (2004).

The employability dimensions as by Van der Heijde and Van der Heijden (2006) are closely related to competences. As stated before, investment in training, education and experiential programs can develop competences of employees (Price, 2007). In other words, the employer can also invest in the development of competences.

The insight in different sets of employability dimensions is needed to identify a set of employability dimensions which can be used in the empirical part of this research. As stated before, this research focuses on needs for employability which can be fulfilled by the employer, using HR-instruments and management interventions. A set of employability dimensions is used to indicate which needs for employability employees can have (see chapter 6). The employability dimensions defined by De Grip et al. (2004) and Van der Heijde and Van der Heijden (2006) both refer to the responsibility of the employer with regard to the employability of employees.

De Grip et al. (2004) state an employer can invest in the employability of its employees by providing employees with the opportunity for career counselling and the provision of training courses. The influence of employers via 'contextual conditions of effectuation' are considered to be strictly contextual.

The employability dimensions defined by Van der Heijde and Van der Heijde (2006) represent five competences in which employers can invest by offering HR-instruments and management interventions to their employees.

Since the employability dimensions by Van der Heijde and Van der Heijden (2006) most evidently indicate the responsibility of the employer with regard to the employability of employees and the influence of employers via contextual conditions of effectuation, as described by De Grip et al., is considered to be strictly contextual, the employability dimensions used in this research to operationalize 'employability' are the employability dimensions as defined by Van der Heijde and Van der Heijden (2006).

This section gained insight in different sets of employability dimensions. Chapter 4 continues with §4.3 with discusses employability in the context of a knowledge intensive organization.

4.3 Employees of knowledge intensive organizations

As stated in the problem definition, a knowledge intensive organization is described as “a company where most work can be said to be of an intellectual nature and where well qualified employees form the major part of the workforce” (Alvesson, 2000). Knowledge intensive organizations have one substantial source of competitive advantage, the knowledge and brain-power of its employees (Kinnie *et al.*, 2006 cited by Boxall & Purcell, 2008). These “employees often have distinctive needs concerned with multiple identities” (Boxall & Purcell, 2008, p.99).

Employees of a knowledge intensive organization are expected to have ‘core knowledge’ and are therefore ‘core workers’ of strategic importance for an organization. Employees of knowledge intensive organizations are highly educated. The ‘core workers’ of knowledge intensive organizations are referred to as ‘knowledge workers’ throughout this research.

Since the aim of this research is to enable an organization to better align its HR-policy with the needs for employability of employees, the focus of this section is on the characteristics of employees of knowledge intensive organizations.

Different sets of human resources

An organization comprises different groups of employees, referred to as different sets of human resources. Lepak & Snell (1999, 2007, cited by Boxall & Purcell, 2008) state that different sets of human resources should be approached with different HR systems. HR systems organise the work and manage the employment of a workforce group (Boxall & Purcell, 2008). They have developed an ‘HR architectural perspective’ which includes four HR systems that fit different sets of human resources (see Figure 5).

This framework consists of two dimensions: “the extent to which the particular form of human capital represents a valuable resource for the firm (strategic value) and the extent to which it is unique or firm specific (uniqueness)” (Boxall & Purcell, 2008, p.103). The framework distinguishes between ‘externalised’ partners or workers (collaborations and contracts) and ‘internalised’ employees. Another distinction is made between long-term relationships between the organization and the employee (referred to as ‘relational’) and short-term relationships between the organization and the employee (referred to as ‘transactional’).

The four HR systems are: 1. ‘commitment-based HR’; 2. ‘productivity-based HR’; 3. ‘compliance-based HR’; and 4. ‘collaborative HR’. The first quadrant includes ‘knowledge employees’ whose skills are unique and have a high strategic value. They need a commitment-based HR system, the organization should invest in the empowerment, development and motivation of those employees.

The second set of employees includes ‘job-based employees’ (second quadrant), like accounting staff. Their skills have a high strategic value but low uniqueness. Job-based employees need a productivity-based HR system.

Work which requires ‘contract workers’ (third quadrant) with generic skills of low strategic value is often contracted out. These workers have no core knowledge and need a compliance-based HR system.

The last quadrant includes 'alliance partners', like a firm's attorneys. They do not directly create value but are unique in some way to the organization. A firm collaborates with these workers, therefore they need a collaborative HR system. (Boxall & Purcell, 2008) An overview of the sets of human resources and its HR systems is given in Figure 5.

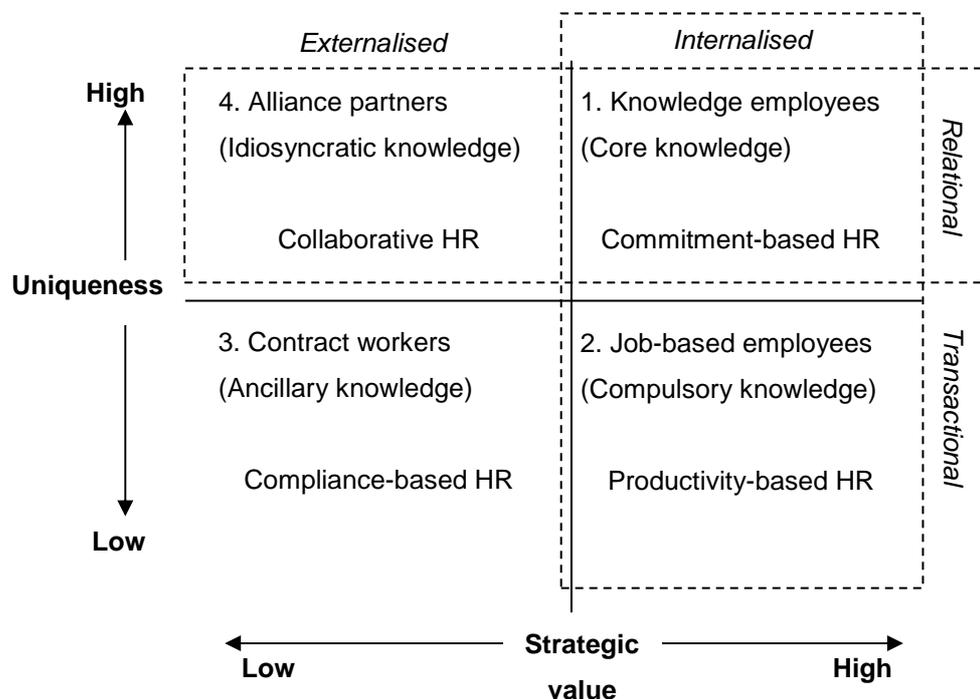


Figure 5 "Lepak and Snell's 'HR architectural perspective' "
(Boxall & Purcell, 2008, p.102).

Knowledge workers

The previous part defined different sets of human resources and different HR systems. This research focuses on the core workers of a knowledge intensive organization, which are defined as knowledge workers. Therefore more insight is gained in 'commitment-based' HR systems. This type of HR system is relational, since it focuses on creating long term relationships between the organization and its employees.

A knowledge intensive organization should implement an HR system which builds the loyalty of core workers of the organization and, thus, their exclusiveness to the organization (Boxall & Purcell, 2008, p.103). This can be achieved by investing in the empowerment, development and motivation of those who hold critical knowledge (Boxall & Purcell, 2008).

Creating empowerment for employees means they are in control of their own destiny. Empowerment enables an employee "to take decisions, think, behave and control work in one's own way" (Price, 2007, p.612). Developing those who hold critical knowledge, means investing in training and education related to one's discipline and social and emotional skills. An organization can invest in motivation by adopting the 'motivational' strategies listed by Parker and Wall (1998, cited by Boxall & Purcell, 2008, p.118):

1. "Arrange work in a way that allows the individual employee to influence his or her own working situation, work methods, and pace. Devise methods to eliminate or minimise pacing.

2. Where possible, combine interdependent tasks into a job.
3. Aim to group tasks into a meaningful job that allows for an overview and understanding of the work process as a whole. Employees should be able to perceive the end product or service as contributing to some part of the organisation's objectives.
4. Provide a sufficient variety of tasks within the job, and include tasks that offer some degree of employee responsibility and make use of the skills and knowledge valued by the individual.
5. Arrange work in a way that makes it possible for the individual employee to satisfy time claims from roles and obligations outside work (e.g. family commitments).
6. Provide opportunities for an employee to achieve outcomes that he or she perceives as desirable (e.g. personal advancement in the form of increased salary, scope for development of expertise, improved status within a work group, and a more challenging job).
7. Ensure that employees get feedback on their performance, ideally from the task as well as from the supervisor. Provide internal and external customer feedback directly to employees.
8. Provide employees with the information they need to make decisions".

This section gained more insight in the characteristics of employees in a knowledge intensive organization by elaborating on which HR system best suits knowledge workers. Empowerment, development and motivation are key words in this. This leads to the first hypothesis:

Knowledge workers of a knowledge intensive organization have different needs for employability compared with the staff of a knowledge intensive organization. (H1)

Whereas 'the staff of a knowledge intensive organization' refers to the supporting staff in this research. The insights are used in the empirical part of this research to define which needs for employability are preferred by employees of a knowledge intensive organization. Chapter 4 concludes with a summary.

4.4 Summary

Chapter 4 has answered the first two research questions. These research questions are answered consecutively.

Research question 1):

What is employability?

In this research employability is defined as "the capacity and willingness of workers to remain attractive for the labour market (supply factors), by reacting to and anticipating changes in tasks and work environment (demand factors), facilitated by the human resources development instruments available to them (institutions)" (De Grip et al., 2004, p.216). Five employability dimensions are assigned to the concept: i) occupational expertise; ii) personal flexibility; iii) balance; iv) corporate sense; and v) anticipation and optimization. HR-instruments and management interventions are linked to employability dimensions in order to determine the needs for employability dimensions for employees (see chapter 6).

Research question 2):

What is characteristic for employees of a knowledge intensive organization concerning employability?

In this research knowledge intensive organizations are defined as organizations "where most work can be said to be of an intellectual nature and where well qualified employees form the major part of the workforce" (Alvesson, 2000). The strategic core workers of a knowledge intensive organization are defined as 'knowledge workers'. The HR system appropriated for knowledge workers should be commitment-based and focussing on empowerment, development and motivation of those employees who hold critical knowledge. It is expected that the characteristics of employees of a knowledge intensive organization influence the needs for employability (see **H1**).

The first part of this literature study, chapter 4, has elaborated on the employability concept, in general and in context of a knowledge intensive organization. The insights presented in this chapter are used in chapter 6 which presents the empirical part of this research. This report continues with the second part of the literature study, addressing different variables which can be used to make distinctive groups of employees according to their needs for employability.

5. Variables to categorize employees

Chapter 4 has provided insight in the employability concept and the influence of characteristics of employees of a knowledge intensive organization on employability. The insights are used in the empirical research to make an assessment of the needs for employability of employees of a knowledge intensive organization.

This chapter continues with discussing two variables which can be used to make distinctive groups of employees, according to their needs for employability. As stated in the problem definition (§3.1) it is required to categorize employees in order to align the HR-policy of an organization with the needs of its employees. Social-demographic trends like individualisation and diversification require organizations to change 'one size, fits all' HR-policies into more individualized HR-policies. After all, being able as an organization to identify and meet the different needs of employees makes the organization successful. Unfortunately it is unrealistic to strive for a distinctive HR-policy for every individual employee. Therefore a variable needs to be identified which can make distinctive categories of employees according to their needs for employability.

Chapter 5 is used to answer the fourth research question:

- 4) *Which variables can be distinguished for making distinctive categories of employees according to their needs for employability?*

Two variables are included in this research, a variable related to age (i.e. the generation an employee belongs to) and a variable not related to age (i.e. the labour market transition an employee experiences). The argumentation for including those two variables is presented below.

This chapter continues with two sections, §5.1 about generations and §5.2 about labour market transitions. Both sections will answer the fourth research question from the perspective of the variable that is discussed. Chapter 5 concludes with §5.4 which presents the hypotheses that have emerged during the literature study. The insights of chapter 5 are also used in chapter 6, where the empirical part of this research is introduced and explained.

5.1 Generations

This section discusses the first variable, generations. Generations are defined by Ryder in 1965 as "a group of individuals similar in age who have experienced the same historical events within the same time period". This definition of generations is often used in literature and acts as underpinning for defining different generations. Amongst others, Strauss and Howe (1991) define generations and its theoretical descriptors. Three generations are included in this research because they are currently active on the labour market. These generations are:

- i) the Baby Boom generation (Boomers, 1943-1960);
- ii) Generation X (GenX'ers, 1961-1981); and

iii) Millennials (1982-2003).

The generations are shortly introduced using the theoretical descriptors defined by Strauss and Howe (1991). Boomers are described as critical thinkers, socially mature, self-confident, religious and failing to meet expectations. GenX is described as distrusting, mature for their age, independent and straightforward. The youngest generation in this research, Millennials, is described as optimists, team players, rule-followers, confident, achieving and pressured.

With respect to generations at work, empirical evidence shows generations to be more similar at work than different (Kowske et al., 2010). Finding meaning in work or having pleasant interactions with others is equally important for every generation (Twenge, 2010).

Nevertheless, some differences are empirically proven. Twenge listed these findings in a review article (2010). Empirical evidence shows Boomers to be work-centric and GenX and Millennials to be family-centric. Boomers also show a higher interest in unpaid overtime. Millennials put value on leisure, by valuing jobs with more vacation time and jobs that allows one to work slowly. GenX wants freedom from supervision more than Millennials or Boomers do so.

Extrinsic values, like status, respect and money, are valued differently by the generations. GenX and Millennials put more value on extrinsic values compared to Boomers. Of these extrinsic values, respect and money is valued by GenX'ers and status by Millennials.

Social values are most important to Boomers and the least important to Millennials. Millennials report the highest on job satisfaction. Boomers are most willing to remain with one employer, whereas GenX is the least willing to remain with one employer. Meaning GenX shows the highest intention to leave.

Categorizing employees according to the generation they belong to is often used in organizations because it is straightforward to determine to which generation an employee belongs and because organizations expect differences in needs between generations. Nevertheless, two remarks can be made with respect to this variable:

- i) An age-related variable can lead to age-related stereotypes which can affect the employer's perception of an employee's employability negatively, especially with regard to employees aged 50 and older (Van der Heijden, 2002). To underpin this remark: Posthuma and Campion (2009) listed six age-related stereotypes according to 117 articles and books, all applicable to older employees. Some examples: the 'resistance to change stereotype', stating older workers to be less adaptable, less flexible and more resistance to changes. Or the 'poor performance stereotype', stating older employees to have a lower ability, to be less motivated and less productive than younger workers. Even though research refutes the stereotypes, they appear to be very persistent. Older workers even hold the same stereotypes about older workers and are likely to employ them in decision making.
- ii) There is hardly any empirical evidence for generational differences at work (Kowske, Rasch and Wiley, 2010). Differences at work within each generation exceed the differences at work between generations (Twenge, 2010). So using generations as variable to better align the HR-policy with needs for employability of different generations, excludes variation in needs for employability of employees that belong to the same generation.

Due to these remarks, a second variable is included in this research which is not related to age. This minimizes the effect of age-related stereotypes when categorizing employees. Besides, another variable might detect greater differences between employees at work which can contribute to making distinctive categories of employees.

Summary

A generation is defined as "a group of individuals similar in age who have experienced the same historical events within the same time period" (Ryder, 1965). There is little empirical evidence to underpin differences between generations at work. In fact, Posthuma and Campion (2009) state there are much greater differences within generations than between generations. But, the empirical part of this research will show whether or not the generation an employee belongs to can be a good variable to make distinctive categories of employees according to their needs for employability.

In order to reduce age-related stereotyping a second variable is included in this research. This variable might as well be more suitable to categorize employees according to their needs for employability.

5.2 Labour market transitions

This section discusses the second variable included in this research, labour market transitions. Labour market transitions are derived from the transitional labour market, which is defined by Schmid (1998) "as institutionalized arrangements which allow or support the change of the employment status or the combination of labour market work with other socially (and to some extent even economically) useful activities".

The need for transitional labour markets is created by a number of social-demographic trends, like differentiation, individualisation and globalisation. Employment systems are challenged by changes in family and demographic structures, like increasing female participation in the labour market, increasing numbers of single parents, rising divorce rates and declining birth rates. These demographic trends are accompanied by an individualized society in which people increasingly see themselves as "creators of their own, non-collective life" (Schmid, 1998, p.3).

The social-demographic trends require a change in the employment system which allow transitory states between paid work and gainful non-market activities. Institutionalized arrangements can support employees while experiencing labour market transitions and preserve and enhance the employability of the employees (Schmid, 1998).

As the social-demographic trends take place at the macro-economic level, the theory on transitional labour markets is originally aimed at this macro-economic perspective. Researchers like De Gier and Van den Berg often relate the transitional labour market theory to 'social risk management' (De Gier & Van den Berg (2005); Schmid (2004, 2007)). Social risks are for example increased "risk of social exclusion related to failures in education and training", increased risks related to temporary jobs or increased risk of long term unemployment (De Gier & Van den Berg, 2005, p.10). Managing these risks raises the question "under what conditions individuals could take over more responsibility". This

question refers in turn to the employability of the individual employee, which is a core element of transitional labour markets (De Gier & Van der Berg, 2005, p.10).

However, there is no interpretation found of labour market transitions on the individual level. In this research the translation is made from labour market transitions on the macro-economic level to the individual level. Schmid is used as main reference since he is considered to be the key publisher on 'labour market transitions' (De Gier & Van der Berg, 2005). There are five types of transitional employment, hereafter called labour market transitions, discussed in the next part.

Different labour market transitions

This part explains each labour market transition on macro-economic level (using Schmid, 1998) and individual level. The labour market transitions are used as variable to indicate needs for employability of employees.

The transitional labour market includes five types of transitional employment: i) transitions between different working time regimes; ii) transitions between unemployment and employment; iii) transitions between training or education and employment; iv) transitions between productive (but unpaid) private work and (paid) market work; and v) transitions from employment to retirement.

I. *Transitions between different working time regimes;*

Macro-economic level: This type of transitional arrangement refers to transitions between short-time work or part-time work and full-time employment, or transitions between dependent work and self-employment or a combination of both. Overtime work, bad weather, cyclical shortages of demand etcetera are cause of the first transition.

Individual level: The transition between different working time regimes is interpreted as a transition due to different, variable working times imposed by the employer.

II. *Transitions between unemployment and employment;*

Macro-economic level: The second type of transitional arrangement refers to the transition between unemployment and employment. Various forms of providing a bridge between unemployment and employment can be created, like wage subsidies for employers to induce the hiring of disadvantaged.

Individual level: The transition between unemployment and employment includes employees that were recently unemployed and just started working at an organization and employees with contracts expiring within the six months time.

III. *Transitions between education or training and employment;*

Macro-economic level: The third transition refers to all kinds of transitions between education or training and employment. Such as the transition from higher education to employment, or the transition between (re)training and employment.

Individual level: The focus on the individual level is on the latter transition between (re)training and employment.

IV. *Transitions between productive (but unpaid) private work and (paid) market work*

Macro-economic level: The fourth transition refers to the increase in critical events in the life course. Such as family formation, divorces and elderly becoming dependent. These critical events induce a transition between paid and unpaid, private work.

Individual level: The implication of this transition is the same at the macro-economic level and the individual level.

V. *Transitions from employment to retirement.*

Macro-economic level: The fifth and last transition, from employment to retirement, refers to the ageing workforce and different 'types' of retirement, like flexible retirement and gradual retirement. Next to the option to stop fully at the mandatory retirement age, the option to remain active should be open. Flexible or gradual retirement allows the organization to benefit as long as possible from the knowledge and experiences of older employees.

Individual level: The implication of this transition is the same at the macro-economic level and the individual level.

This part discussed the different labour market transitions as introduced by Schmid (1998). Labour market transitions are included as a variable in this research for several reasons. First, because there is a clear relation with the employability of employees. At the same time the responsibility of the employer is emphasized, as Schmid (1998) states institutionalized arrangements can support employees. A third argument is the expectation that age-related stereotypes are minimized when categorizing employees by the labour market transition they experience. This leads to the second hypothesis of this research:

Labour market transitions are more suitable than generations to categorize employees according to their needs for employability. (H2)

Summary

Labour market transitions are defined "as institutionalized arrangements which allow or support the change of the employment status or the combination of labour market work with other socially (and to some extent even economically) useful activities" (Schmid, 1998). There are five labour market transitions, which relate to the employment status of an employee. These transitions are: i) transitions between different working time regimes; ii) transitions between unemployment and employment; iii) transitions between training or education and employment; iv) transitions between productive (but unpaid) private work and (paid) market work; and v) transitions from employment to retirement. Since the labour market transition an employee experiences influences its employment status, it is expected

that these transitions are of influence on the needs for employability of employees. The empirical part of this research will show whether or not labour market transitions can be a good variable to make distinctive categories of employees according to their needs for employability.

This chapter continuous with §5.3 which answers the fourth research question with help of the summaries of §5.1 and §5.2.

5.3 Summary

Chapter 5 has answered the fourth research question.

Research question 4):

Which variables can be distinguished for making distinctive categories of employees according to their needs for employability?

This research includes two variables. One variable related to age and, inter alia because of age-related stereotyping, one variable not related to age. The two variables are i) the generation an employee belongs to and ii) the labour market transitions an employee can experience.

- i) In this research a generation is defined as “a group of individuals similar in age who have experienced the same historical events within the same time period” (Ryder, 1965). There is little empirical evidence to underpin differences between generations at work. In fact, Posthuma and Campion (2009) state there are much greater differences within generations than between generations.
- ii) Labour market transition are defined “as institutionalized arrangements which allow or support the change of the employment status or the combination of labour market work with other socially (and to some extent even economically) useful activities” (Schmid, 1998). Since the transitions influence the employment status of an employee, it is expected that it also affects the need for employability of an employee.

The chapter ends with §5.4 presenting hypotheses which are formulated throughout the first three chapters.

5.4 Hypotheses

Chapter 4 and 5 gained more insight in the theory used in this research. Throughout the chapters, research question 1, 2 and 4 are answered. The theory is also used as input for the empirical part of this research, presented in chapter 6.

The hypotheses that arose from the literature study are presented below and schematically represented. The hypotheses are tested with the results from the empirical research.

The first hypothesis will show whether or not knowledge workers and members of the staff of a knowledge intensive organization have different needs for employability. (see Figure 6)

Knowledge workers of a knowledge intensive organization have different needs for employability compared with the staff of a knowledge intensive organization. (H1)

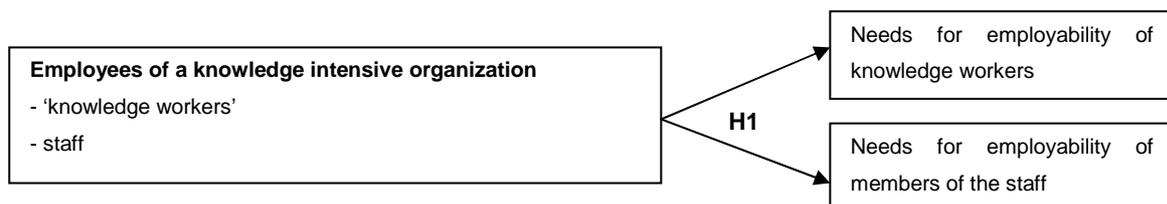


Figure 6 Schematic representation of hypothesis 1.

The empirical research will show if generations and labour market transitions can make distinctive categories of employees according to their needs for employability. The second hypothesis will show which variable is most suitable for categorizing employees according to their needs for employability. It is expected that when categorizing employees according to the labour market transition they experiences, the needs for employability of employees are better fulfilled. (see Figure 7)

Labour market transitions are more suitable than generations to categorize employees according to their needs for employability. (H2)

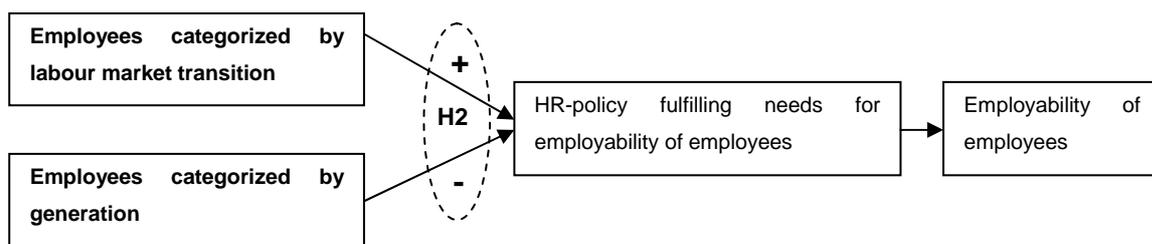


Figure 7 Schematic representation of hypothesis 2.

The report continues with chapter 6, which presents the methods used to conduct this research. The results of the empirical research are presented in chapter 7. Chapter 8 presents the conclusions and recommendations to Wageningen UR. The report ends with chapter 9 presenting the discussion and recommendations for further research.

6. Research Design

Chapter 6 describes the method used to conduct the empirical research. The empirical research is designed for two reasons. First to make an assessment of the needs for employability of employees of knowledge intensive organizations. Secondly to assess the suitability of two variables when categorizing employees according to their needs for employability and to decide which variable is most suitable.

The previous chapters, chapter 4 and 5, have presented the literature study and thereby gained insight in employability, employees of knowledge intensive organizations and the variables to categorize employees included in this research (i.e. generations and labour market transitions). These insights are used as input for the empirical research.

The general research question of this research:

What are the needs for employability of employees of a knowledge intensive organization and what variable is best when categorizing employees according to these needs?

The research questions:

- 1) What is employability and which dimensions of employability are defined in literature?
- 2) What is characteristic for a knowledge intensive organization concerning employability?
- 3) *What conditions for employability are valued most by employees of a knowledge intensive organization?*
- 4) Which variables can be distinguished for making distinctive categories of employees according to their needs for employability?
- 5) *Which variable is most suitable when categorizing employees according to their needs for employability?*

The empirical research is used to answer research question 3 and 5. A survey of employees of a knowledge intensive organization, i.e. Wageningen UR, is used to collect data from a sample of a large population (Baarda & De Goede, 2006). This chapter presents the population and sample size (§6.1), the instrumentation used (§6.2), the analysis that will be performed (§6.4) and the validity and reliability of the research (§6.3). The report continues with chapter 7 which presents the results of the empirical research.

6.1 Population and sampling

The population in this research counts 5834 people, the workforce of Wageningen UR. A random sample is drawn from the workforce of Wageningen UR to get a good representation of the population. In order to define the amount of response required to get reliable results, a 99% confidence interval is

used. This means the results of the research are 19 out of 20 times the same. The required response is 596 completed surveys. Assuming a response rate of 30-35% completed questionnaires returned, a sample size between 1702 and 1987 employees is sufficient.

The sample used in this research includes 1933 employees, which is within the confidence interval. The sample is controlled for 1) the divisions of Wageningen UR (Wageningen University, Van Hall Larenstein and the DLO Foundation) and 2) job categories, in order to assure each division and job category is proportionally represented in the results of the empirical research. The job categories are:

- i) academic staff, PhD-students and staff (Wageningen University)
- ii) teachers and staff (Van Hall Larenstein)
- iii) researchers and staff (the DLO Foundation)

The academic staff, teachers and researchers are defined as the 'knowledge workers' of Wageningen UR (see §4.3 and H1). The employees should be appointed in a permanent or temporary position and work full-time or part-time for a fixed salary. Employees with a foreign nationality are excluded from the survey to minimize the influence of other cultures. Culture has a significant effect on how people think and the norms and values they possess (Price, 2007). Employees with different nationalities might have different needs for employability. Therefore only employees with a Dutch nationality are included in the survey.

6.2 Instrumentation

The results of the preliminary research about Wageningen UR, employability, employees of knowledge intensive organizations, generations and labour market transitions (chapter 2, 4 and 5), are used to develop the questionnaire. The questionnaire includes closed questions and proposes statements with a 5-point Likert scale. The choice is made to use a 5-points scale including an odd number response categories to cover the distance between the two extremes (e.a. one and five) ('t Hart et al., 1998). Theory by Baarda, De Goede & Kalmijn (2007) on developing a questionnaire, is taken into account when developing the questionnaire.

An email sent together with the questionnaire is signed by a member of the Executive Board of Wageningen UR (see Appendix I). The questionnaire is included in Appendix II.

Needs for employability

Chapter 4 is used to embed 'employability' in the questionnaire. The need for employability of employees is restricted to specific needs which can be met by HR-instruments and management interventions offered by the employer. A list of HR-instruments and management interventions is composed by the researcher in collaboration with the commissioner. These HR-instruments and management interventions are assigned to the employability dimensions (see Appendix III and IV, Table 38 and Table 39). The five dimensions are i) occupational expertise; ii) personal flexibility; iii) balance; iv) corporate sense; and v) anticipation and optimization (see §4.2).

With regard to the HR-instruments, the employees are asked with which HR-instruments they are familiar, which HR-instruments they use and which HR-instruments they need. The first two questions,

'being familiar with' and 'making use of', are proposed to gain insight in the current situation. The third question, 'in need of', is proposed to gain insight in the need for employability of employees.

With regard to the management interventions multiple statements are presented. Most statements are answered with a 5-point Likert scale, ranging from 'certainly' to 'certainly not' and 'very satisfied' to 'not satisfied at all'. Two questions are answered with 'yes', 'no' or 'do not know/not applicable'. One question asks for the frequency of feedback received from the employees' supervisor.

Variables to categorize employees

Chapter 5 is used to define variables by which employees can be categorized. The first variable is the generation an employee belongs to. In order to define to what generation an employee belongs, the employee has to indicate in which period he is born. These periods correspond to the different generations included in this research (see §5.1).

The second variable defined in the literature study is the labour market transition an employee experiences. These labour market transitions are established on macro-economic level and translated to the individual level (see §5.2). The labour market transitions have not yet been operationalized to actually categorize employees according to the transition they experience. Therefore the main characteristics of the labour market transitions are used to define distinct activities of life, which are incorporated in the empirical research. The main priority of an employee for an activity of life is used to categorize the employee. The four activities of life included in the research are:

- i) to work (#1, #4 and #10);
- ii) personal development (#5 and #8);
- iii) leisure (#3, #6, #7 and #9);
- iv) care tasks (#2).

Ten statements related to these activities of life are presented to the employees in the sample (the numbers between brackets after the activities of life listed above refer to the statements in the questionnaire), which should indicate the extent to which they identify themselves with the activity of life. Next to that, the employees need to arrange the activities of life according to their priority. The outcome of both the statements and the ranking of the activities of life result in one specific activity of life for which an employee has priority.

6.3 Validity and reliability

The validity of a research indicates the extent to which the data are representative for what is supposed to be measured. The validity of a research can be affected unintentionally by both respondents and researcher. Respondents can unintentionally affect the validity due to a selective memory or because they are not aware of their own behaviour and motives. Formulating specific and clear questions forces a respondent to really think about the subject and therefore increases validity.

The influence of a researcher on the validity of a research can be minimized by pre-testing the questionnaire. The questionnaire of this research is tested by ten employees of Wageningen UR and

submitted for approval to the academic supervisors and the commissioner before send to the employee sample. The pilot test is used to address possible ambiguous or unclear questions and to determine whether the introduction to and formulation of the questions is clear. Some adjustments had to be made due to technical mistakes (like incorrect referrals to questions) and unclearness in the introduction, questions and response categories. All adjustments have been implemented.

A research is reliable if it can be replicated by other researchers. All respondents receive the same questionnaire, which makes a replicate of the study possible by sending out the same questionnaire to another sample. Analysing the data with statistical tests increases the reliability as well, since other researchers can implement the same tests.

6.4 Analysis

Several steps for analysing the results are presented below. All information related to the statistical testing is based on Field (2005).

First, the results on the HR-instruments are clustered and presented per employability dimension (i.e. occupational expertise, personal flexibility, balance, corporate sense and anticipation & optimization). Cronbach's α is calculated for each employability dimension to test the reliability of the scaling. The reliability of scaling refers to the extent to which certain items reflect the construct they are measuring. In this research the items are HR-instruments and management interventions. The construct (to which they are assigned) are the employability dimensions. Cronbach's α varies from zero to one. A value of .7 or .8 is assumed to be acceptable. Deleting items can increase or decrease Cronbach's α . An increase in the value means that the deletion of an item improves reliability. A decrease in the value means that the deletion of a value deteriorates the reliability. (Field,2005)

The remarkable (differences in) percentages of employees being familiar with, making use of and having a need for the HR-instruments are discussed in §7.2 for exploratory purposes. The general need for employability dimensions is used in §7.3.

The need for an employability dimension (per employee) is determined by summing up an employees' need for the different HR-instruments assigned to that specific employability dimension (having a need for an HR-instrument is one point, no need is no points). The need for an employability dimension is then used to discuss the difference in the need for employability dimensions between knowledge workers and members of the staff, between the different generations and between the different groups of employees having different priorities for activities of life. The employees who have a need for an employability dimension are displayed as a percentage of the total group they belong to. The data on specific HR-instruments is no longer taken into account in this section.

Secondly, the management interventions. In §7.2 the management interventions are clustered and discussed per employability dimension. An average score per management intervention is mentioned. This score is calculated as follows. Fourteen questions are formulated which relate to the different management interventions. The majority of the questions is answered using a 5-point Likert scale. A

positive answer, like 'very satisfied' or 'certainly', accounts for one point and a negative answer, like 'not satisfied at all' or 'certainly not' accounts for five points.

Two questions are answered with 'yes', 'no' and 'do not know/not applicable' which respectively accounts for one, three and five points. An average score for each management intervention is calculated. Next to that an average score for each employability dimension is calculated by summing the individual scores for the management interventions assigned to the employability dimensions divided by the number of management interventions assigned to that employability dimension. An average score below 2.5 is a positive score (i.e. the management intervention or employability dimension is valued positive), an average score above 2.5 is a negative score (i.e. the management intervention or employability dimension is valued negative).

The average scores are used in §7.2 to discuss the management interventions and in §7.3 to discuss the difference between knowledge workers and members of the staff, between different generations and between groups of employees having different priorities for activities of life.

Thirdly, testing of the hypotheses. The first hypothesis (see §5.4) is tested with a *One-Way ANOVA* and a *Games-Howell* pairwise test. Just like the suitability of generations and labour market transitions for categorizing employees is tested with a *One-Way ANOVA* and a *Games-Howell* pairwise test.

The *One-Way ANOVA* is used to gain insight in possible significant relationships between a variable (i.e. knowledge workers and members of the staff; generations; or groups of employees having priorities for different activities of life) and employability dimensions (i.e. occupational expertise, personal flexibility, balance, corporate sense and anticipation & optimization). A significant F-value ($p < .05$) indicates a significant relationship between a variable and an employability dimension, which means the variable influences the need of employees for that employability dimension. For example; a significant relationship between generations and 'occupational expertise' indicates the generation an employee belongs to has an effect on the need for that employability dimension.

The *Games-Howell* pairwise test is used to indicate which groups of a variable significantly differ. For example; there is a significant relationship between generations and occupational expertise. The *Games-Howell* pairwise test will show which generations significantly differ, for example Boomers and GenX'ers.

The second hypothesis is tested with the results of the third and fourth hypothesis. No additional statistical testing is required.

The next chapter, chapter 7, presents the results of the empirical research. The results are used in chapter 8 to formulate conclusions and recommendations.

7. Results

The results of the empirical research, the employee survey, are presented in this chapter. The data are gathered via a random sample of the workforce of Wageningen UR. The employees had to meet two criteria in order to participate in the survey: i) the employee has a Dutch nationality and 2) the employee is appointed to permanent or temporary employment and is working full-time or part-time for a fixed salary.

This chapter first describes the response group (§7.1). The chapter continues with presenting the results related to the HR-instruments and management interventions (§7.2). §7.3 presents and discusses the influence of the characteristics of a knowledge intensive organisation on the needs for employability of employees (**H1**) and the relationship between generations and needs for employability and between priority for activities of life and needs for employability. The ability of 'generations' and 'priority for activities of life' as variables to categorize employees are compared in §7.3.4 (**H2**).

7.1 The response group

This section describes the response group. 712 surveys are fully completed, which indicates a response rate of 36.8% (the sample includes 1933 surveys and a confidence interval of 95% is applied). The structure of this section is explained below.

§7.1.1– Education and work; controlling the sample for divisions and job categories of Wageningen UR and presenting numbers on:

- iv) the participation of knowledge workers and staff in this survey;
- v) the highest levels of education followed by employees of Wageningen UR;
- vi) the average period employees are employed at Wageningen UR;
- vii) the number of days spent on education and training.

§7.1.2 – Demographics; presenting numbers on:

- viii) the participation of men and women in this survey;
- ix) the participation of the different generations included in this survey;
- x) the family composition and amount of children of respondents in this survey.

§7.1.3 – Priority for activities of life; presenting numbers on the priority for different activities of life of employees.

7.1.1 Education and work

Controlling for divisions and job categories of Wageningen UR

The total workforce of Wageningen University consists of 2465 employees (i.e. 42% of the total workforce of Wageningen UR) of which 819 employees were included in the sample (i.e. 43% of the total sample) and 313 employees participated in the survey (i.e. 44% of the total response group).

32% of the employees of Wageningen University are academic staff, 16% are PhD-students and 52% are members of the staff.

These percentages approach the percentages in the sample and response group (respectively 33% academic staff, 15% PhD-students, 52% staff in the sample and 28% academic staff, 14% PhD-student and 58% staff in the response group).

The total workforce of Van Hall Larenstein consists of 505 employees (i.e. 9% of the total workforce of Wageningen UR) of which 164 employees were included in the sample (i.e. 9% of the total sample) and 55 employees participated in the survey (i.e. 8% of the total response group). 62% of the employees of Van Hall Larenstein are teachers and 38% are staff.

These percentages approach the percentages in the sample and response group (respectively 60% teachers and 40% staff in the sample and 60% teachers and 40% staff in the response group).

The total workforce of the DLO Foundation consists of 2864 employees (i.e. 49% of the total workforce of Wageningen UR) of which 950 employees were included in the sample (i.e. 49% of the total sample) and 344 employees participated in the survey (i.e. 48% of the total response group). 63% of the employees of the DLO Foundation are researchers and 37% are staff.

These percentages approach the percentages in the sample and response group (respectively 62% researchers and 38% staff in the sample and 60% researchers and 40% staff in the response group).

The Chi-square test is used to indicate if the response group is a reliable representation of the sample. The Chi-square test confirms the response group to be a reliable representation of the sample ($\chi^2(6) = 13.95, p < 0.05$).

Table 2 Controlling for division and job category, in percentages and number of employees.

Job Categorie	RESPONSE GROUP		
	Population	Sample	Response
WU Total	100% (2465)	100% (819)	100% (313)
Academic staff	32% (796)	33% (270)	28% (89)
PhD	16% (381)	15% (126)	14% (44)
Staff	52% (1288)	52% (423)	58% (180)
VHL Total	100% (505)	100% (164)	100% (55)
Teacher	62% (315)	60% (98)	60% (33)
Staff	38% (190)	40% (66)	40% (22)
DLO Total	100% (2864)	100% (950)	100% (344)
Researcher	63% (1802)	62% (592)	60% (207)
Staff	37% (1062)	38% (358)	40% (137)
TOTAL WU, VHL and DLO	100% (5834)	100% (1933)	100% (712)

Knowledge workers

The job categories of Wageningen UR give rise to two sets of employees; knowledge workers and staff (by 'staff' is meant 'supporting staff', see §6.2). The group 'knowledge workers' includes academic staff, PhD-students (both Wageningen University), teachers (Van Hall Larenstein) and researchers (the DLO Foundation). The group 'staff' includes the staff of all three divisions of Wageningen UR.

In total 373 knowledge workers and 339 staff participated in this survey (respectively 52% and 48%). 64% of the knowledge workers is male, 36% female. 96% has a higher professional or (post)academic degree. 35% of the knowledge workers are Boomers, 51% GenX'ers and 14% Millennials. Personal development is the largest priority for knowledge workers. Care tasks are the priority for 25% of the knowledge workers. To work for 23% and leisure for 16% of the knowledge workers.

The gender distribution of staff members is more or less equal, 51% male and 49% female. 64% has a higher professional or (post) academic degree. 51% of the staff members are Boomers, 45% GenX'ers and 4% Millennials. 29% of the members of the staff have a priority for leisure and 28% for care tasks. Personal development is the priority for 24% and work for 17% of the members of the staff.

Education and work.

This part includes statistics on the highest level of education of the employees, the average number of years they are employed at Wageningen UR and the days spent over the past year on education and training (whether or not related to their discipline).

55% of the employees has a (post)academic degree and 25% a higher professional degree. The remaining employees are less educated (20%). The employees are on average 12-13 years employed at Wageningen UR (Wageningen University: 10 years; Van Hall Larenstein: 15 years; the DLO Foundation: 13 years).

61% of the employees has spent on average ten days on education and training related to their discipline last year, of which 64% has spent one to five days. Two employees state to have learned every day (365 days a year). The remaining 39% of the employees has spent no time on education and training related to their discipline last year.

With regard to education and training not related to the discipline the employee works in, 28% has spent on average nine days last year, of which 79% has spend one to five days. Two employees state to have spent on average over 300 days on education and training not related to their discipline. The majority of 72% has spent no days last year on education and training not related to their discipline.

7.1.2 Demographics

In general slightly more men than women are employed at Wageningen UR (see chapter 2). The share of men and women participating in this survey is equivalent, slightly more men (58%) have participated in the survey than women (42%).

43% of the employees in the response group are Baby Boomers, 48% are GenX'ers and 9% are Millennials. The total workforce of Wageningen UR represents 37% Baby Boomers, 51% GenX'ers and 12% Millennials. Comparing the representation of the generations in the total workforce with the participation of generations in the response group, it can be concluded that relatively more Baby Boomers have participated in the survey and less GenX'ers and Millennials.

The next table shows the gender distribution per generation (Table 3).

Table 3 Men and women per generation, in percentages and number of employees.

Gender	Generation			Total
	Baby Boomers	GenX'ers	Millennials	
Women	31% (94)	46% (158)	71% (48)	42% (300)
Men	69% (209)	54% (183)	29% (20)	58% (412)
Total	100% (303)	100% (341)	100% (68)	100% (712)

Family composition and children.

34% of the employees is married or living together without children. Married or living together with children is 48% of the employees. 5% is a one parent household and 13% is not married nor living together. The figures are shown below in Table 4.

By 89% of the employees with children, the children live at home. 80% of the children is aged up to 21.

Table 4 Family composition and children, in percentages and number of employees.

Children	Family Composition				Total
	Married or living together without children	Married or living together with children	One parent household	Not married or living together	
No children	34% (240)			13% (93)	47% (333)
1 or 2		33% (235)	3.5% (25)		36.5% (260)
3 or 4		14% (102)	1.5% (11)		15.5% (113)
5 or more		1% (6)			1%(6)
Total	34% (240)	48% (343)	5% (36)	13% (93)	100% (712)

7.1.3 Priority for activities of life

As stated in §6.2, categorizing employees according to labour market transitions is embedded in the empirical research by including four activities of life for which employees may take priority. These activities are: i) to work; ii) personal development; iii) leisure time; and iv) care tasks.

20% of the employees have the priority to work. 29% of the employees have priority for personal

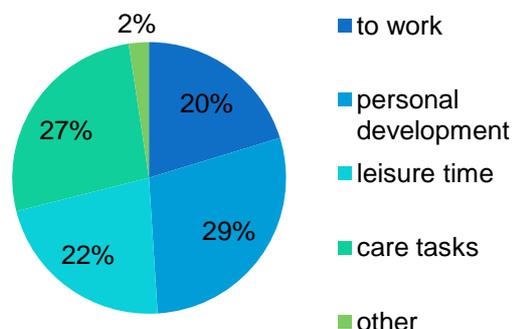


Figure 8 Priorities for activities of life, in percentages.

development. 22% have priority for leisure and 27% for care tasks. 2% of the employees have equal priority for different activities of life. (see Figure 8).

7.2 Results of the assessment of needs for employability

This section presents the results about the HR-instruments and management interventions, which are assigned to the different employability dimensions. This section is structured according to the employability dimensions. Each part addresses another employability dimension and presents the results on the HR-instruments and the management interventions (§7.2.1 to §7.2.5). This section ends with §7.2.6, which presents a summary of the results.

Cronbach's α

As explained in §6.4 Cronbach's α is calculated for each employability dimension to test the reliability of the scaling. A value of Cronbach's α between 0.7 and 0.8 is sufficient. Table 5 presents an overview of Cronbach's α for each employability dimension, in terms of HR-instruments and management interventions.

Table 5 Cronbach's α for each employability dimension.

Employability dimension	Cronbach's α			
	HR-instruments		Management interventions	
	n^1	α	n^2	α
Occupational expertise	5	.696	5	.508
Personal flexibility	4	.454	3	.418
Balance	5	.753	1 ^a	.763
Corporate sense	4	.633	2	.112
Anticipation and optimization	3	.523	3	.396

1 = number of HR-instruments

2 = number of management interventions

a = the management intervention assigned to 'balance' is asked by two questions, therefore Cronbach's α can be calculated.

One item assigned to personal flexibility is deleted to increase a negative value of α to a more positive value. This accounts for the question "Are u satisfied with the way you receive feedback from your superior?". The item is no longer taken into account in the analysis of the results.

It can be concluded that the scaling for balance (i.e. assigning HR-instruments and management interventions to 'balance') is most reliable. The HR-instruments assigned to occupational expertise and corporate sense have a value of .696 and .633. These values indicate the scaling is not 100% reliable but it does not make the scaling useless. The other employability dimensions have values far below .7 which means the scaling is not reliable.

The value of Cronbach's α for the management interventions assigned to corporate sense is 0.112. This score differs from the desired score (i.e. 0.7 or 0.8) in such a way, that the independent management interventions assigned to corporate sense alone are discussed in §7.2.4. No overall

score for corporate sense is calculated and the results on the management interventions assigned to corporate sense are no further discussed in §7.3.

Despite the low values of Cronbach's α , the results per employability dimension are presented below for exploratory meaning. More research is needed on the interpretation of employability dimensions at the level of HR-policies to improve the reliability of the scaling.

7.2.1 Occupational expertise

Occupational expertise is one of the five employability dimensions and refers to a high degree of knowledge and skills related to a particular professional domain and social recognition by important key figures. (Van der Heijde & Van der Heijden, 2006)

HR-instruments

The employees are, on average, familiar with four of the five HR-instruments assigned to occupational expertise. The opportunity to participate in job- or discipline related education (#1) and to participate in projects (#3) are known best (respectively by 73% and 71% of the employees). The HR-instrument acknowledgement of acquired competencies (EVC's, #4) is known by only 30% of the employees. The remaining two HR-instruments, job enrichment (#2) and the opportunity to be coached by the supervisor (#5), are known by respectively 66% and 60% of the employees.

The HR-instruments used most are the opportunity to participate in projects (#3) and job enrichment (#2). But the need for these HR-instruments is only 24%. More employees express a need for the opportunity to participate in job- or discipline related education (#1) than the employees that actually use the opportunity (26%). The need for EVC's (#4) also exceeds the use made of it (respectively 26% and 3%) just as the need for the opportunity to be coached (#5) exceeds the percentage of employees that uses the opportunity.

In total 92% of the employees are familiar with one or more HR-instruments assigned to occupational expertise. 66% of the employees uses one or more HR-instrument and 56% of the employees is in need for one or more HR-instrument assigned to occupational expertise.

Table 6 Results of HR-instruments assigned to occupational expertise.

HR-instruments assigned to occupational expertise	Being familiar with	Making use of	In need of
#1. The opportunity to participate in job- or discipline related education	73%	26%	32%
#2. Job enrichment, including a broader range of tasks	66%	33%	25%
#3. The opportunity to participate in projects	71%	45%	24%
#4. EVC's, acknowledgement of acquired competencies	30%	3%	26%
#5. The opportunity to be coached by your supervisor	60%	17%	21%
TOTAL OCCUPATIONAL EXPERTISE	92%	66%	56%

Management interventions

Five management interventions are assigned to the employability dimension 'occupational expertise'. An average score below 2.5 is a positive score (i.e. the management intervention is valued positive), an average score above 2.5 is a negative score (i.e. the management intervention is valued negative).

- 1) A little less than 50% of the employees influences policy issues that affect the execution of their function. Of the remaining employees 28% influences the policy issues to some extent, 19% hardly influences the policy issues and 7% does not influence the policy issues at all.

Average score: 2.6.

- 2) 90% of the employees are more or less enabled to develop their knowledge and skills, required for execution of their function. 10% of the employees state they are not enabled to develop the required knowledge and skills. The relationship between having access to required information and being enabled to develop required knowledge and skills is significant, $r = .326, p < .01$.

Average score: 2.1.

- 3) 25% of the employees receives no feedback from their supervisor in addition to the Performance & Development (P&D) interview. 24% receives additional feedback once a year, 17% of the employees every six months, 20% every three months and 15% once a month or more often. In total 75% of the employees receive feedback additional to the P&D interview.

Average score: 3.2.

11% of the employees is really satisfied with the way they receive feedback. 35% is satisfied, 23% is somewhat satisfied and 7% is hardly satisfied at all. There is a significant relationship between receiving feedback additional to the P&D interview and the degree of satisfaction regarding the additional feedback, $r = .349, p < .01$.

Average score: 1.8.

- 4) Participation in 'management development' or 'talent development' groups is hardly ever promoted by supervisors (according to 55% of the employees). The supervisor does promote participation in 'management development' and 'talent development' groups by 17% of the employees. By the remaining 21% of the employees participation in 'management development' or 'talent development groups is promoted to some extent. This might be a realistic percentage due to the selection of candidates by the management.

Average score: 3.5.

- 5) The majority of the employees has access to the information they need for executing their function (14% always has access, 73% usually has access). Only 2% of the employees has answered to rarely or even never have access to the information they need to execute their function.

Average score: 2.0

The average score of employees with regard to occupational expertise is 2.6. This score represents a more negative appreciation of the management interventions by the employees, mainly caused by the high scores on additional feedback to the P&D interview and the promotion of participation in management and talent development groups.

7.2.2 Personal flexibility

The employability dimension personal flexibility refers to the ability to adapt easily to all kinds of changes in the internal and external labour market. Flexible employees know better how to take advantages of changes. (Van der Heijde & Van der Heijden, 2006)

HR-instruments

The HR-instruments assigned to personal flexibility are well known by the employees (i.e. by 60% or more) and used by over 50% of the employees. But what is remarkable, is the fact that the employees only have a need for the opportunity to organize own work activities (70%), which exceeds the 57% of the employees that make use of the HR-instrument.

With regard to the three other HR-instruments, there is a big difference between making use of the HR-instrument and the need for this instrument. The opportunity to save rights for leave over a number of years (#2) is used by 66% of the employees but needed by only 13% of the employees. 'Job rotation' (#3) is used by 62% of the employees but only needed by 9% of the employees. The same goes for training of social skills (#4), used by 69% of the employees but needed by 16% of the employees. (see Table 7)

In total 97% of the employees are familiar with one or more HR-instruments assigned to personal flexibility. 92% of the employees uses one or more HR-instrument and 76% of the employees is in need for one or more HR-instrument assigned to occupational expertise. The need for the opportunity to organize own work activities (#1) is of great influence on the total need for one or more HR-instruments.

Table 7 Results of HR-instruments personal flexibility.

HR-instruments assigned to personal flexibility	Being familiar with	Making use of	In need of
#1 The opportunity to organize your own work activities	65%	57%	70%
#2 The opportunity to save rights for leave over a number of years	76%	66%	13%
#3 Job rotation	70%	62%	9%
#4 Training of social skills, such as leadership skills	78%	69%	16%
TOTAL PERSONAL FLEXIBILITY	97%	92%	76%

Management interventions

Three management interventions are assigned to personal flexibility. An average score below 2.5 is a positive score (i.e. the management intervention is valued positive), an average score above 2.5 is a negative score (i.e. the management intervention is valued negative).

- 1) Only 12% of the employees is familiar with the opportunity to get a mentor. 49% of the employees is not familiar with the opportunity to get a mentor and 40% is not aware of the opportunity at all.

Average score: 2.3

- 2) Personal development is (to some extent) supported by the supervisor by 76% of the employees. The remaining employees state their supervisor rarely, if at all, supports their personal development.

Average score: 2.7

The third management intervention assigned to personal flexibility is 'feedback', which has been discussed in §7.2.1 on occupational expertise. The satisfaction of employees with regard to the feedback they receive additional to their P&D interview, is not included due to a negative impact on Cronbach's α .

The average score of employees with regard to personal flexibility is 2.7. The average score of personal flexibility represents a more negative appreciation of the management interventions by the employees.

7.2.3 Balance

The employability dimension balance is the third employability dimension and implies compromising between employers' interests and own work, career and private interests. There should be an honest exchange relationship with balanced investments and profits between the employer and employee. (Van der Heijde & Van der Heijden, 2006)

HR-instruments

The HR-instruments assigned to the employability dimension 'balance' are well known by the employees. Especially the opportunity to work part-time (#1) by 94% of the employees and special leave due to exceptional circumstances (#3) by 83% of the employees. However, the HR-instruments are used by a small group.

The opportunity to work part time (#1) is used most by 39% of the employees. The other four HR-instruments, agreements with the supervisor on the care of children (#2), special leave due to exceptional circumstances (#3), special arrangements for older workers (#4) and care leave (#5) are used by less than 15% of the employees. (see Table 8).

The opportunity to work part-time (#1) is used most but only needed by 14% of the employees. With regard to special leave due to exceptional circumstances (#3) and care leave (#5) the need for the instruments exceeds its use.

In total 98% of the employees are familiar with one or more HR-instruments assigned to occupational expertise. 54% of the employees uses one or more HR-instruments and 24% of the employees is in need for one or more HR-instrument assigned to occupational expertise.

Table 8 Results of HR-instruments balance.

HR-instruments assigned to balance	Being familiar with	Making use of	In need of
#1 The opportunity to work part time	94%	39%	14%
#2 Agreements with the supervisor on the care of children, like flexible working hours	71%	13%	7%
#3 Special leave due to exceptional circumstances	83%	9%	10%
#4 Special arrangements for older workers	66%	10%	8%
#5 Care leave	77%	2%	8%
TOTAL BALANCE	98%	54%	24%

Management interventions

One management intervention is assigned to the employability dimension 'balance', related to obtaining a good work-life balance. Two questions related to this management intervention are included in the questionnaire. An average score below 2.5 is a positive score (i.e. the employability dimension is valued positive), an average score above 2.5 is a negative score (i.e. the management intervention is valued negative).

77% of the employees is supported by their supervisor in the choice of working conditions which contribute to the work-life balance. The remaining 23% of the employees is rarely, if at all, supported by their supervisor.

Average score: 2.6.

64% of the employees is satisfied with the support they receive from their supervisor. 26% is somewhat satisfied and the remaining employees (10%) is (certainly) not satisfied.

Average score: 2.3.

The average score of employees with regard to balance is 2.4. The average score of balance represents a more positive appreciation of the management interventions by the employees.

7.2.4 Corporate sense

Corporate sense is one of the five employability dimensions and builds on social capital, social skills and emotional intelligence. It is about sharing responsibilities, knowledge, experiences, feelings, credits, failures, goals and the like. (Van der Heijde & Van der Heijden, 2006)

HR-instruments

Four HR-instruments are assigned to the employability dimension 'corporate sense'. The opportunity to participate in social positions (#3), such as the participation council or staff association, is best known among the employees (92%). The introduction meeting (#1) is known among 71% of the employees. About 50% of the employees is familiar with the opportunity to participate in teams (#2) and 45% is familiar with the transfer of knowledge and skills of the older, experienced generation to the younger generation (#4).

The HR-instruments are used by only a few employees, the opportunity to participate in teams is used most by 17% of the employees. The need for these HR-instruments is also rather low.

The transfer of knowledge and skills of the older, experienced generation to the younger generation (#4) is needed most by 21% of the employees, followed by the opportunity to participate in teams (#2) by 17% of the employees. (see Table 9)

In total 95% of the employees are familiar with one or more HR-instruments assigned to occupational expertise. 35% of the employees uses one or more HR-instruments and 30% of the employees is in need for one or more HR-instrument assigned to corporate sense.

Table 9 Results of HR-instruments assigned to corporate sense.

HR-instruments assigned to corporate sense	Being familiar with	Making use of	In need of
#1 Introduction meeting for new employees	71%	7%	8%
#2 The opportunity to participate in teams, to improve teambuilding and collaboration	51%	17%	17%
#3 The opportunity to participate in social positions, such as the participation council or staff association	92%	11%	3%
#4 Transfer of knowledge and skills of the older, experienced generation to the younger generation	45%	13%	21%
TOTAL CORPORATE SENSE	95%	35%	30%

Management interventions

The management interventions assigned to corporate sense are 'participation in management and talent development groups' and 'the opportunity to get a mentor'. These interventions were discussed in §7.2.1 on occupational expertise and §7.2.2 on personal flexibility.

Due to a low value of Cronbach's α for this employability dimension, no overall score for corporate sense is calculated.

7.2.5 Anticipation and optimization

Anticipation and optimization is the fifth employability dimension and refers to preparing for future work changes in a personal and creative manner in order to strive for the best possible job and career

outcomes. Employees should create the future themselves instead of performing fixed tasks. (Van der Heijde & Van der Heijden, 2006)

HR-instruments

Three HR-instruments are assigned to anticipation and optimization. The performance and development (P&D) interview (#2) is best known among 93% of the employees. 76% of the employees makes use of this HR-instrument, but only 18% has a need for the P&D interview.

The other HR-instruments, the opportunity to receive career advice (#1) and the assessment of skills and knowledge for the career (#3), are known by respectively 62% and 45% of the employees. An average of 7% of the employees uses these HR-instruments, while approximately 23% has a need for these HR-instruments. (see Table 10)

In total 95% of the employees are familiar with one or more HR-instruments assigned to occupational expertise. 78% of the employees uses one or more HR-instruments and 37% of the employees is in need for one or more HR-instruments assigned to anticipation and optimization. The familiarity with and use made of the performance and development interview (#2) is of great influence on the total familiarity and use of one or more HR-instruments assigned to anticipation and optimization.

Table 10 Results of HR-instruments assigned to anticipation and optimization.

HR-instruments assigned to anticipation and optimization	Being familiar with	Making use of	In need of
#1 The opportunity to receive career advice and get help with career planning	62%	7%	23%
#2 Performance and Development interview (P&D interview)	93%	76%	18%
#3 Assessment of skills and knowledge for the career	45%	9%	24%
TOTAL ANTICIPATION AND OPTIMIZATION	95%	78%	37%

Management interventions

The management interventions assigned to anticipation and optimization are related to career planning. An average score below 2.5 is a positive score (i.e. the employability dimension is valued positive), an average score above 2.5 is a negative score (i.e. the management intervention is valued negative).

- 1) 48% of the employees discuss their expectations with respect to growth opportunities within the organization with their supervisor. The remaining employees discuss these expectations somewhat or rarely (35%) or never (5%). 12% of the employees have answered that expectations with respect to growth opportunities are not applicable in their situation.

Average score: 2.9.

- 2) 26% of the employees states to discuss the search for a new job in another organization with their supervisor. 24% states to discuss it sometimes. The other 50% of the employees rarely, if at all, discuss the search for a new job with their supervisor.

Average score: 3.5.

- 3) A career coach is offered to 13% of the employees, 30% of the employees is no career coach offered. 56% of the employees is not aware of the opportunity to get a career coach.

Average score: 2.4.

The average score of employees with regard to anticipation and optimization is 2.7. The average score of anticipation and optimization represents a more negative appreciation of the management interventions by the employees.

7.2.6 Summary

The results presented above leads to a general summary in this part. The results on HR-instruments and management interventions per employability are summarized and discusses below.

HR-instruments

The total familiarity with, use made of and need for HR-instruments assigned to the employability dimensions is calculated in order to compare the results per employability dimensions (Table 11).

Table 11 Total familiarity with, use made of and need for employability dimensions².

Employability dimension ²	A:		B:		C:	
	Total familiarity with...		Total use made of...		Total need for...	
1. Bal.	98%	1. Pers. flex.	92%	1. Pers. flex.	76%	
2. Pers. flex.	97%	2. Anti. & opti	78%	2. Occup. exp.	56%	
3. Anti. & opti.	95%	3. Occup. exp.	66%	3. Anti. & opti.	37%	
4. Corp. sense	95%	4. Bal.	54%	4. Corp. sense	30%	
5. Occup. exp.	92%	5. Corp. sense	35%	5. Bal.	24%	

² The colors in Table 11 indicate different employability dimensions.

Table 11 shows employees are most familiar with HR-instruments assigned to balance (A: 98%). But they make little use of these HR-instrument (B: 54%) and need them even less (C: 24%). HR-instruments assigned to personal flexibility are known second best (A: 97%) and used most (B: 92%). The need for this employability dimension is the highest as well with 76% (column C).

Anticipation and optimization is more or less in the middle of the ranking and shows a great difference between the percentage of employees that uses one or more HR-instruments assigned to this dimension (78% makes use of and 37% is in need of one or more HR-instruments assigned to anticipation and optimization).

² Occup. exp. = occupational expertise; Pers. flex. = personal flexibility; Bal. = balance; Corp. sense = corporate sense; Anti & opti = anticipation & optimization.

Corporate sense is mainly at the bottom of the table. 95% of the employees are familiar with one or more HR-instruments assigned to corporate sense. But only 35% makes use of one or more HR-instruments and 30% needs the instruments.

92% of the employees are familiar with one or more HR-instruments assigned to occupational expertise. This employability dimension is at the bottom of column A. 66% of the employees make use of these HR-instruments (column B, #3) and 26% have a need for these instruments (column C, #2).

From Table 11 it can be concluded that the employees are in general well aware of the HR-instruments assigned to the employability dimensions. The use made and need for HR-instruments varies a lot per employability dimensions.

The scores per HR-instrument give more insight in the exact familiarity with, use made of and need for the HR-instruments. Table 13 (p.59) shows the top five HR-instruments employees are most familiar with, the top five HR-instruments employees use the most and the top five HR-instruments employees need the most.

Management interventions

- i) A little less than 50% of the employees is enabled to influence policy issues that affect the execution of their function.
- ii) Over 80% of the employees has access to the required information to execute their function.
- iii) A majority of the employees is enabled to develop their knowledge and skills that are required for execution of their function.
- iv) 75% of the employees receive feedback from their supervisor, additional to their P&D interview. A little less than 50% of the employees that receive additional feedback is satisfied with the way they receive it.
- v) Management development and talent development groups are hardly ever promoted by the supervisors, according to the employees.
- vi) The opportunity to get a mentor is not known to 50% of the employees. The same accounts for the opportunity to get a career coach.
- vii) Personal development is supported by the supervisor by 75% of the employees, even as the work-life balance.
- viii) Expectations with respect to growth opportunities are discussed with the supervisor by a little less than 50% of the employees. The search for a job in another organization is also discussed with the supervisor by 50% of the employees.

The average scores of employees for each employability dimension (except corporate sense due to a low value for α) are listed in Table 12. The average scores are all close to the middle score of 2.5. The

most positive score is on the employability dimension 'balance'. The most negative score accounts for 'anticipation and optimization'. This means employees value the management interventions assigned to balance the most positive and the management interventions assigned to anticipation and optimization the most negative.

Table 12 Average score for management interventions assigned to the employability dimension.

Employability dimension	Average score
Occupational expertise	2.6
Personal flexibility	2.5
Balance	2.4
Anticipation and optimization	2.7

§7.1 and §7.2 have gained more insight in the response group and the results of the assessment, in terms of HR-instruments and management interventions. This chapter continuous with §7.3, which discusses the hypotheses.

Table 13 Top five HR-instruments per familiarity, use and need.

Top five familiarity with HR-instruments			Top five used HR-instruments		Top five HR-instruments needed	
#	HR-instrument and percentage of employees that knows it	Employability dimension	HR-instrument and percentage of employees that uses it	Employability dimension	HR-instrument and percentage of employees that needs it	Employability dimension
1	The opportunity to work part time 94%	Balance	Performance and Development interview (P&D interview) 76%	Anti. & opti	The opportunity to organize your own work activities 70%	Pers. flex.
2	Performance and Development interview (P&D interview) 93%	Anti. & opti.	Training of social skills, such as leadership skills 69%	Pers. flex.	The opportunity to participate in job- or discipline related education 31%	Occu. exp.
3	The opportunity to participate in social positions 92%	Corp.sense	The opportunity to save rights for leave over a number of years 66%	Balance	EVC's, acknowledgement of acquired competencies 26%	Occu. exp.
4	Special leave due to exceptional circumstances 83%	Balance	Job rotation 62%	Pers. flex.	Job enrichment, including a broader range of tasks 25%	Occu. exp.
5	Training of social skills, such as leadership skills 78%	Pers. flex.	The opportunity to organize your own work activities 57%	Pers. flex.	The opportunity to participate in projects 24%	Occu. exp.

7.3 Testing the hypotheses

Throughout this research two hypotheses have emerged. The hypotheses are discussed and tested in this section. The hypotheses are:

1. *Knowledge workers of a knowledge intensive organization have different needs for employability compared to the staff of a knowledge intensive organization. (H1)*
2. *Labour market transitions are more suitable than generations to categorize employees according to their needs for employability. (H2)*

§7.3.1 discusses the first hypothesis and provides insight in the influence of the characteristics of employees of a knowledge intensive organization on the needs for employability. §7.3.2 and §7.3.3 each discuss the suitability of a different variable for categorizing employees, respectively generations and priorities for activities of life. The results of the empirical research and the results of the literature study are compared in §7.3.1 to §7.3.3. This section concludes with §7.3.4, discussing the second hypothesis and therewith comparing the variables discussed in §7.3.2 and §7.3.3.

7.3.1 Influence of the characteristics of employees of a knowledge intensive organization on the needs for employability

The first hypothesis is tested in this part:

H1: *Knowledge workers of a knowledge intensive organization have different needs for employability compared with the staff of a knowledge intensive organization.*

52% of the employees is defined as 'knowledge worker' and 48% as 'member of the staff'.

HR-instruments

The results of the empirical research show knowledge workers in general have more needs for one or more HR-instrument assigned to occupational expertise (58%), corporate sense (35%) and anticipation and optimization (41%) compared with members of the staff (respectively 53%, 25% and 32%). Female knowledge workers need anticipation and optimization to a greater extent compared with male knowledge workers ($p < .05$).

Members of the staff have more needs for personal flexibility compared with knowledge workers: 72% of the members of the staff and 61% knowledge workers. The need for personal flexibility of knowledge workers is influenced by the division of Wageningen UR they are employed at ($p < .05$). Employees employed at the DLO Foundation most need personal flexibility, followed by employees employed at Van Hall Larenstein. Employees employed at Wageningen University need personal flexibility the least, but still 77% of the employees have expressed a need for one or more HR-instruments assigned to personal flexibility. The need for personal flexibility of members of the staff is influenced by their level of education. Higher skilled employees need personal flexibility to a greater extent compared with lower skilled employees ($p < .05$).

The need for one or more HR-instrument assigned to balance is equal in both groups (24%). (see Table 14)

A closer look at the data shows the family composition of members of the staff influences their need for occupational expertise, balance, corporate sense and anticipation and optimization ($p < .05$). In general employees living alone need one or more HR-instruments assigned to these employability the most, except the need for occupational expertise which is needed most by employees living together with children.

The effect of being a knowledge worker or member of the staff on the need for employability is significant for three employability dimensions. There is no significant effect of being a knowledge worker or member of the staff on the need for occupational expertise and balance.

- i) occupational expertise, $F(1, 710) = 1.69$, *not significant*
- ii) personal flexibility, $F(1, 710) = 6.95$, $p < .05$
- iii) balance, $F(1, 710) = 0.97$, *not significant*
- iv) corporate sense, $F(1, 710) = 5.47$, $p < .05$
- v) anticipation and optimization, $F(1, 710) = 12.07$, $p < .05$

Table 14 Knowledge workers and members of the staff having a need for one or more HR-instruments per employability dimension, in percentages.

Need for employability	Knowledge workers	Staff	Total of all employees
Occupational expertise	58%	53%	56%
Personal flexibility	80%	72%	76%
Balance	24%	24%	24%
Corporate sense	35%	25%	30%
Anticipation and optimization	41%	32%	37%

Management interventions

The general results on the management interventions are discussed in §7.2. This part will gain more insight in the potential variety of answers between knowledge workers and members of the staff per employability dimension.

First more insight is gained in the average values for each employability dimension. As can be seen in Table 15, the average scores of knowledge workers and members of the staff are very similar. This indicates there is little difference between knowledge workers and members of the staff with regard to the management interventions assigned to the employability dimensions.

A closer look at the data shows the level of education influences the satisfaction of knowledge workers and members of the staff with management interventions assigned to occupational expertise. The same applies for knowledge workers and their satisfaction with balance and anticipation and optimization. The divisions of Wageningen UR influence the satisfaction of members of the staff with management interventions assigned to personal flexibility, balance, corporate sense and anticipation and optimization ($p < .05$). Members of the staff employed at the DLO Foundation are most satisfied with personal flexibility, corporate sense and anticipation. Members of the staff employed at Wageningen University are most satisfied with balance.

The satisfaction of members of the staff with balance and corporate sense is influenced by gender as well. Female members of the staff are more satisfied with balance compared with male members of the staff. Whereas male members of the staff are more satisfied with corporate sense compared with female members of the staff. ($p < .05$)

More detailed insights in the differences between knowledge workers and members of the staff is presented in Appendix V.

Table 15 Average scores of knowledge workers and members of the staff, per employability dimension.

Employability dimension	Knowledge workers	Members of the staff	Total of all employees
Occupational expertise	2.5	2.6	2.6
Personal flexibility	2.7	2.8	2.7
Balance	2.4	2.5	2.4
Anticipation and optimization	2.7	2.8	2.7

The One-Way ANOVA shows there is a significant effect of being a knowledge worker or member of the staff on the needs for one employability dimension. With regard to the other three employability dimensions, no significant effect of being a knowledge worker or member of the staff on the needs for those employability dimensions has been proven.

- i) occupational expertise, $F(1, 710) = 2.63$, *not significant*
- ii) personal flexibility, $F(1, 710) = 0.69$, *not significant*
- iii) balance, $F(1, 710) = 0.17$, *not significant*
- iv) anticipation and optimization $F(1, 710) = 4.06$, $p < .05$

The results presented in this part are used to test the first hypothesis which states knowledge workers to have different needs for employability compared with members of the staff. Knowledge workers do not have different needs for employability compared with members of the staff, but knowledge workers have more needs for employability. So the first hypothesis is rejected.

Reflection theoretical framework

Insights are gained on the influence of the characteristics of employees of a knowledge intensive organization on the needs for employability in §4.3. The literature study pointed out three key words that are of importance for knowledge workers; empowerment, development and motivation. The results of the empirical research support these findings. Several HR-instruments can be assigned to these key words, like the opportunity to organize own work activities or the opportunity to receive career advice and get help with career planning can be assigned to empowerment. The opportunity to participate in job- or discipline related education and training of social skills can be assigned to development and job enrichment to motivation. Looking at the percentage of employees expressing a need for these instruments, it can be concluded that more knowledge workers have a need for these HR-instruments compared to members of the staff. The three topics, empowerment, development and

motivation, do seem to be of greater importance to knowledge workers than members of the staff which corresponds to the findings from the literature study.

7.3.2 Generations as a variable to categorize employees

This part presents results on the needs for employability of different generations. 43% of the employees who participated in this research are Boomers, 48% GenX'ers and 9% Millennials. The results are used in §7.3.4 to test the second hypothesis.

HR-instruments

Table 16 presents the need of a generation for one or more HR-instruments, per employability dimension, as a percentage of the total generation. The need for personal flexibility is the highest for all generations. The level of education influences the need for personal flexibility of Boomers and GenX'ers, lower-skilled employees show less needs for personal flexibility compared with higher-skilled employees ($p < .05$).

Looking at each employability dimensions separately (see Table 16, the bold percentages), occupational expertise and personal flexibility are needed most by GenX'ers. Balance, corporate sense and anticipation and optimization are needed most by Millennials. Whereas more female Millennials express a need for anticipation and optimization compared with male Millennials ($p < .05$).

Boomers have the lowest need for corporate sense, their need is influenced by the division of Wageningen UR they are employed at ($p < .05$). Employees employed at the DLO Foundation need HR-instruments assigned to corporate sense more compared with employees employed at Wageningen University or Van Hall Larenstein. The need for one or more HR-instruments assigned to balance is the lowest for GenX'ers and Millennials.

There is a significant effect of the generation an employee belongs to on the need for three employability dimensions.

- i) occupational expertise, $F(2, 709) = 9.45, p < .05$
- ii) personal flexibility, $F(2, 709) = 0.54, \text{not significant}$
- iii) balance, $F(2, 709) = 2.92, \text{not significant}$
- iv) corporate sense, $F(2, 709) = 7.63, p < .05$
- v) anticipation and optimization, $F(2, 709) = 22.00, p < .05$

Table 16 Need for employability per generation, in percentages.

Need for employability	Boomers	GenX'ers	Millennials	Total of all employees
Occupational expertise	46%	65%	54%	56%
Personal flexibility	74%	78%	77%	76%
Balance	23%	24%	25%	24%
Corporate sense	22%	35%	40%	30%
Anticipation and optimization	23%	46%	52%	37%

Games-Howell pairwise test takes a closer look at the differences between generations, per employability dimension. The result is shown in Table 17. There is a significant difference between generations and four employability dimensions; occupational expertise, balance, corporate sense and anticipation and optimization. The result above showed there is a significant relationship between generations and needs for employability for only three employability dimensions. This difference can be explained by the fact that a *post Hoc* test (like Games-Howell pairwise test) is less powerful to detect true effects (Field, 2005).

Table 17 Result of Games-Howell test for generations (HR-instruments).

Significant difference ($p < .05$)

	Boomers	GenX'ers	Millennials
Boomers	X	- Occup. exp. - Corp. sense - Anti. & opti.	- Corp. sense - Anti. & opti.
GenX'ers	- Occup. exp. - Corp. sense - Anti. & opti.	X	- Balance
Millennials	- Corp. sense - Anti. & opti.	- Balance	X

Management interventions

The general results on the management interventions are discussed in §7.2. This part will gain more insight in the potential variety of answers between different generations.

First more insight is gained in the average values for each employability dimension. As can be seen in Table 18, the average scores of different generations are close together. With regard to balance and anticipation and optimization, GenX'ers and Millennials are slightly more positive compared to Boomers. A closer look at the results on management interventions assigned to balance, shows female Boomers and GenX'ers are more satisfied with management interventions assigned to balance compared with male Boomers and GenX'ers ($p < .05$). Millennials living together with children are most satisfied with the management interventions assigned to balance compared with employees living together without children and employees living alone ($p < .05$). Millennials employed at the DLO Foundation are most positive about management interventions assigned to balance, compared with employees employed at Wageningen University and Van Hall Larenstein ($p < .05$)

With regard to Boomers and their satisfaction with management interventions assigned to anticipation and optimization, female Boomers and Boomers employed at the DLO Foundation are most satisfied compared with male Boomers and Boomers employed at Wageningen University and Van Hall Larenstein ($p < .05$).

In general there are small differences between the generations in relation to the management interventions assigned to the employability dimensions. More detailed insights in the differences between generations is presented in Appendix V.

Table 18 Average scores of different generations, per employability dimension.

Employability dimension	Boomers	GenX'ers	Millennials	Total of all employees
Occupational expertise	2.5	2.6	2.6	2.6
Personal flexibility	2.8	2.7	2.6	2.7
Balance	2.6	2.4	2.3	2.4
Anticipation and optimization	2.8	2.7	2.6	2.7

The One-Way ANOVA test shows there is a significant effect of the generation an employee belongs to and the need for one employability dimension. There is no significant effect of the generation an employee belongs to and the need for the other employability dimensions.

- i) occupational expertise, $F(2, 709) = 0.49$, *not significant*
- ii) personal flexibility, $F(2, 709) = 2.99$, *not significant*
- iii) balance, $F(2, 709) = 5.19$, $p < .05$
- iv) anticipation and optimization, $F(2, 709) = 2.11$, *not significant*

Games-Howell pairwise test takes a closer look at the differences between generations, per employability dimension. The result is shown in Table 19. There is a significant difference between generations for two employability dimensions; personal flexibility and balance. The result above, showed there is a significant relationship between generations and needs for employability for only one employability dimension. This difference can again be explained by the fact that a *post Hoc* test is less powerful to detect true effects (Field, 2005).

Table 19 Result of Games-Howell test for generations (management interventions).

Significant difference ($p < .05$)

	Boomers	GenX'ers	Millennials
Boomers	X	- Balance	- Pers. flex. - Balance
GenX'ers	- Balance	X	
Millennials	- Pers. flex. - Balance		X

Reflection theoretical framework

Insights are gained on generations and the needs for employability of employees belonging to different generations in §5.1. Literature shows there are small difference between generations. Boomers are more work-centric and value social values more compared with GenX'ers and Millennials. GenX'ers on the other hand, are more family-centric, want freedom from supervision, put value on money and respect. Millennials are also family-centric and put value on leisure and status.

The findings of the literature study are partly confirmed by the results of the empirical research. Boomers do not show the highest need for occupational expertise nor for corporate sense (as would be expected for a work-centric generation which values social values).

Literature states GenX'ers and Millennials are more family-centric, but HR-instruments assigned to balance are equally needed by all three generations. The management interventions assigned to balance are on the other hand valued more positive by GenX'ers and Millennials.

7.3.3 Priorities for activities of life as a variable to categorize employees

This part presents results on the needs for employability of employees with different priorities for activities of life. 20% of the employees who participated in this research have a priority to work, 29% has a priority for personal development, 22% for leisure and 27% for care tasks. The results are used in §7.3.4 to test the second hypothesis.

Table 20 presents the need per employability dimension of groups of employees with different priorities for activities of life³.

On average the employees have the highest need for personal flexibility and the lowest need for balance. Occupational expertise, personal flexibility, corporate sense and anticipation and optimization are needed most by employees having a priority for personal development. Whereas the need for anticipation and optimization is influenced by gender, females with a priority for personal development need anticipation and optimization more compared with males with a priority for personal development ($p < .05$). The employability dimension balance is needed most by employees having a priority for leisure. (see Table 20, the bold percentages)

There is a significant effect of the activity of life on the needs for two employability dimensions:

- i) occupational expertise, $F(4, 707) = 2.91, p < .05$
- ii) personal flexibility, $F(4, 707) = 1.17, \text{not significant}$
- iii) balance, $F(4, 707) = 0.75, \text{not significant}$
- iv) corporate sense, $F(4, 707) = 2.01, \text{not significant}$
- v) anticipation and optimization, $F(4, 707) = 3.61, p < .05$

Table 20 Need for employability per priority for activities of life, in percentages.

Need for employability	To work	Personal development	Leisure	Care tasks	Total of all employees
Occupational expertise	57%	63%	50%	50%	56%
Personal flexibility	76%	78%	73%	76%	76%
Balance	24%	21%	27%	25%	24%
Corporate sense	29%	37%	26%	27%	30%
Anticipation and optimization	39%	46%	27%	33%	37%

³ Employees with a priority for more than one activity (17 employees in total) are excluded from the table.

Games-Howell pairwise test takes a closer look at the differences between activities of life, per employability dimension. The result is shown in Table 21. There is a significant difference between activities for life and three employability dimensions; occupational expertise, corporate sense and anticipation and optimization. The result above, showed there is a significant relationship between activities for life and needs for employability for only two employability dimensions. This difference can be explained by the fact that a *post Hoc* test is less powerful to detect true effects (Field, 2005).

Table 21 Result of Games-Howell test for activities of life (HR-instruments).

Significant difference ($p < .05$)				
	To work	Personal development	Leisure	Care tasks
To work	X			
Personal development		X	- Occup. exp. - Anti. & opti.	- Corp. sense
Leisure		- Occup. exp. - Anti. & opti.	X	
Care tasks		- Corp. sense		X

Management interventions

The general results on the management interventions are discussed in §7.2. This part will gain more insight in the potential variety of answers between groups of employees with different priorities for activities of life.

First more insight is gained in the average values for each employability dimension. As can be seen in Table 22, the average scores of different activities of life are very much alike. The average scores for the activities of life 'to work' and 'personal development' are closest together. There is a greater difference between 'leisure' and 'care tasks'.

A closer look at the data shows the satisfaction of employees with a priority for work or personal development with occupational expertise is influenced by the level of education ($p < .05$). Employees with a (post)academic degree are most positive compared with employees with a lower educational level. With regard to employees with a priority to work, female employees and employees employed at Wageningen University are most satisfied with management interventions assigned to balance ($p < .05$).

In general there are small differences between the activities of life in relation to the management interventions assigned to the employability dimensions.

More detailed insights in the differences between activities of life is presented in Appendix V.

Table 22 Average scores of activities of life, per employability dimension.

Employability dimension	To work	Personal development	Leisure	Care tasks	Total of all employees
Occupational expertise	2.5	2.5	2.7	2.6	2.6
Personal flexibility	2.7	2.6	2.9	2.7	2.7
Balance	2.5	2.5	2.6	2.3	2.4
Anticipation and optimization	2.7	2.6	2.9	2.7	2.7

The One-Way ANOVA shows there is a significant effect of the priority on an employee and three employability dimensions.

- i) occupational expertise, $F(4, 707) = 3.85, p < .05$
- ii) personal flexibility, $F(4, 707) = 5.77, p < .05$
- iii) balance, $F(4, 707) = 1.62, \text{not significant}$
- iv) anticipation and optimization, $F(4, 707) = 2.95, p < .05$

Games-Howell pairwise test takes a closer look at the differences between priorities for activities of life, per employability dimension. The result is shown in Table 23 and corresponds with the result of the One-Way ANOVA.

Table 23 Result of Games-Howell test for activities of life (management interventions).

Significant difference ($p < .05$)				
	To work	Personal development	Leisure	Care tasks
To work	X		- Occup. exp.	
Personal development		X	- Occup. exp. - Pers. flex. - Anti. & opti.	
Leisure	- Occup. exp.	- Occup. exp. - Pers. flex. - Anti. & opti.	X	- Pers. flex.
Care tasks			- Pers. flex.	X

The results presented above show the priority of employees for activities of life does not influence the need for every employability dimension. Since the aim of this research is to create distinctive categories of employees in order to better align the HR-policy with the needs for these employees, an additional analysis is performed.

Additional analysis

The activities of life 'to work' and 'personal development' are combined, just as the activities of life 'leisure' and 'care tasks'. To work and personal development are combined since they both refer to an employee's career. Leisure and care tasks are combined since they both refer to an employee's personal life. The priorities for activities of life combined in two groups results in two new groups,

'career' and 'personal life'. The results of the One-Way ANOVA are presented below. Having a priority for 'career' or 'personal life' influences the need for HR-instruments assigned to occupational expertise, corporate sense and anticipation and optimization. And influences the satisfaction with management interventions assigned to occupational expertise.

Combining the activities of life into two separate groups results in even less significant relationships (three significant relationships compared with five as presented above), so there is no added value in combining the priorities with regard to making distinctive categories of employees.

	<u>HR-instruments</u>	<u>Management interventions</u>
i) occupational expertise	$F(1, 710) = 10.59, p < .05$	$F(1, 710) = 8.70, p < .05$
ii) personal flexibility	$F(1, 710) = 2.27, \text{not sig.}$	$F(1, 710) = 2.76, \text{not sig.}$
iii) balance	$F(1, 710) = 0.47, \text{not sig.}$	$F(1, 710) = 0.09, \text{not sig.}$
iv) corporate sense	$F(1, 710) = 6.50, p < .05$	<i>(not applicable)</i>
v) anticipation and optimization	$F(1, 710) = 11.15, p < .05$	$F(1, 710) = 2.77, \text{not sig.}$

Reflection theoretical framework

Insights are gained on the meaning of labour market transitions on the needs for employability of employees in §5.2. It is concluded from literature that labour market transitions influence the employment status of an individual and thereby influences its needs for employability. There are no specific statements made with regard to what these needs for employability are during different labour market transitions. The interpretation of labour market transitions as activities of life which can be prioritized by employees makes it difficult to compare the results of the literature study with the results of the empirical research. In general it can be stated that the priority for an activity of life influences the needs for employability of employees.

7.3.4 Generations vs. priorities for activities of life

The second hypothesis is tested in this part:

H2: *Labour market transitions are more suitable than generations to categorize employees according to their needs for employability.*

In order to test the hypothesis, the variables discussed in the previous parts (§7.3.2 and §7.3.3) are compared. But first the relationship between generations and priority for activities of life is shown in Table 24⁴ in order to create insight in the priorities of different generations.

Table 24 shows that employees belonging to a specific generation can have different priorities for activities of life, i.e. priority for work, personal development, leisure or care tasks. All four activities are represented by approximately one fourth of the Baby Boomers. Personal development is the priority for most of the Boomers (27%) and care tasks are the least important for Boomers (21%).

⁴ Employees with a priority for more than one activity (17 employees in total; 7 Boomers, 8 GenX'ers and 2 Millennials) are excluded from the table, which changes the number of employees in every generation.

36% of the GenX'ers has a priority for care tasks and 28% for personal development. To work or leisure are the priority for respectively 18% and 17% GenX'ers.

Almost 50% of the Millennials has a priority for personal development. Thereafter they have a priority for leisure (33%). The remaining Millennials have a priority to work (12%) or care tasks (9%).

Table 24 Priority for activities of life per generation.

Activities of life					
Generation	To work	Personal development	Leisure	Care tasks	Total
Baby Boomers	26%	27%	26%	21%	100%
GenX'ers	18%	28%	17%	36%	100%
Millennials	12%	45%	33%	9%	100%
Total	21%	29%	23%	27%	100%

§7.3.2 showed that the generation an employees' belongs to influences the needs for employability to a certain extent. There is a significant relationship between the generation an employee belongs to and occupational expertise, balance, corporate sense and anticipation and optimization. §7.3.3 showed that the priority for activities of life has an influence on the employability dimensions occupational expertise, personal flexibility, corporate sense and anticipation and optimization to a certain extent as well. An overview of the significant effects is presented in Table 25. A possible significant with management interventions assigned to corporate sense is not applicable (N.A.) due to a low value of α .

Table 25 Significant effects of generations and activities of life on the need for employability dimensions.

Employability dimensions	Occupational expertise		Personal flexibility		Balance		Corporate sense		Anticipation & optimization	
	HR-instr. ^a	Man. interv. ^b	HR-instr.	Man. interv.	HR-instr.	Man. interv.	HR-instr.	Man. interv.	HR-instr.	Man. interv.
Generations	9.45 ^(*)	0.49	0.54	2.99	2.92	5.19 ^(*)	7.63 ^(*)	N.A.	22.00 ^(*)	2.11
Activities of life	2.91 ^(*)	3.85 ^(*)	1.17	5.77 ^(*)	0.75	1.62	2.01	N.A.	3.61 ^(*)	2.95 ^(*)

^a = HR-instruments

^b = management interventions

* = effect is significant at the 0.05 level (2-tailed)

The previous sections have made a distinction between HR-instruments and management interventions assigned to dimensions of employability. As shown in Table 25, there is a significant effect of generations on the need for HR-instruments assigned to occupational expertise, corporate sense and anticipation and optimization. With regard to management interventions the table shows there is a significant effect of generations on the employability dimension balance.

Looking at the activities of life, the effect on the need for HR-instruments assigned to occupational expertise and anticipation and optimization is significant. Regarding management interventions significant relationships are present between activities of life and the employability dimensions occupational expertise, personal flexibility and anticipation and optimization.

In general there are more significant relationships between activities of life and employability dimensions than between generations and employability dimensions. But still, no distinctive categories of employees are made with regard to every employability dimension. Therefore a closer look is taken at:

- i) significant effects of different priorities for activities of life on the need for employability within each generation; and
- ii) significant effects of different generations on the need for employability within each group of employees with a different priority for activities of life.

Looking at each generation separately, the priority for an activity of life influences the need for an employability dimension in five cases. With regard to Boomers, the priority for an activity of life influences the need for HR-instruments anticipation and optimization ($p < .05$). With regard to GenX'ers, the priority for an activity of life influences the need for HR-instruments assigned to occupational expertise and personal flexibility and the satisfaction with management interventions assigned to occupational expertise and anticipation and optimization ($p < .05$).

A closer look at each group of employees with a different priority for an activity of life, the generation an employee belongs to influences the need for employability dimension in four cases. The need for HR-instruments assigned to anticipation and optimization of employees with a priority of personal development, leisure or care tasks, is influenced by the generation they belong to ($p < .05$). With regard to employees with a priority for leisure, the generation an employee belongs to has a significant effect on the need for HR-instruments assigned to corporate sense as well ($p < .05$).

The additional analysis on i) and ii), as presented above, does not lead to more significant effects. Still no distinctive categories of employees can be made with regard to every employability dimension. Therefore the second hypothesis is tested with the results from §7.3.2 and §7.3.3 only. The number of significant effects of activities of life on the need for employability exceeds the number of significant effects of the generation on the need for employability. This leads to the conclusion that the variable 'activities of life' is, to a certain extent, more suitable to categorize employees according to their needs for employability. To a certain extent since no distinctive categories of employees can be made with regard to every employability dimension. The second hypothesis (**H2**) is therewith confirmed to a certain extent as well.

This report continues with chapter 8 presenting the conclusion and recommendations to Wageningen UR. The report ends with chapter 9 which presents the discussion and recommendations for further research.

8. Conclusion and Recommendations

Chapter 4 to 7 have provided the insights to answer research question 1 to 5. This chapter will formulate a conclusion to each research question and therewith answers the main research question (§8.1). Recommendations towards the commissioner, Wageningen UR, are formulated in §8.2.

8.1 Conclusions

The main research question formulated at the beginning of this research:

What are the needs for employability of employees of a knowledge intensive organization and what variable is best when categorizing employees according to these needs?

The answer to this main research question is formulated by answering the five research question.

1) **What is employability and which dimensions of employability are defined in literature?**

Employability is defined as “*the capacity and willingness of workers to remain attractive for the labour market (supply factors), by reacting to and anticipating changes in tasks and work environment (demand factors), facilitated by the human resources development instruments available to them (institutions)*” (De Grip et al., 2004, p.216). This definition of employability refers to a shared responsibility of the employee and employer regarding the employee’s employability. The employee should be willing to remain attractive for the labour market and the employer has a facilitating role by offering human resources development instruments to the employee.

Several sets of employability dimensions are discussed in this research. Each set of employability dimensions approaches the concept from a different perspective. The employability dimensions defined by Van der Heijde and Van der Heijden (2006) are included in this research. The employability dimensions represent five competences that employees should possess in order to be employable. An employer can invest in the development of these competences. The employability dimensions are:

- i) *Occupational expertise:* A high degree of knowledge and skills related to a particular professional domain and social recognition by important key figures.
- ii) *Personal flexibility:* Adapting easily to all kinds of changes in the internal and external labour market.
- iii) *Balance:* “Compromising between opposing employers’ interests and own opposing work, career and private interests”.
- iv) *Corporate sense:* Builds on social capital, social skills, and emotional intelligence.
- v) *Anticipation & optimization:* “Preparing for future work changes in a personal and creative manner in order to strive for the best possible job and career outcomes”.

Source: Van der Heijde & Van der Heijden, 2006, p.454-456

2) What is characteristic for employees of a knowledge intensive organization concerning employability?

A knowledge intensive organization is described as “a company where most work can be said to be of an intellectual nature and where well qualified employees form the major part of the workforce” (Alvesson, 2000). The well qualified employees of a knowledge intensive organization are called knowledge workers. They are of strategic importance for the organization and therefore they should be approached with a commitment-based HR-system which focuses on creating a long term relationship between the organization and its employees.

Empowerment, development and motivation are key words. Knowledge workers should be in control of their own destiny and should be able to take decisions, think, behave and control work in their own way (empowerment). Those who hold critical knowledge should be enabled to develop themselves by investing in training and education related to one's discipline and social and emotional skills (development). At last motivation of knowledge workers is important. They can be motivated partly due to empowerment and development, but a good work-life balance is also relevant just as receiving feedback and a variety of tasks within the job.

3) What conditions for employability are valued most by employees of a knowledge intensive organization?

The result of the empirical research shows employees are, in general, most in need of HR-instruments assigned to the employability dimension 'personal flexibility', followed by 'occupational expertise'. The percentage knowledge workers in need of occupational expertise, personal flexibility, corporate sense and anticipation and optimization is higher compared with members of the staff. An equal percentage of knowledge workers and members of the staff is in need of balance. (see Table 26)

Table 26 Average need of employees for each employability dimension.

Employability dimension	Knowledge workers and staff		Total of all employees
Occupational expertise	58%	Knowledge worker	56%
	53%	Staff	
Personal flexibility	80%	Knowledge worker	76%
	72%	Staff	
Balance	24%	Knowledge worker	24%
	24%	Staff	
Corporate sense	35%	Knowledge worker	30%
	25%	Staff	
Anticipation and optimization	41%	Knowledge worker	37%
	32%	Staff	

The average scores of employees in general with regard to the management interventions are all close to 2.5 (see Table 27). An average score for corporate sense is not calculated due to a low value

of Cronbach's α . Employees are most positive about management interventions assigned to 'balance'. The average score for the remaining three dimensions is more negative. The table also shows there is little different between knowledge workers and members of the staff.

Table 27 Average score of employees for management interventions for each employability dimension.

Employability dimension	Knowledge workers and staff		Average score of employees
Occupational expertise	2.5	Knowledge workers	2.6
	2.6	Staff	
Personal flexibility	2.7	Knowledge workers	2.7
	2.8	Staff	
Balance	2.4	Knowledge workers	2.4
	2.5	Staff	
Anticipation and optimization	2.7	Knowledge workers	2.7
	2.8	Staff	

The overall result of the empirical research shows that knowledge workers, in general, have more needs for employability compared to members of the staff. This rejects the first hypothesis since it states knowledge workers to have different needs for employability. Knowledge workers do not have different needs for employability compared with members of the staff, but they have more needs for employability.

There appears to be a significant effect of being a knowledge worker or member of the staff on the needs for HR-instruments assigned to 'personal flexibility', 'corporate sense' and 'anticipation and optimization' ($p < .05$). The effect of being a knowledge worker or member of the staff on the satisfaction with management interventions assigned to 'anticipation and optimization' is also significant ($p < .05$).

4) Which variables can be distinguished for making distinctive categories of employees according to their needs for employability?

This research includes two variables: i) the generation an employee belongs to and ii) the labour market transitions the employee can experience.

A generation is defined as "a group of individuals similar in age who have experienced the same historical events within the same time period" (Ryder, 1965). Three generations are included in this research; Baby Boomers, Generation X and Millennials.

Labour market transition are defined "as institutionalized arrangements which allow or support the change of the employment status or the combination of labour market work with other socially (and to some extent even economically) useful activities" (Schmid, 1998). There are five labour market transitions:

- i) Transitions between different working time regimes;
- ii) Transitions between unemployment and employment;
- iii) Transitions between education or training and employment;
- iv) Transitions between productive (but unpaid) private work and (paid) market work
- v) Transitions from employment to retirement.

Both variables, generations and labour market transitions, are expected to be able to distinguish different categories of employees according to their need for employability.

5) Which variable is most suitable when categorizing employees according to their needs for employability?

The empirical part of this research compared two variables, generations and labour market transitions. Due to practical reasons, the labour market transitions are translated into four activities of life; to work, personal development, leisure and care tasks.

The result of the empirical research shows categorizing employees according to the generation they belong to, results in four significant relationships. The generation an employee belongs to has effect on the need for HR-instruments assigned to occupational expertise, corporate sense and anticipation and optimization ($p < .05$). The generation an employee belongs to also influences the satisfaction with management interventions assigned to balance ($p < .05$).

The result of the empirical research shows, categorizing employees according to their priority for an activity of life, results in six significant relationships. The priority for an activity of life has effect on the need for HR-instruments assigned to occupational expertise and anticipation and optimization ($p < .05$). The priority for an activity of life influences the satisfaction with management interventions assigned to occupational expertise, personal flexibility, corporate sense and anticipation and optimization as well ($p < .05$). The additional analysis in which employees of distinct generations are categorized according to their priority and in which employees with different priorities are categorized according to the generation they belong to, does not lead to more significant effects on the needs for employability.

Although some significant effects of the variables on the need for employability are proven, both variables are unable to make distinctive categories of employees for every employability dimension. It is concluded that, of these two variables no variable is more suitable to make distinctive categories of employees. This rejects the second hypothesis.

Answer to the main research question:

What are the needs for employability of employees of a knowledge intensive organization and what variable is best when categorizing employees according to these needs?

Employees of a knowledge intensive organization express most needs for HR-instruments assigned to personal flexibility and occupational expertise and are most satisfied with management interventions assigned to balance. The opportunity to organize own work activities is needed most by employees.

The variables included in this research, generations and activities of life, are not suitable to make distinctive categories of employees with regard to their needs for employability. The question emerges if there might be another variable more suitable to categorize employees. In response to this question a closer look is taken at the data and four possible variables:

- i) *Family composition*; it might be expected that living alone or living together, with or without children influences the needs for employability of an employee.
- ii) *Gender*; males and females are expected to have different beliefs and behaviors (Price, 2007) which can influence their needs for employability.
- iii) *Highest level of education*; lower-skilled employees might have less or different needs for employability compared with higher-skilled employees.
- iv) *Divisions of Wageningen UR*; the employees that participated in this study, are employed at three different divisions of Wageningen UR: Wageningen University, Van Hall Larenstein, the DLO Foundation. It might be possible that the characteristics of these divisions influence the needs for employability of employees.

The results of the analysis show family composition does not influence the needs for employability of employees. The division of Wageningen UR where an employee is employed hardly influences the need for employability of employees. Gender influences the need for employability to a greater extent. Female employees need HR-instruments assigned to occupational expertise and anticipation and optimization more compared with male employees ($p < .05$). Female employees are more positive about management interventions assigned to balance and more negative about management interventions assigned to occupational expertise compared with male employees ($p < .05$).

The variable that influences the need for employability of employees the most, is the level of education. Employees with a higher professional or (post)academic degree need employability more compared with lower-skilled employees. The level of education has a significant effect on the need for HR-instruments assigned to personal flexibility, corporate sense and anticipation and optimization ($p < .05$). Higher skilled employees are more satisfied with management interventions assigned to occupational expertise and anticipation and optimization ($p < .05$).

Despite the fact that the level of education does influence the needs for employability of employees to a certain extent, no distinctive categories of employees with regard to every employability dimension can be made according to this variable. This leads to the conclusion that employees should not be categorized according to any of these variables. In order to better align the HR-policy of an

organization with the need for employability of its employees, it would be more appropriate to look at each HR-instruments and management intervention separately and to gain insight in the characteristics of the employee that needs these HR-instruments and management interventions. The results of the empirical research can be used to gain these insights.

§8.1 presented the answers to the research questions and concluded with an answer to the main research question. These conclusions lead to recommendations for Wageningen UR presented in the next section.

8.2 Recommendations for Wageningen UR

Following the conclusion presented in §8.1 and prior chapters of this report, recommendations to Wageningen UR are formulated. First the objective of this research is mentioned once more.

“The objective of this research is to gain insight in the concept of and need for employability in knowledge intensive organizations and to indicate a variable which is best suited to categorize the employees according to their needs for employability. The outcome of this research is used to advice Wageningen UR in order to better align its HR-policy with the needs of its employees.”

The advice for Wageningen UR is presented in this section.

In general, this research can underpin the intention of Wageningen UR to better align its HR-policy with the needs of its employees. Employers that identify and meet the needs of their employees are expected to be most successful. Unfortunately, making categories of employees using a single variable seems to be difficult. Besides, with regard to generations as a variable, the result of the literature study already showed there are little differences at work between generations.

In order to enable Wageningen UR to better align its HR-policy with the needs for employability of its employees, it is recommended to change their approach. Instead of making distinctive categories of employees to gain insight in their needs for employability, Wageningen UR should focus at each HR-instrument and management intervention separately and gain insight in the characteristics of the employees that need these HR-instruments and management interventions.

This research also leads to another point of attention. Some HR-instruments and management interventions offered by Wageningen UR are not familiar to all employees. So the first thing to start with, is making all employees familiar with the HR-instruments and management interventions available to them. This might lead to fulfilling already existing needs for employability of employees, which brings Wageningen UR already a little closer to an individualized HR-policy.

In order to achieve this, three steps need to be taken:

- 1) Determine which HR-instruments are known to less than 60% of the employees and improve the familiarity among employees.
- 2) Determine for each HR-instrument which employees have expressed their need and customize the HR-instrument if necessary.

- 3) Look at the satisfaction of employees with each management intervention and try to improve the satisfaction of employees wherever possible.

This report will support Wageningen UR when carrying out the above mentioned steps. A list of HR-instruments and management interventions which require attention is presented below. Appendix VI is used to formulate the recommendations.

1) HR-instruments; familiarity

There are six HR-instruments which are known to less than 60% of the employees. These HR-instruments are:

- i) The opportunity to participate in job- or discipline related education
- ii) EVC's (acknowledgement of acquired competencies)
- iii) Assessment of skills and knowledge for career development
- iv) Transfer of knowledge and skills of the older, experienced generation to the younger generation
- v) The opportunity to participate in teams, to improve teambuilding and collaboration

Some of these instruments are discussed below as well. It is recommended to Wageningen UR to take a closer look at these HR-instruments and decide to dedicate time to increase the number of employees that are familiar with these HR-instruments. This could enable Wageningen UR to meet unmet needs.

2) HR-instruments; use and need

Ten HR-instruments are used by fewer employees than they are needed. The HR-instruments are discussed below and more insight is gained regarding the employees that need these instruments. Wageningen UR can use these insights to customize the (offer of the) HR-instrument.

- i) The opportunity to organize own work activities

The opportunity to organize own work activities is used by 57% of the employees and needed by 70% of the employees. Little difference is found between knowledge workers and members of the staff, between different generations and between activities of life. (see Table 28) It is recommended to offer this HR-instrument to a larger part of the workforce.

Table 28 The opportunity to organize own work activities.

Employees ⁵								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
75%	69%	69%	71%	71%	70%	72%	66%	71%

⁵ Specified for each table: KW = knowledge workers; S = staff; BB = Baby Boomers; GX = GenX'ers; M = Millennials; W = to work; PD = personal development; L = leisure; CT = care tasks

ii) The opportunity to participate in job- or discipline related education

The opportunity to participate in job- or discipline related education is used by 26% of the employees and needed by 31% of the employees. GenX'ers have most need this HR-instrument. Looking at the activities of life, this HR-instrument appears to be most important for employees with a priority to work. No difference is found between knowledge workers and members of the staff. (see Table 29)

It is recommended to keep the different generations in mind when offering this HR-instrument to the workforce.

Table 29 The opportunity to participate in job- or discipline related education.

Employees								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
24%	24%	22%	28%	15%	29%	23%	23%	21%

iii) EVC's

The EVC's, acknowledgement of acquired competencies, is an HR-instrument used by 3% of the employees but needed by 26% of the employees. Although this HR-instrument is intended to support members of the staff, an equal percentage of knowledge workers and members of the staff have a need for this instrument.

GenX'ers most need for this HR-instrument, followed by Boomers. Millennials have little interest in this HR-instrument. Looking at the activities of life, this HR-instrument appears to be most important for employees with a priority for personal development or a priority to work. (see Table 30)

The large number of knowledge workers that have expressed a need for this HR-instrument could be explained by the fact that few employees are familiar with the instrument, so the instrument could be misinterpreted. It is therefore recommended to Wageningen UR to make more employees familiar with the instrument on the one hand. On the other hand, the employees have expressed a need for 'acknowledgement of competencies'. Wageningen UR should value the experiences of its employees.

Table 30 Acknowledgement of acquired competences.

Employees								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
25%	28%	25%	30%	16%	27%	31%	21%	23%

iv) Assessment of skills and knowledge for career development

The assessment of skills and knowledge is used by 9% of the employees whereas 24% of the employees have a need for this instrument. Knowledge workers have more need for the assessment than members of the staff. Millennials most need this HR-instrument, Boomers the least. Employees with a priority for personal development are the largest group that express the need for the assessment. (see Table 31)

It is recommended to keep the different generations and priorities in mind when offering this HR-instrument to the workforce.

Table 31 The assessment of skills and knowledge.

Employees								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
28%	20%	14%	30%	41%	24%	31%	16%	23%

- v) The opportunity to receive career advice and get help with career planning

The opportunity to receive career advice and get help with career planning is used by 7% of the employees but needed by 23% of the employees. This HR-instrument is needed most by knowledge workers. Looking at the generations, the youngest generation (Millennials) most need the instrument. Followed by GenX'ers and at last the Boomers. Personal development is again an important priority for employees that need this HR-instrument. (see Table 32)

It is recommended to keep the different generations and priorities in mind when offering this HR-instrument to the workforce.

Table 32 The opportunity to receive career advice and get help with career planning.

Employees								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
27%	20%	15%	28%	37%	23%	31%	19%	20%

- vi) The opportunity to be coached by the supervisor

The opportunity to be coached by the supervisor is used by 17% of the employees and needed by 22% of the employees. More knowledge workers have a need for this HR-instrument compared with members of the staff. The HR-instrument is of equal importance for GenX'ers and Millennials. Looking at the activities of life, this HR-instrument appears to be most important for employees with a priority for personal development. (see Table 33)

It is recommended to keep the GenX'ers and Millennials and employees with a priority for personal development in mind when offering this HR-instrument to the workforce.

Table 33 The opportunity to be coached by the supervisor.

Employees								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
26%	17%	14%	28%	29%	23%	30%	17%	16%

- vii) Transfer of knowledge and skills of the older, experienced generation to the younger generation

The transfer of knowledge and skills of the older, experienced generation to the younger generation is applied by 13% of the employees and needed by 23% of the employees. The HR-instrument is needed most by knowledge workers, GenX'ers, Millennials and employees with a priority for personal development. (see Table 34)

It is recommended to keep these characteristics in mind when offering the HR-instrument to the workforce.

Table 34 The transfer of knowledge and skills.

Employees								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
26%	15%	15%	24%	29%	19%	28%	18%	15%

- viii) Special leave due to exceptional circumstances

Special leave due to exceptional circumstances is used by 9% of the employees and needed by 10% of the employees. GenX'ers have most need this HR-instrument most. Little difference is found between knowledge workers or members of the staff and activities of life. (see Table 35)

It is recommended to keep especially the need of GenX'ers in mind.

Table 35 Special leave due to exceptional circumstances.

Employees								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
7%	9%	7%	12%	9%	10%	9%	8%	11%

- ix) Care leave

Care leave is used by 3% of the employees and needed by 8% of the employees. Employees belonging to the Baby Boom generation and Generation X most need this HR-instrument. It is also needed by employees with a priority for care tasks. Little difference is found between knowledge workers and members of the staff. (see Table 36)

It is recommended to keep the need of Boomers, GenX'ers and employees with a priority for care tasks in mind.

Table 36 Care leave.

Employees								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
7%	9%	8%	8%	3%	9%	7%	4%	11%

x) Introduction meeting for new employees

The introduction meeting for new employees is used by 7% of the employees and needed by 8% of the employees. The HR-instrument is needed most by Millennials and employees with a priority for personal development. Little difference is shown between knowledge workers and members of the staff. (see Table 37)

It is recommended to keep these two groups, Millennials and employees with a priority for personal development, in mind when offering this HR-instrument to the workforce.

Table 37 The introduction meeting for new employees.

Employees								
Workers		Generations			Activities of life			
KW	S	BB	GX	M	W	PD	L	CT
9%	7%	5%	9%	15%	6%	11%	8%	6%

It is up to Wageningen UR to decide whether or not to spend more attention to these HR-instruments, to raise awareness and create more understanding among employees about these HR-instruments.

3) Management interventions

Some management interventions are brought under attention because of the low scores on satisfaction. It is up to Wageningen UR to determine which improvements are feasible.

- i) Participation in management – and talent development groups is promoted according to only 25% of the employees. This might be a realistic percentage due to the selection of candidates by the management.
- ii) 25% of the employees never receives feedback additional to the P&D interview.
- iii) The opportunity to get a mentor is unknown to 40% of the employees and the opportunity to receive a career coach is unknown to 57% of the employees.

This report ends with chapter 9 which critically discusses this research and presents recommendations for further research.

9. Discussion

Several remarks can be made with regard to this research, presented below. Some remarks result in recommendations for further research.

- i) A literature search on 'knowledge intensive organizations' and 'knowledge workers' resulted in many articles on 'knowledge management'. The majority of the articles is written from the perspective of the employer. In this research the focus was on the perspective of the employee, the support they need from their employer in order to become or stay employable. Therefore the theory on 'knowledge management' was not included in this research.

It could be interesting to see how an organization would be able to manage the knowledge of their employees on the one hand and fulfill the needs for employability of the employees on the other hand.

- ii) As explained above, this research focused on sets of employees (i.e. different sets of human resources) represented by a knowledge intensive organization. The HR-policy of the reference company is central in this research, which makes the results less applicable to other knowledge intensive organizations. The characteristics of employees of a knowledge intensive organization are taken into account but the characteristics of a knowledge intensive organization in general are not taken into account.

If the focus of a research would be on the influence of the characteristics of a knowledge intensive organization on the needs for employability of its employees, it is recommended to include several knowledge intensive organizations in the research. Including more knowledge intensive organizations equals including more HR-policies in the research. The results would then be more general and wider applicable to other knowledge intensive organizations.

- iii) The theory on labour market transitions, included in this research, is focused on the macro-economic perspective. In this research a translation is made to the individual level in order to categorize employees according to their needs for employability. In the end an employees' priority for an 'activity of life' is used to make distinctive categories. Two remarks can be made:
 - o In order to categorize employees according to the labour market transition they experience, research is needed on the exact interpretation and consequences of labour market transitions on the individual level. In literature the transitional labour market is often associated with social risk management. This could be used as starting point.
 - o The labour market transitions refer to different changes in the employment status of an employee. Whether it is a transition between employment and unemployment or between employment and private work activities. Some employees might not experience such a transition at a certain moment in life. When the labour market transitions are used again to categorize employees, this should be taken into account.

- iv) Employees with a Dutch nationality have participated in this research. So the result of this research is only applicable on Dutch employees of knowledge intensive organizations.
There is an opportunity for further research to identify the difference between cultures with regard to needs for employability. The same research can be conducted on the need for employability among Dutch employees and foreign employees.
- v) Assigning HR-instruments and management interventions to the employability dimensions is done by the researcher and the commissioner. Cronbach's α showed the scaling of the different employability dimensions was not reliable for every employability dimension (see §7.3).
More research is needed on the operationalization of employability dimensions into HR-instruments and management instruments offered by employers. In other words, more research is needed on the responsibility and interpretation of the employers' role with regard to the employability of its employees in order to improve the reliability of the scaling.
- vi) The questionnaire included 21 HR-instruments. Employees were asked about their familiarity with, use made of an need for these instruments. The first two questions, 'being familiar with' and 'use made of', are used to gain insight in the current situation. The third question, 'in need of', is used to gain insight in the need of employees. The answer to the latter is used to determine the need of employees for the HR-instruments. Employees that are currently using the HR-instrument may not have indicated their need, since their need is already met. So the need for HR-instruments as determined in this research can be interpreted to some extent as the future need for employability of employees.
- vii) It would have been a good addition to discuss the results of this research in a focus group. A focus group gives the researcher the opportunity to verify the results of the research. Employees would have the opportunity to put the results in perspective. Unfortunately, due to time restrictions no focus group was organized.
- viii) This research gained insight in the need for employability of employees. The research has not taken into account the actual employability of employees. It might be of interest for an organization to measure the employability of its employees and to gain insight in the needs for employability at the same time. If the research is repeated one or more years later, insight is gained in the development of the employees' employability on the one hand and in the contribution of the HR-policy on the employability of employees on the other hand.

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Appendices

- I. E-mail to employees of Wageningen UR
- II. Questionnaire
- III. HR-instruments assigned to the different employability dimensions
- IV. Management interventions assigned to the different employability dimensions
- V. Results related to management interventions per group
- VI. Results of the assessment
- VII. Additional information for Wageningen UR

I. E-mail to employees of Wageningen UR

Onderwerp: Brief dr. I.J.J.H. Breukink inzake Onderzoek behoefte medewerkers in relatie tot duurzame inzetbaarheid

Beste collega,

Duurzame inzetbaarheid van medewerkers is een onderwerp dat maatschappelijk hoog op de agenda staat, zo ook binnen Wageningen UR. Duurzame inzetbaarheid maakt dat werknemers plezierig, gemotiveerd en gezond aan het werk blijven en een positieve bijdrage blijven leveren aan het bedrijfsresultaat. Het onderwerp is meermalen besproken met de werknemersorganisaties. Daarbij is naar voren gekomen dat we meer willen weten over dat wat medewerkers nodig hebben om hun eigen duurzame inzetbaarheid vorm te kunnen geven.

Daarom wordt een onderzoek uitgevoerd door Margot Baas die als Master student van Wageningen University de opleiding 'Management, Economics and Consumer Studies' met als specialisatie 'Human Resource Management' volgt. Het onderzoek is haar afstudeerproject. Zij onderzoekt de behoeften van werknemers met betrekking tot duurzame inzetbaarheid, hun eigen keuzes en hun verwachtingen inzake de ondersteuning door de organisatie. Medewerkers van Wageningen University, Van Hall Larenstein en Stichting DLO zullen deelnemen aan het onderzoek.

U bent via een aselechte steekproef uit het personeelsbestand van Wageningen UR geselecteerd om deel te nemen aan het onderzoek. Deelname aan het onderzoek bestaat uit het invullen van een **online vragenlijst**. De antwoorden die u geeft worden op geen enkele wijze aan uw persoonlijke gegevens gekoppeld. De antwoorden worden automatisch en anoniem verwerkt. Het invullen van de vragenlijst wijst zichzelf en neemt ongeveer 15 minuten van uw tijd in beslag.

Indien u besluit mee te doen aan het onderzoek verzoek ik u vriendelijk **vóór 8 november** de vragenlijst in te vullen. Mocht u vragen hebben over het onderzoek, dan kunt u contact opnemen met Margot Baas via margot.baas@wur.nl of met Romke Kuindersma, beleidsmedewerker Corporate HR, via romke.kuindersma@wur.nl.

Uw medewerking stel ik zeer op prijs.

Met vriendelijke groet,

dr. I.J.J.H. Breukink,
lid Raad van Bestuur

II. Questionnaire

Beste medewerker,

De vragenlijst begint met een aantal vragen over uw persoonlijke situatie. Er wordt gekeken naar het verband tussen de persoonlijke situatie van werknemers van Wageningen UR en hun behoefte aan mogelijkheden om hun eigen duurzame inzetbaarheid vorm te geven. Duurzaam inzetbare werknemers blijven plezierig, gemotiveerd en gezond aan het werk en leveren een positieve bijdrage aan het bedrijfsresultaat.

Privacy staat voorop. Daarom is gegarandeerd dat alle antwoorden anoniem worden verwerkt. Het invullen van de vragenlijst neemt ongeveer 15 minuten van uw tijd in beslag.

Bij voorbaat dank voor uw medewerking en het invullen van de vragenlijst!

A. Persoonlijke situatie

a. Huishouden

- 1) Hoe is uw huishouden samengesteld?
 - Gehuwd of samenwonend zonder kinderen (*ga verder naar vraag 5*)
 - Gehuwd of samenwonend met kinderen
 - één ouder huishouden
 - ongehuwd of niet samenwonend
- 2) Hoeveel kinderen heeft u?
 - Ik heb geen kinderen. (*ga verder naar vraag 5*)
 - 1 of 2 kinderen
 - 3 of 4 kinderen
 - 5 kinderen of meer
- 3) U heeft aangegeven dat u kinderen heeft, in welke leeftijdscategorie vallen ze?
(meerdere antwoorden mogelijk)
 - 0-12 jaar oud
 - 13-21 jaar oud
 - 22 jaar of ouder
- 4) Wonen één of meer kinderen bij u thuis?
 - ja
 - nee

b. Huidige werksituatie

5) Wat is de hoogst voltooide opleiding waarvan u een diploma heeft behaald?

- lager algemeen onderwijs (lagere school, basisschool)
- lager beroepsonderwijs (LTS, LEAO, LHNO, VMBO)
- middelbaar algemeen onderwijs (MULO, MAVO)
- middelbaar beroepsonderwijs (MEAO, MTS)
- hoger algemeen voortgezet onderwijs (HBS, HAVO, VWO)
- hoger beroepsonderwijs (HTS, HEAO, PABO)
- (post-) academisch onderwijs (universiteit)

6) Binnen welk onderdeel van Wageningen UR bent u werkzaam?

- Wageningen University
- Van Hall Larenstein
- Stichting DLO

7) U werkt bij (*antwoord op vraag 6*), binnen welke categorie valt uw functie?

Wageningen University

- Wetenschappelijk personeel
- Promovendus
- Staf- en ondersteunend personeel

Van Hall Larenstein

- Docent
- Staf en ondersteunend personeel

Stichting DLO

- Onderzoeker
- Staf en ondersteunend personeel

8) Hoeveel jaren bent u werkzaam in uw huidige functie?

..... jaar

c. Opleiding en training

De volgende twee vragen zijn van toepassing op de tijdsperiode van nu tot een jaar geleden.

9) Hoeveel dagen heeft u naar schatting het afgelopen jaar besteed aan training en opleiding in het vakgebied en / of de functie waar u op dit moment werkzaam bent?

..... dagen

10) Hoeveel dagen heeft u naar schatting het afgelopen jaar besteed aan training en opleiding buiten het vakgebied en / of de functie waar u op dit moment werkzaam bent?

NB: Onderwijs om vaardigheden te ontwikkelen die u alleen in uw privéleven toepast vallen hier niet onder.

..... dagen

d. Dagelijks leven

Hieronder wordt een tiental stellingen over het dagelijks leven aan u voorgelegd. De stellingen hebben betrekking op uw persoonlijke situatie en uw werksituatie.

11) Kruis per stelling aan in hoeverre u zich in de uitspraak herkent.

	Zeker wel	Wel	Enigszins	Nauwelijks	Zeker niet
Als mijn leidinggevende buiten werktijd belt, neem ik altijd de telefoon op.	<input type="checkbox"/>				
Mijn vrije tijd besteed ik grotendeels aan zorg voor familie en verwanten.	<input type="checkbox"/>				
Ik vind het belangrijk om genoeg tijd voor mezelf te hebben.	<input type="checkbox"/>				
Geld verdienen is voor mij het belangrijkste aspect van mijn werk.	<input type="checkbox"/>				
Ik besteed veel tijd aan het verbeteren van mijn kennis en vaardigheden.	<input type="checkbox"/>				
Mijn vrije tijd besteed ik grotendeels aan sporten.	<input type="checkbox"/>				
Hobby's betekenen veel voor me.	<input type="checkbox"/>				
Ik ben er volledig op gericht mezelf te blijven ontwikkelen.	<input type="checkbox"/>				
Tijd doorbrengen met familie en/of vrienden vind ik erg belangrijk.	<input type="checkbox"/>				
Een betaalde baan geeft veel status en aanzien.	<input type="checkbox"/>				

12) Hieronder wordt een viertal levenskenmerken gegeven: werken, zorgtaken, persoonlijke ontwikkeling en vrije tijd. Wilt u deze levenskenmerken op volgorde zetten van hoe belangrijk u ze momenteel vindt? U kunt iedere waardering, van 'heel belangrijk' tot 'minst belangrijk', één keer kiezen.

	Heel belangrijk	Belangrijk	Redelijk belangrijk	Minst belangrijk
Zorgtaken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Werken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persoonlijke ontwikkeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vrije tijd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B. Inzetbaarheid

In de komende 5 vragen worden mogelijkheden aan u voorgelegd die duurzame inzetbaarheid kunnen vergroten. Deze mogelijkheden worden aangeboden door Wageningen UR. Iedere set vragen legt een aantal mogelijkheden aan u voor die bepaalde dimensies van duurzame inzetbaarheid bij u kunnen vergroten.

Per mogelijkheid wordt u gevraagd of u

- 1) met de mogelijkheid bekend bent,
- 2) van de mogelijkheid gebruik maakt en
- 3) of u behoefte heeft aan deze mogelijkheid.

Indien u antwoordt dat u met de mogelijkheid bekend bent (1), van de mogelijkheid gebruik maakt (2) of behoefte heeft aan de mogelijkheid (3), kruist u het bijbehorende hokje aan.

Indien u niet bekend bent met de mogelijkheid (1), er geen gebruik van maakt (2) en/of er geen behoefte aan heeft (3), kruist u het bijbehorende hokje niet aan.

U kunt ook alle hokjes open laten bij bepaalde mogelijkheden.

Voorbeeld 1:

- 1) U bent bekend met de mogelijkheid tot deeltijd werken, (hokje aankruisen),
- 2) u maakt geen gebruik van deze mogelijkheid (hokje niet aankruisen) maar
- 3) u heeft wel behoefte aan deze mogelijkheid (hokje aankruisen).

Voorbeeld 2:

- 1) U bent niet bekend met de mogelijkheid tot deeltijd werken (hokje niet aankruisen),
- 2) u maakt dus ook geen gebruik van deze mogelijkheid (hokje niet aankruisen) en
- 3) u heeft geen behoefte aan deze mogelijkheid (hokje niet aankruisen).

13) Deze mogelijkheden hebben betrekking op de aanwezigheid van kennis en vaardigheden gerelateerd aan het vakgebied waar u werkzaam bent.

	1. Ik ben met de mogelijkheid bekend.	2. Ik maak van de mogelijkheid gebruik.	3. Ik heb behoefte aan de mogelijkheid.
De mogelijkheid tot vakgericht en functiegericht opleiden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taakverbreding, binnen een functie meer uiteenlopende taken opnemen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deelname aan projecten binnen de afdeling waar u werkzaam bent of tussen verschillende afdelingen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erkenning van Verworven Competentie (EVC's) op basis van werkervaring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De mogelijkheid om gecoacht te worden door uw leidinggevende	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14) De volgende mogelijkheden kunnen uw flexibiliteit, de mate waarin u zich aan kunt passen aan interne en externe veranderingen, bevorderen.

	1. Ik ben met de mogelijkheid bekend.	2. Ik maak van de mogelijkheid gebruik.	3. Ik heb behoefte aan de mogelijkheid.
Invloed op de indeling van eigen werkzaamheden, denk hierbij aan werkwijze en tempo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meerjarige opbouw van verlof- en compensatie-uren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De mogelijkheid om binnen de organisatie van functie te wisselen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training sociale vaardigheden, zoals een training in samenwerken of leidinggeven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15) De volgende mogelijkheden kunnen u helpen bij het vinden van een balans tussen uw werkleven en uw privéleven.

	1. Ik ben met de mogelijkheid bekend.	2. Ik maak van de mogelijkheid gebruik.	3. Ik heb behoefte aan de mogelijkheid.
Deeltijd werken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Afspraken maken met de leidinggevende over de opvang van kinderen, zoals aangepaste werktijden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Buitengewoon verlof door persoonlijke omstandigheden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seniorenregeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zorgverlof	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16) De volgende mogelijkheden hebben betrekking op het delen van verantwoordelijkheden, kennis en sociale vaardigheden.

	1. Ik ben met de mogelijkheid bekend.	2. Ik maak van de mogelijkheid gebruik.	3. Ik heb behoefte aan de mogelijkheid.
Introductieprogramma voor nieuwe medewerkers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De mogelijkheid om in groepen te werken, om teambuilding en samenwerking te bevorderen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deelname aan sociale functies, zoals de medezeggenschapsraad of de personeelsvereniging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overdracht van kennis en vaardigheden van de oudere, ervaren generatie op de jongere generatie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17) De volgende mogelijkheden hebben betrekking op loopbaanbegeleiding en -planning.

	1. Ik ben met de mogelijkheid bekend.	2. Ik maak van de mogelijkheid gebruik.	3. Ik heb behoefte aan de mogelijkheid.
De mogelijkheid loopbaanadvies te ontvangen en hulp te krijgen bij het plannen van de loopbaan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R&O gesprek (Resultaat & Ontwikkeling)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assessment van vaardigheden en kennis met het oog op de loopbaan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C. Rol leidinggevende

De volgende vragen gaan over de rol die uw leidinggevende kan spelen bij het vergroten van uw inzetbaarheid.

- 18) Heeft u inhoudelijk invloed op beleidspunten die relevant zijn bij de uitvoering van uw functie?
- zeker wel
 - wel
 - enigszins
 - nauwelijks
 - zeker niet
- 19) Uitgaande van zelfstandige uitoefening van uw functie, beschikt u dan over de informatie die u nodig hebt bij het uitvoeren van uw functie en het nemen van beslissingen?
- altijd
 - meestal
 - soms
 - zelden
 - nooit
- 20) Indien van toepassing, bespreekt u met uw leidinggevende uw verwachtingen met betrekking tot doorgroeimogelijkheden binnen de organisatie?
- zeker wel
 - wel
 - enigszins
 - nauwelijks
 - zeker niet
 - niet van toepassing
- 21) Benut uw leidinggevende uw talent, kennis en vaardigheden?
- zeker wel
 - wel
 - enigszins
 - nauwelijks
 - zeker niet
- 22) Bevordert uw leidinggevende de deelname aan 'management development' of 'talent development' groepen?
- zeker wel
 - wel
 - enigszins
 - nauwelijks
 - zeker niet

- 23) Hoe vaak krijgt u feedback van uw leidinggevende over uw functioneren, buiten uw R&O-gesprek om?
- nooit
 - 1 keer per jaar
 - ieder half jaar
 - 1 keer per 3 maanden
 - 1 keer per maand of vaker
- 24) Bent u tevreden met de wijze waarop u feedback van uw leidinggevende ontvangt?
- heel erg tevreden
 - tevreden
 - enigszins tevreden
 - nauwelijks tevreden
 - helemaal niet tevreden
- 25) Biedt uw leidinggevende mentoren aan?
- ja
 - nee
 - weet ik niet
- 26) Ondersteunt uw leidinggevende u in uw persoonlijke ontwikkeling?
- zeker wel
 - wel
 - enigszins
 - nauwelijks
 - zeker niet
- 27) Steunt uw leidinggevende u in uw keuze van arbeidsvoorwaarden om een goede werk - privé balans te bereiken?
- altijd
 - meestal
 - soms
 - zelden
 - nooit
- 28) Bent u tevreden over de ondersteuning van uw leidinggevende bij het in balans houden van werk en privé?
- heel erg tevreden
 - tevreden
 - enigszins tevreden
 - nauwelijks tevreden
 - helemaal niet tevreden

29) Bespreekt u het zoeken naar een nieuwe functie of baan met uw leidinggevende?
N.B. Indien dit niet op u van toepassing is omdat u op dit moment niet op zoek bent naar een nieuwe functie of baan, volstaat een schatting.

- altijd
- meestal
- soms
- zelden
- nooit

30) Biedt uw leidinggevende loopbaancoaches aan?

- ja
- nee
- weet ik niet / niet op mij van toepassing

31) Stelt uw leidinggevende u in staat om uw kennis en vaardigheden te ontwikkelen die nodig zijn om uw functie uit te voeren?

- zeker wel
- wel
- enigszins
- nauwelijks
- zeker niet

D. Algemene vragen

U bent aangekomen bij de laatste twee vragen. Na het beantwoorden van deze vragen heeft u de vragenlijst volledig ingevuld.

32) Wat is uw geslacht?

- vrouw
- man

33) Wanneer bent u geboren?

- in 1942 of eerder
- tussen 1943 en 1960
- tussen 1961 en 1981
- in 1982 of later

Hartelijk dank voor het invullen van de vragenlijst.

Klik op gereed om de vragenlijst te sluiten. U antwoorden worden automatisch verstuurd en verwerkt.

III. HR-instruments assigned to the different employability dimensions

Table 38 HR-instruments and management interventions assigned to employability dimensions.

Employability dimension	HR-instruments	#⁶
Occupational expertise	<ol style="list-style-type: none"> 1. The opportunity to participate in job- or discipline related education 2. Job enrichment, including a broader range of tasks 3. The opportunity to participate in projects 4. EVC's (Erkenning van Verworven Competenties), acknowledgement of acquired competencies 5. The opportunity to be coached by your supervisor 	13
Personal flexibility	<ol style="list-style-type: none"> 1. The opportunity to organize your own work activities 2. The opportunity to save rights for leave over a number of years 3. Job rotation 4. Training of social skills, such as leadership skills 	14
Balance	<ol style="list-style-type: none"> 1. The opportunity to work part time 2. Agreements with the supervisor on the care of children, like flexible working hours 3. Special leave due to exceptional circumstances 4. Special arrangements for older workers 5. Care leave 	15
Corporate sense	<ol style="list-style-type: none"> 1. Introduction meeting for new employees 2. The opportunity to participate in teams, to improve teambuilding and collaboration 3. The opportunity to participate in social positions, such as the participation council or staff association 4. Transfer of knowledge and skills of the older, experienced generation to the younger generation 	16
Anticipation and optimization	<ol style="list-style-type: none"> 1. The opportunity to receive career advice and get help with career planning 2. Performance and Development interview (P&D interview) 3. Assessment of skills and knowledge for the career 	17

⁶ The number in this column refers to the number of the question in the questionnaire that corresponds to this employability dimension.

IV. Management interventions assigned to the different employability dimensions

Table 39 Management interventions assigned to employability dimensions.

Employability dimension	Management interventions	#⁷
Occupational expertise	1. The opportunity to influence policy issues	18
	2. Availability of talent, knowledge and skills	21, 31
	3. Feedback	23, 24
	4. Management- and talent development groups	22
	5. Access to essential information	19
Personal flexibility	1. Assigning a mentor	25
	2. Feedback	23, 24
	3. Personal development	26
Balance	Supporting the work-life balance	27, 28
Corporate sense	1. Assigning a mentor	25
	2. Management - and talent development groups	22
Anticipation and optimization	1. Being coached during the search process for another job or function	29
	2. Career development	30
	3. Managing expectations related to growth opportunities	20

⁷ The number in this column refers to the number of the question in the questionnaire that corresponds to this management intervention.

V. Results related to management interventions per group

§7.3.1 to §7.3.3 have presented the average scores of knowledge workers and members of the staff, the average scores of different generations and the average scores of activities of life per employability dimension, in terms of management interventions.

- i) Knowledge workers⁸ and members of the staff
- ii) Generations
- iii) Activities of life

The boxplots on the next pages provide more insight in these results. A boxplot presents the range of the average score. Within this range the middle 50% of the scores is represented by the tinted area.

The thicker horizontal line represents the median, the middle score. 50% of the scores lies below the line and 50% lies above the line. An example of a boxplot is presented below (Figure 9) to illustrate the explanation.

Some boxplots also present outliers, which represent scores that are very different from the rest of the data. (Field, 2005)

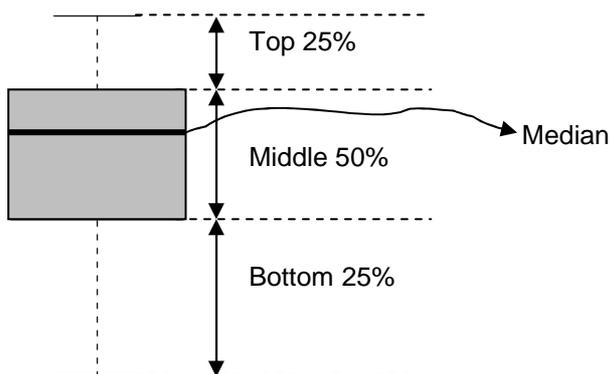
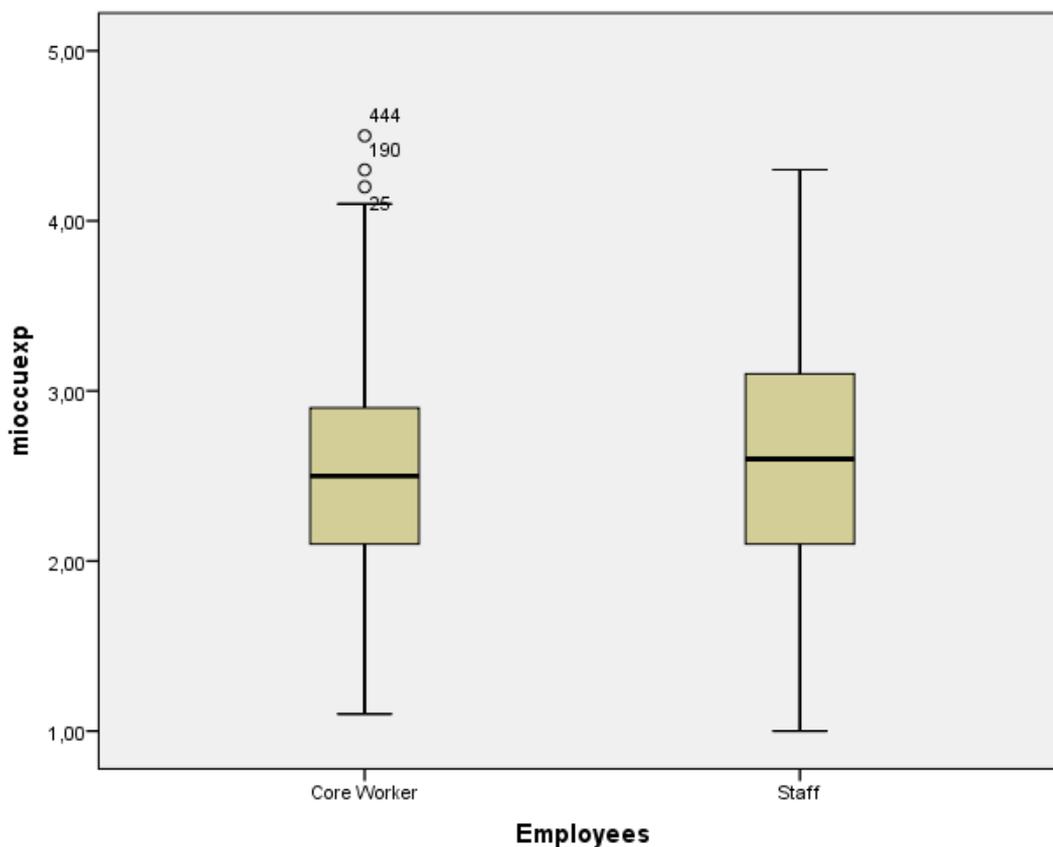


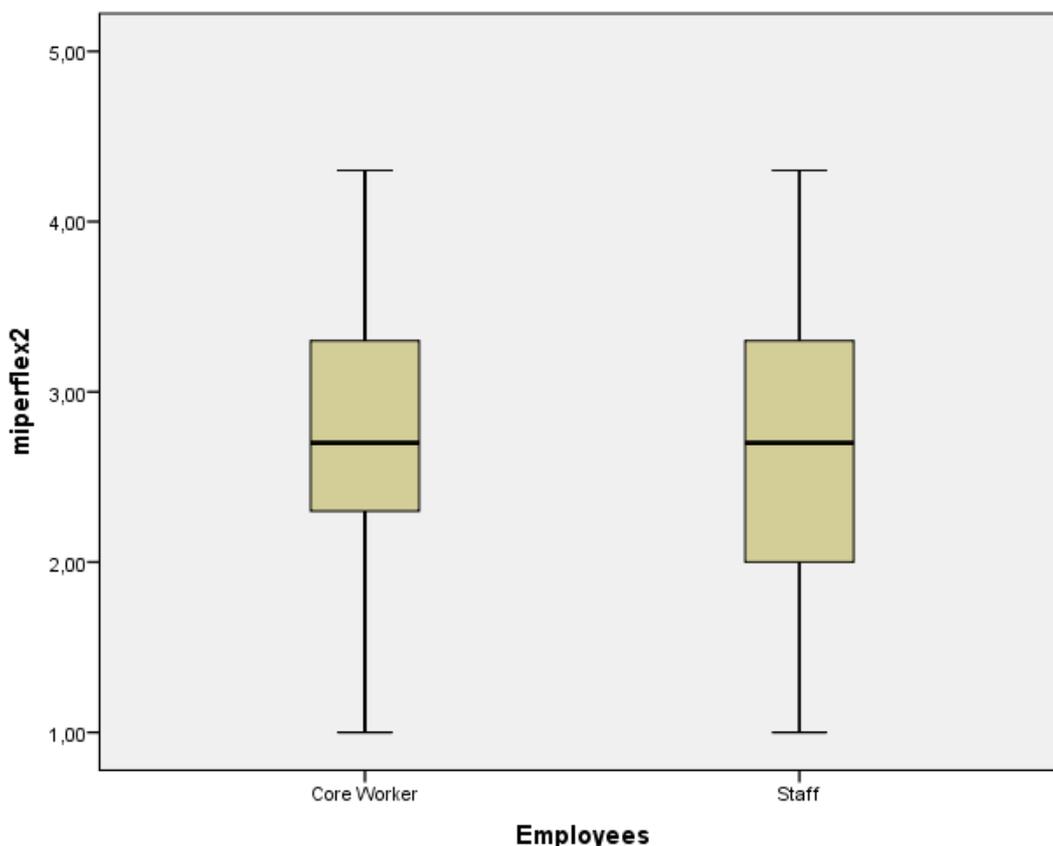
Figure 9 Example of a boxplot.

⁸ Knowledge workers is referred to as 'core workers' in the boxplots. And member of the staff are referred to as 'staff'.

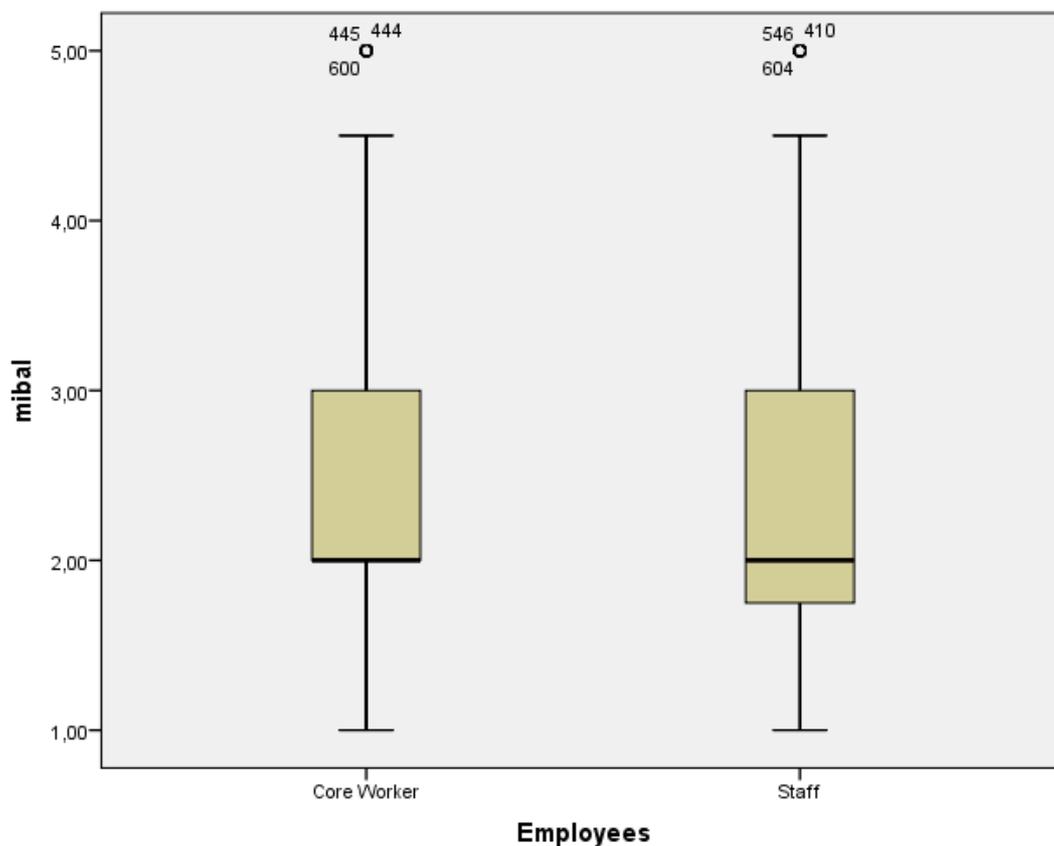
Occupational expertise * knowledge workers / members of the staff



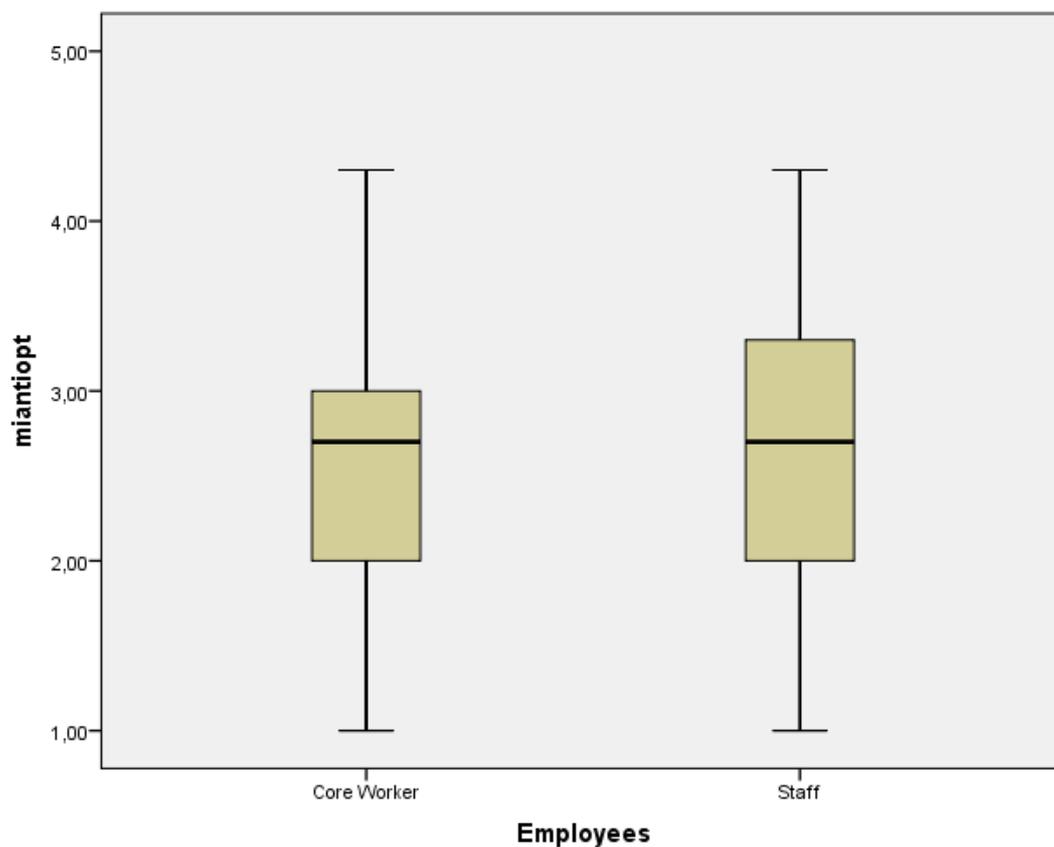
Personal flexibility * knowledge workers / members of the staff



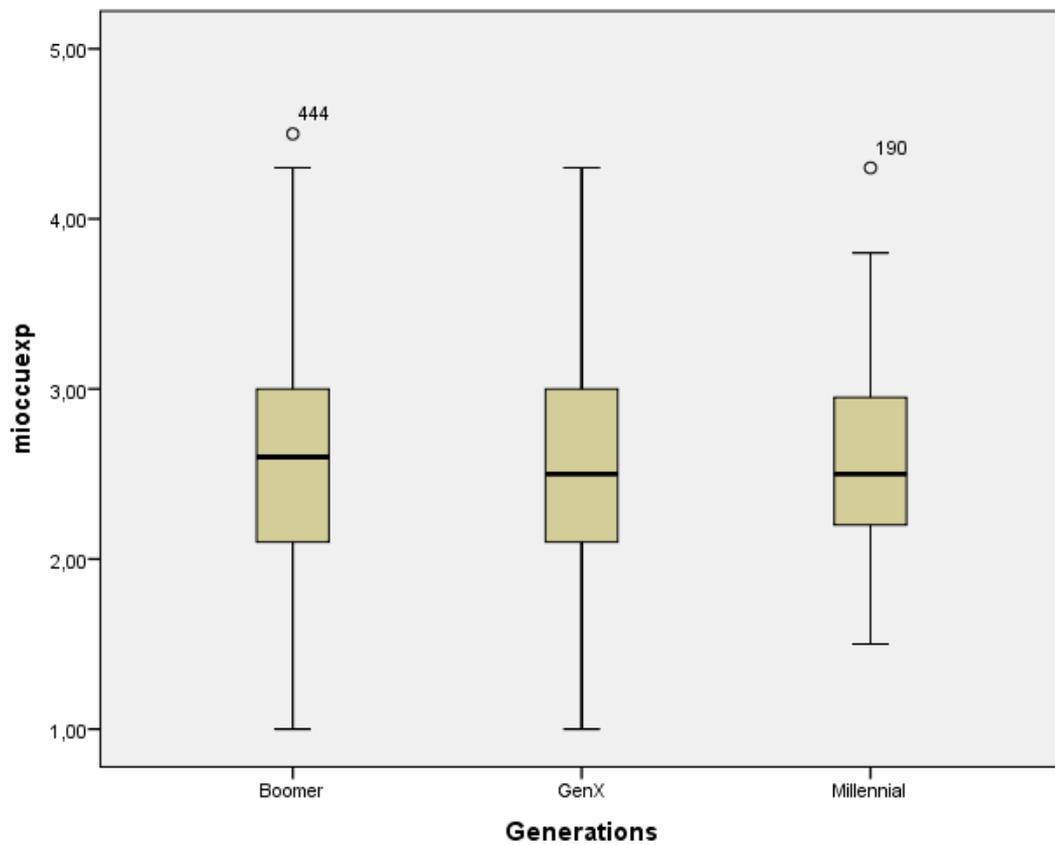
Balance * knowledge workers / members of the staff



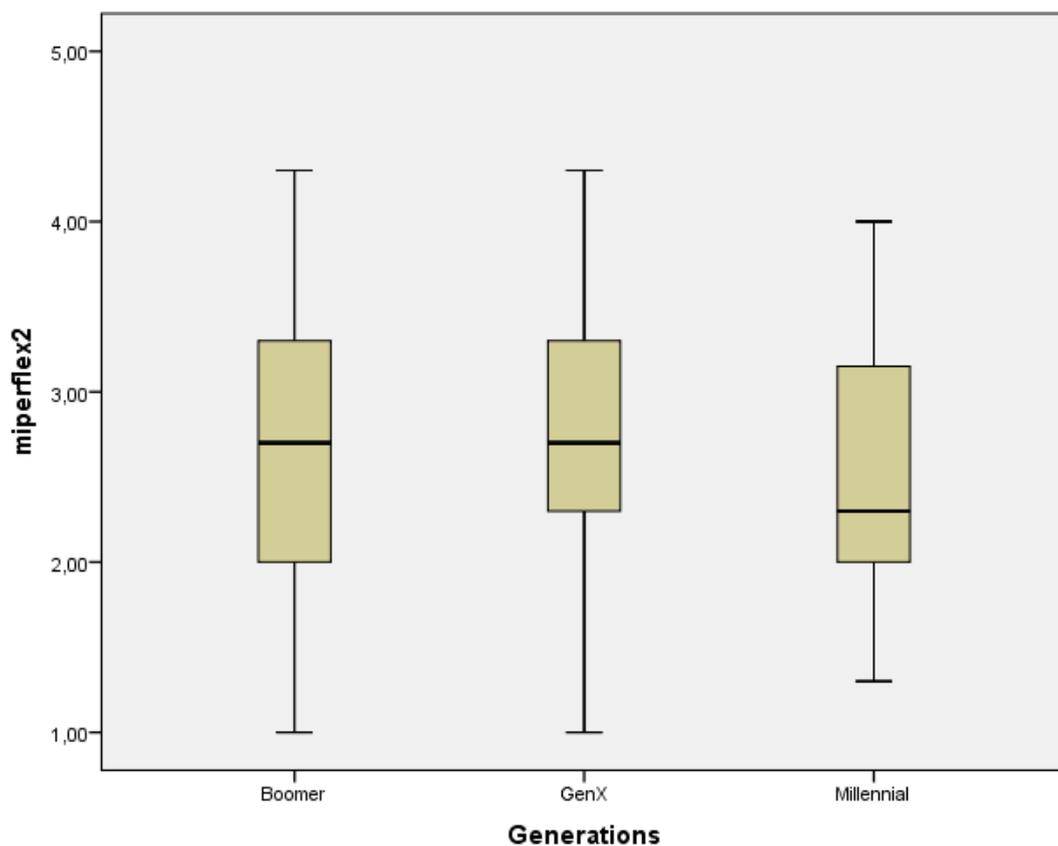
Anticipation and optimization * knowledge workers / members of the staff



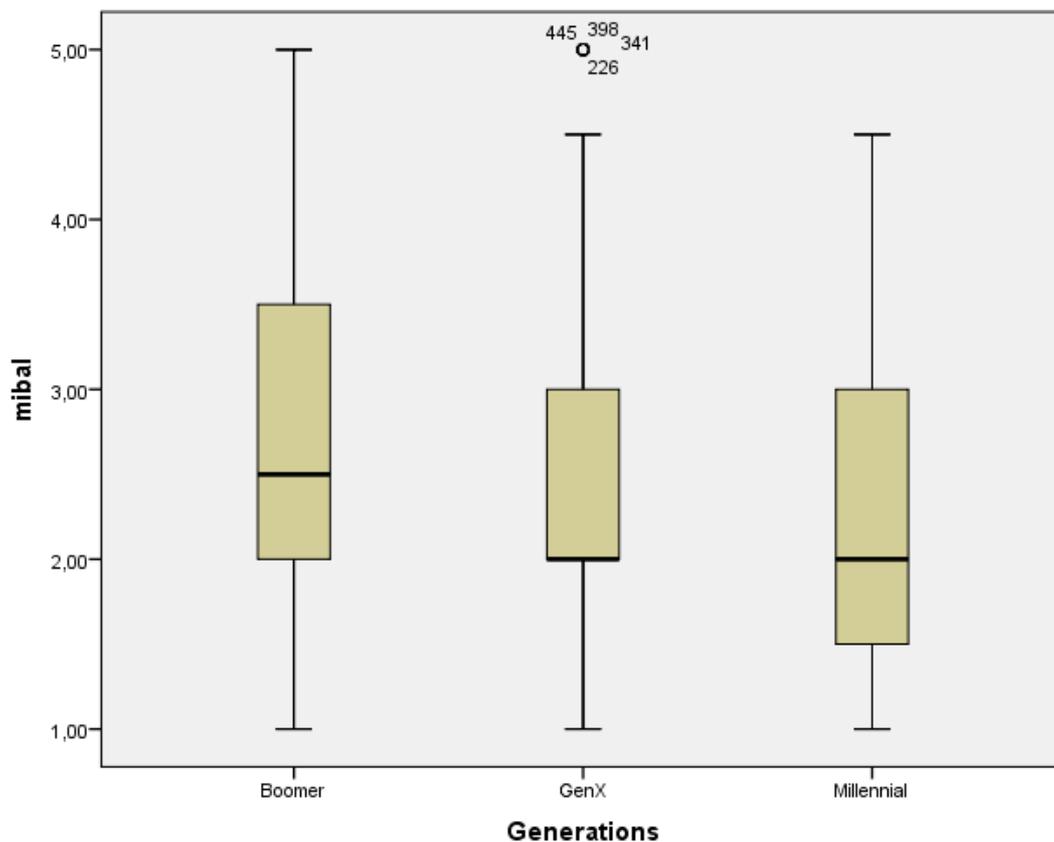
Occupational expertise * generations



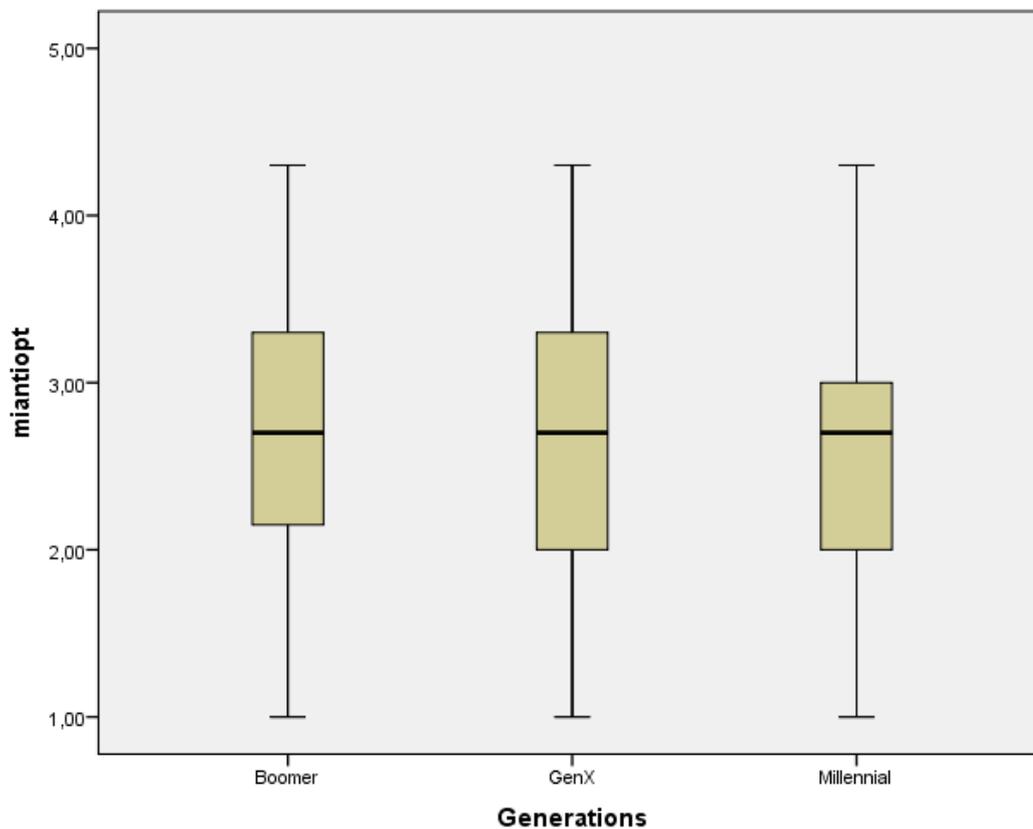
Personal flexibility * generations



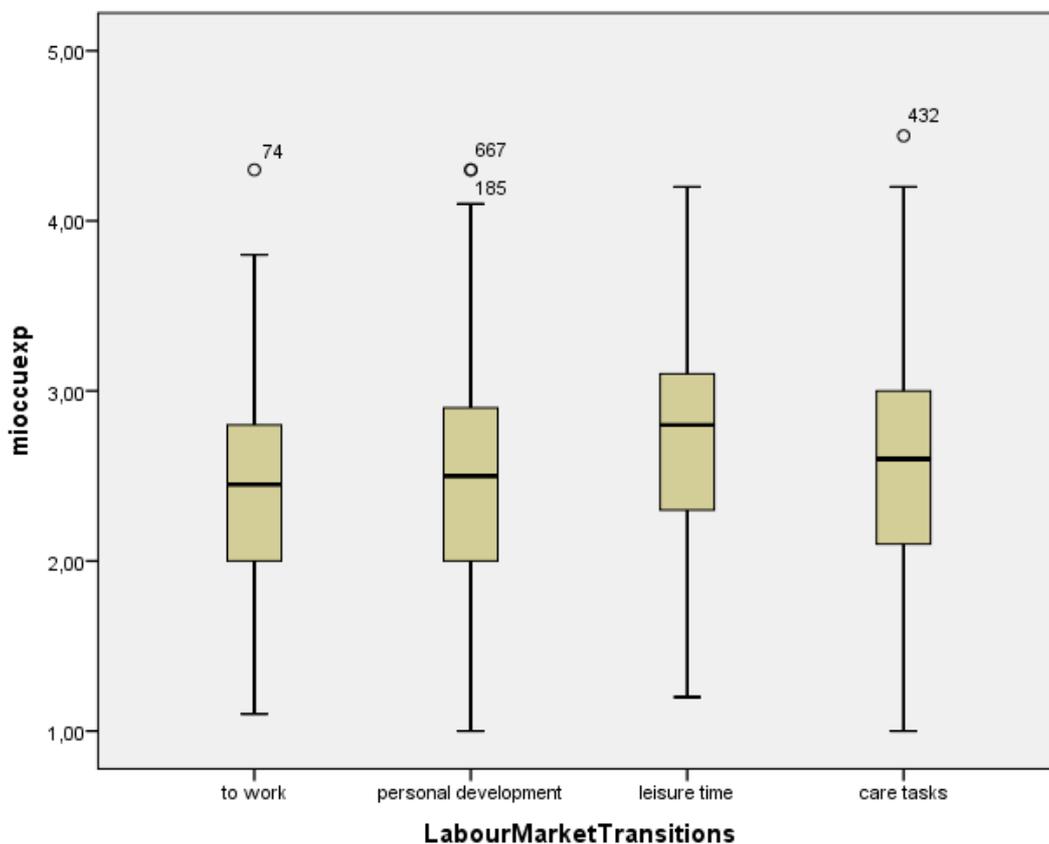
Balance * generations



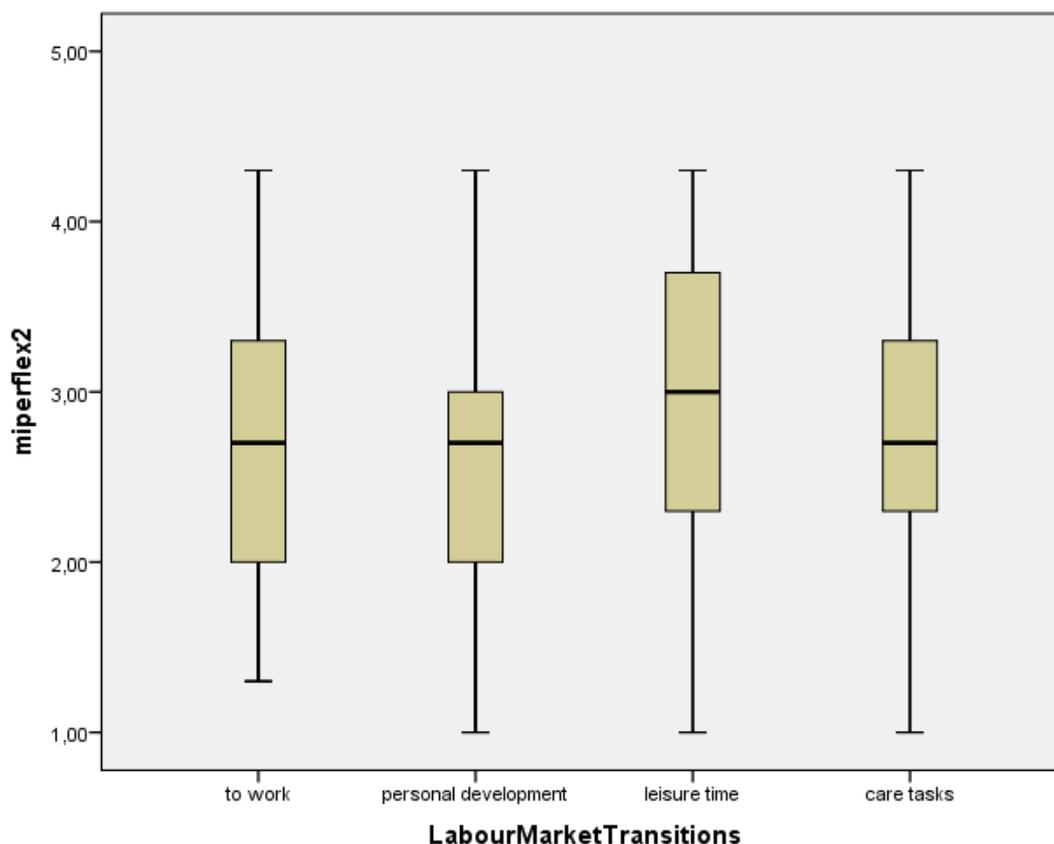
Anticipation and optimization * generations



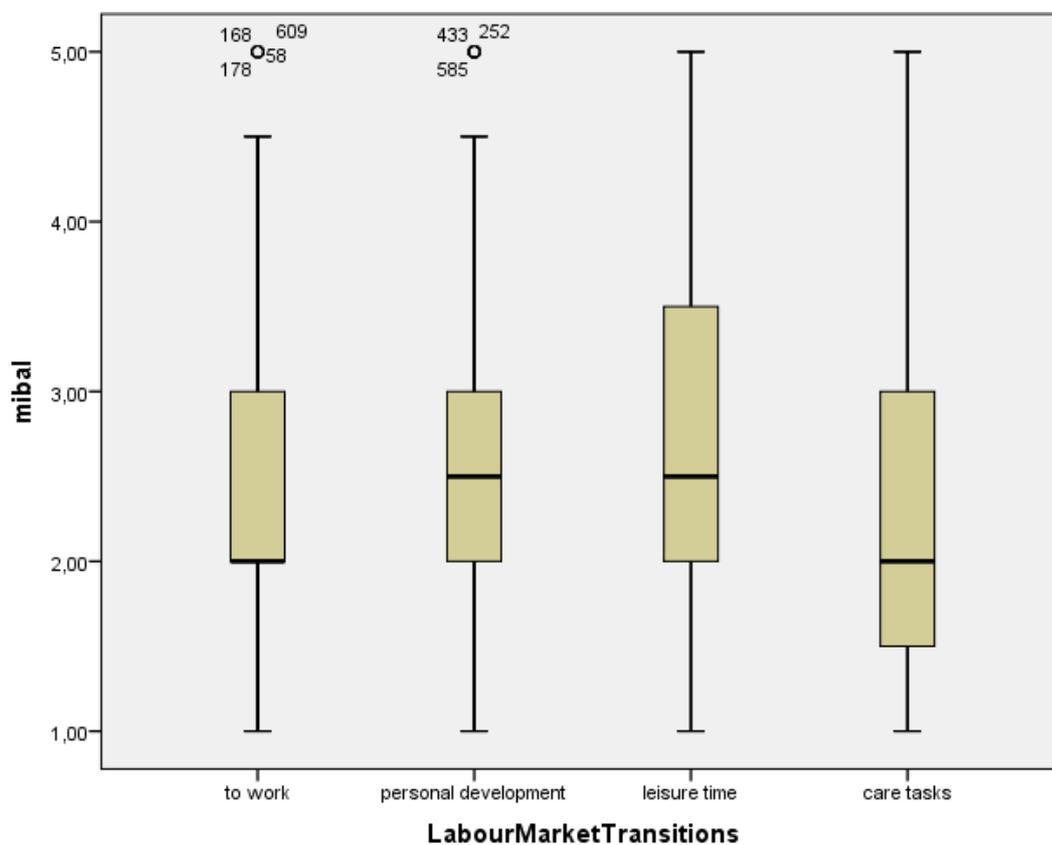
Occupational expertise * activities of life



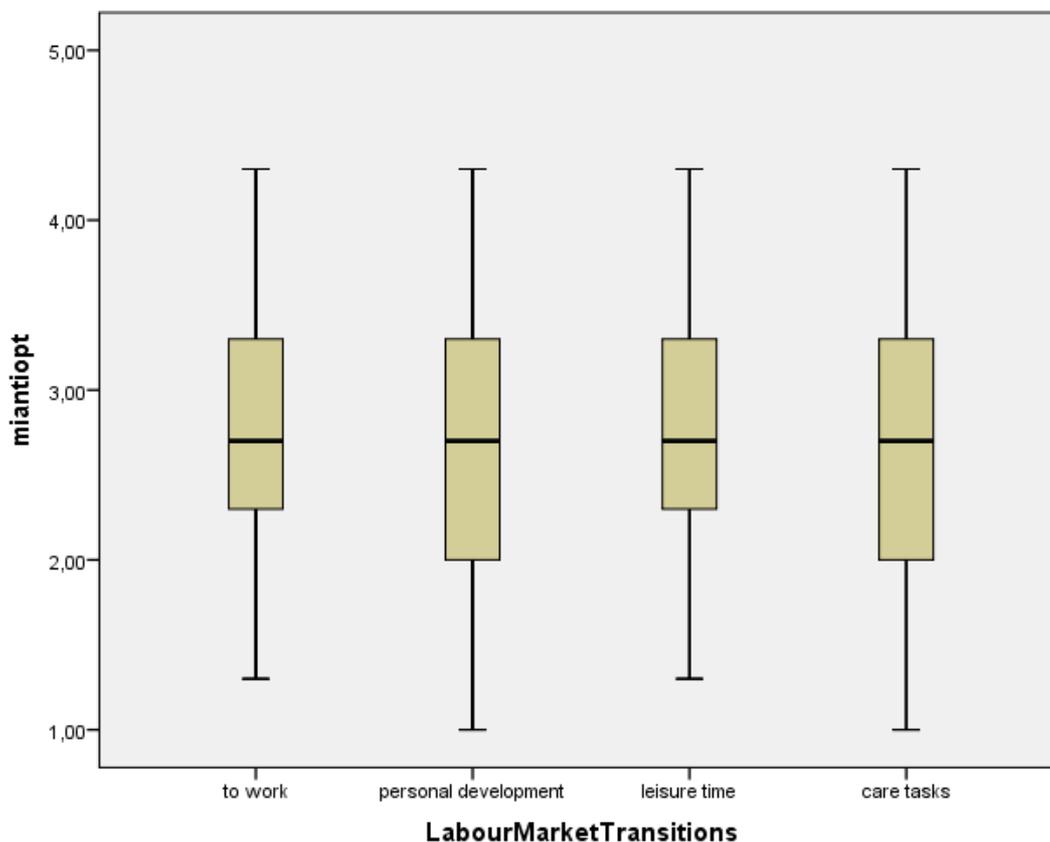
Personal flexibility * activities of life



Balance * activities of life



Anticipation and optimization * activities of life



VI. Results of the assessment

This appendix provides insight in the exact results of the assessment. Table 40 presents the results of the assessment in general. Table 41 presents the results of the assessment by making a distinction between knowledge workers and members of the staff. The same goes for Table 42 and Table 43 where a distinction is made between different generation and between groups of employees having a different priority for activities of life.

Table 40 HR-instruments in descending percentages of employees that have a need for that instrument.

General results⁹	Familiarity with	Making use of	Need for	Employability Dimension
1. The opportunity to organize your own work activities	65%	57%	70%	Personal flexibility
2. The opportunity to participate in job- or discipline related education	27%	26%	31%	Occupational expertise
3. EVC's, acknowledgement of acquired competencies	30%	3%	26%	Occupational expertise
4. Job enrichment, including a broader range of tasks	66%	33%	25%	Occupational expertise
5. The opportunity to participate in projects	71%	45%	24%	Occupational expertise
6. Assessment of skills and knowledge for the career	45%	9%	24%	Anticipation & optimization
7. The opportunity to receive career advice and get help with career planning	62%	7%	23%	Anticipation & optimization
8. The opportunity to be coached by your supervisor	60%	17%	22%	Occupational expertise
9. Transfer of knowledge and skills of the older generation to the younger generation	45%	13%	21%	Corporate sense
10. Performance and Development interview (P&D interview)	93%	76%	18%	Anticipation & optimization
11. The opportunity to participate in teams, to improve teambuilding and collaboration	51%	17%	17%	Corporate sense
12. Training of social skills, such as leadership skills	78%	69%	16%	Personal flexibility
13. The opportunity to work part time	94%	39%	14%	Balance
14. The opportunity to save rights for leave over a number of years	76%	66%	13%	Personal flexibility
15. Special leave due to exceptional circumstances	83%	9%	10%	Balance
16. Job rotation	70%	62%	9%	Personal flexibility
17. Special arrangements for older workers	66%	10%	8%	Balance
18. Care leave	77%	3%	8%	Balance
19. Introduction meeting for new employees	71%	7%	8%	Corporate sense
20. Agreements with the supervisor on the care of children, like flexible working hours	71%	13%	7%	Balance
21. The opportunity to participate in social positions, such as the participation council or staff association	92%	11%	3%	Corporate sense

⁹ The bold HR-instruments are discussed in §8.2.

Table 41 The difference between knowledge workers and members of the staff per HR-instrument.

Knowledge workers and members of the staff ¹⁰	Being familiar with		Making use of		In need of	
	KW	S	KW	S	KW	S
Occupational expertise						
1. The opportunity to participate in job- or discipline related education	70%	76%	28%	24%	36%	27%
2. Job enrichment, including a broader range of tasks	64%	69%	30%	36%	25%	24%
3. The opportunity to participate in projects	74%	69%	52%	38%	24%	24%
4. EVC's, acknowledgement of acquired competencies	23%	37%	2%	3%	25%	28%
5. The opportunity to be coached by your supervisor	59%	61%	20%	14%	26%	17%
Personal flexibility						
1. The opportunity to organize your own work activities	69%	59%	60%	54%	75%	69%
2. The opportunity to save rights for leave over a number of years	76%	76%	65%	67%	15%	10%
3. Job rotation	67%	74%	57%	67%	6%	12%
4. Training of social skills, such as leadership skills	79%	76%	70%	69%	20%	12%
Balance						
1. The opportunity to work part time	94%	94%	37%	41%	16%	11%
2. Agreements with the supervisor on the care of children, like flexible working hours	71%	72%	14%	11%	8%	4%
3. Special leave due to exceptional circumstances	81%	86%	8%	9%	11%	8%
4. Special arrangements for older workers	63%	70%	8%	12%	7%	9%
5. Care leave	74%	81%	4%	2%	7%	9%
Corporate sense						
1. Introduction meeting for new employees	64%	78%	7%	6%	9%	7%
2. The opportunity to participate in teams, to improve teambuilding and collaboration	50%	52%	21%	13%	17%	17%
3. The opportunity to participate in social positions, such as the participation council or staff association	93%	92%	11%	11%	3%	3%
4. Transfer of knowledge and skills of the older generation to the younger generation	44%	45%	17%	9%	26%	15%

¹⁰ KW = knowledge worker; S = staff

Anticipation and optimization

1. The opportunity to receive career advice and get help with career planning	60%	66%	8%	5%	27%	20%
2. Performance and Development interview (P&D interview)	92%	94%	78%	74%	22%	13%
3. Assessment of skills and knowledge for the career	41%	50%	11%	7%	28%	20%

Table 42 The difference between generations per HR-instrument.

Generations ¹¹	Being familiar with			Making use of			In need of		
	BB	GX	M	BB	GX	M	BB	GX	M
Occupational expertise									
1. The opportunity to participate in job- or discipline related education	76%	71%	69%	19%	30%	41%	21%	40%	40%
2. Job enrichment, including a broader range of tasks	69%	65%	59%	32%	35%	28%	21%	28%	22%
3. The opportunity to participate in projects	74%	73%	53%	44%	50%	26%	22%	28%	15%
4. EVC's, acknowledgement of acquired competencies	37%	26%	18%	4%	2%	0%	25%	30%	16%
5. The opportunity to be coached by your supervisor	65%	57%	50%	12%	19%	28%	14%	28%	29%
Personal flexibility									
1. The opportunity to organize your own work activities	56%	71%	72%	51%	61%	60%	69%	71%	71%
2. The opportunity to save rights for leave over a number of years	76%	77%	69%	69%	67%	47%	13%	13%	13%
3. Job rotation	73%	71%	56%	67%	62%	37%	10%	9%	3%
4. Training of social skills, such as leadership skills	77%	78%	78%	70%	69%	69%	13%	18%	22%
Balance									
1. The opportunity to work part time	95%	96%	85%	37%	45%	18%	10%	17%	15%
2. Agreements with the supervisor on the care of children, like flexible working hours	71%	75%	53%	4%	23%	3%	3%	10%	3%
3. Special leave due to exceptional circumstances	87%	82%	74%	8%	9%	12%	7%	12%	9%
4. Special arrangements for older workers	79%	60%	37%	23%	0%	0%	14%	4%	0%
5. Care leave	83%	77%	49%	1%	4%	0%	8%	8%	3%
Corporate sense									
1. Introduction meeting for new employees	76%	72%	40%	5%	7%	10%	5%	9%	15%
2. The opportunity to participate in teams, to improve teambuilding and collaboration	54%	50%	40%	16%	19%	18%	12%	21%	16%
3. The opportunity to participate in social positions, such as the participation council or staff association	94%	92%	87%	13%	10%	3%	2%	4%	3%
4. Transfer of knowledge and skills of the older generation to the younger generation	50%	43%	31%	13%	13%	15%	15%	24%	29%

¹¹ BB = Baby Boom; GX = Generation X; M = Millennials

Anticipation and optimization									
1. The opportunity to receive career advice and get help with career planning	69%	59%	51%	7%	6%	9%	15%	28%	37%
2. Performance and Development interview (P&D interview)	93%	95%	85%	71%	82%	69%	11%	21%	31%
3. Assessment of skills and knowledge for the career	50%	40%	49%	6%	8%	24%	14%	30%	41%

Table 43 The difference between activities of life per HR-instrument.

Activities of life ¹²	Being familiar with				Making use of				In need of			
	W	PD	L	CT	W	PD	L	CT	W	PD	L	CT
Occupational expertise												
1. The opportunity to participate in job- or discipline related education	78%	69%	73%	73%	23%	30%	25%	26%	28%	42%	23%	30%
2. Job enrichment, including a broader range of tasks	66%	63%	69%	67%	35%	29%	34%	34%	28%	25%	24%	23%
3. The opportunity to participate in projects	78%	70%	71%	67%	49%	46%	46%	41%	29%	23%	23%	21%
4. EVC's, acknowledgement of acquired competencies	31%	27%	31%	30%	3%	1%	3%	3%	27%	31%	21%	23%
5. The opportunity to be coached by your supervisor	63%	57%	58%	61%	15%	18%	17%	18%	23%	30%	17%	16%
Personal flexibility												
1. The opportunity to organize your own work activities	67%	64%	62%	64%	60%	52%	57%	59%	70%	72%	66%	71%
2. The opportunity to save rights for leave over a number of years	78%	76%	77%	75%	70%	63%	62%	69%	17%	14%	10%	10%
3. Job rotation	70%	70%	70%	70%	63%	58%	64%	63%	7%	12%	7%	9%
4. Training of social skills, such as leadership skills	84%	74%	75%	78%	75%	63%	68%	73%	17%	15%	15%	19%
Balance												
1. The opportunity to work part time	95%	93%	92%	97%	29%	35%	34%	54%	14%	12%	14%	15%
2. Agreements with the supervisor on the care of children, like flexible working hours	74%	65%	66%	78%	10%	7%	6%	26%	4%	5%	4%	10%
3. Special leave due to exceptional circumstances	84%	80%	80%	87%	6%	7%	13%	9%	10%	9%	8%	11%
4. Special arrangements for older workers	71%	62%	68%	65%	13%	7%	13%	6%	11%	5%	10%	8%
5. Care leave	81%	69%	74%	85%	1%	1%	1%	6%	9%	7%	4%	11%
Corporate sense												
1. Introduction meeting for new employees	71%	66%	67%	77%	6%	8%	4%	6%	6%	11%	8%	6%
2. The opportunity to participate in teams, to improve teambuilding and collaboration	53%	43%	54%	54%	22%	18%	15%	16%	20%	20%	12%	14%
3. The opportunity to participate in social positions, such as the participation council or staff association	93%	92%	90%	94%	10%	9%	11%	13%	3%	2%	4%	3%

¹² W = to work; PD = personal development; L = leisure; CT = care tasks

4. Transfer of knowledge and skills of the older generation to the younger generation	47%	40%	41%	51%	13%	17%	8%	14%	19%	28%	18%	15%
Anticipation and optimization												
1. The opportunity to receive career advice and get help with career planning	65%	56%	65%	65%	4%	9%	8%	5%	23%	31%	19%	20%
2. Performance and Development interview (P&D interview)	92%	93%	92%	95%	74%	78%	70%	80%	22%	22%	13%	14%
3. Assessment of skills and knowledge for the career	44%	41%	50%	46%	8%	12%	8%	6%	24%	31%	16%	23%

VII. Additional information for Wageningen UR

This appendix provides in some extra background informative for Wageningen UR. It presents the differences in needs for employability between academic staff and PhD students in Table 44 to Table 46 and boxplots from page 108. Both groups are knowledge workers of Wageningen University. Table 44 presents the need of academic staff and PhD students for each HR-instrument (in percentages). Table 45 presents the average need of academic staff and PhD students for HR-instruments per employability dimension. At last, Table 46 presents the average scores of academic staff and PhD students for management interventions per employability dimension. The boxplots present the range of the average of score, the middle 50%, the median and outliers.

Table 44 The difference between academic staff and PhD's per HR-instrument.

Knowledge workers WU. ¹³	Being familiar with		Making use of		In need of	
	AS	PhD	AS	PhD	AS	PhD
Occupational expertise						
1. The opportunity to participate in job- or discipline related education	69%	68%	18%	52%	35%	39%
2. Job enrichment, including a broader range of tasks	60%	48%	26%	23%	23%	27%
3. The opportunity to participate in projects	61%	41%	39%	21%	21%	16%
4. EVC's, acknowledgement of acquired competencies	17%	23%	1%	2%	24%	14%
5. The opportunity to be coached by your supervisor	51%	57%	16%	39%	33%	23%
Personal flexibility						
1. The opportunity to organize your own work activities	74%	70%	63%	61%	70%	70%
2. The opportunity to save rights for leave over a number of years	75%	71%	63%	52%	14%	9%
3. Job rotation	64%	46%	51%	27%	2%	0%
4. Training of social skills, such as leadership skills	78%	80%	66%	75%	18%	25%
Balance						
1. The opportunity to work part time	90%	89%	27%	9%	15%	16%
2. Agreements with the supervisor on the care of children, like flexible working hours	71%	57%	17%	0%	11%	5%
3. Special leave due to exceptional circumstances	75%	80%	7%	16%	14%	14%
4. Special arrangements for older workers	71%	36%	6%	0%	12%	0%
5. Care leave	70%	50%	0%	0%	9%	5%
Corporate sense						
1. Introduction meeting for new employees	71%	41%	7%	9%	8%	9%
2. The opportunity to participate in teams, to improve teambuilding and collaboration	39%	41%	16%	16%	16%	16%
3. The opportunity to participate in social positions, such as the participation council or staff association	84%	91%	5%	5%	2%	2%
4. Transfer of knowledge and skills of the older, experienced generation to the younger generation	39%	27%	12%	14%	27%	34%

¹³ AS = academic staff; PhD = PhD students

Anticipation and optimization

1. The opportunity to receive career advice and get help with career planning	54%	52%	9%	14%	25%	34%
2. Performance and Development interview (P&D interview)	98%	91%	84%	73%	24%	34%
3. Assessment of skills and knowledge for the career	42%	68%	12%	39%	25%	41%

Table 45 Average need of academic staff and PhD's per employability dimension (in terms of HR-instruments).

	Academic staff	PhD's
Occupational expertise	44%	55%
Personal flexibility	76%	77%
Balance	21%	32%
Corporate sense	37%	41%
Anticipation and optimization	42%	50%

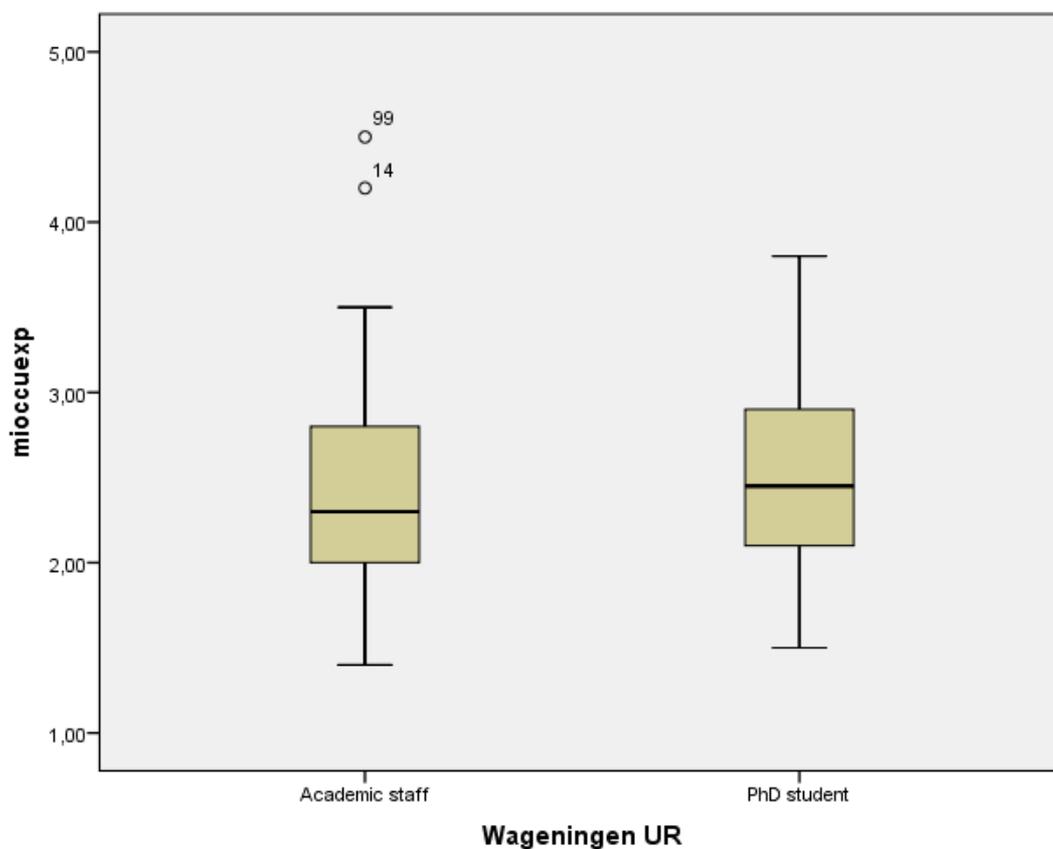
Table 45 shows that PhD-students in general express more needs for employability. The largest difference is perceived for the employability dimensions occupational expertise, balance and anticipation and optimization. A One-Way ANOVA test shows there are no significant relationships between academic staff or PhD students and the employability dimensions.

Table 46 Average score for academic staff and PhD's per employability dimension (in terms of management interventions).

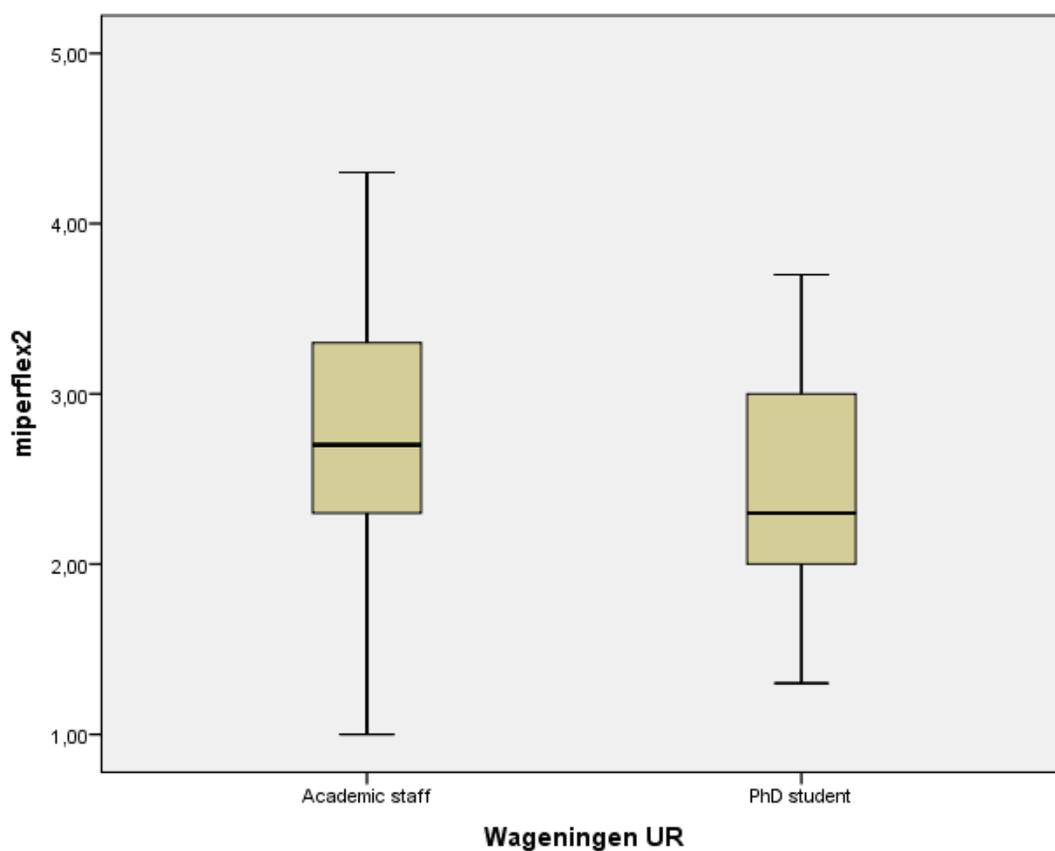
	Academic staff	PhD's
Occupational expertise	2.4	2.6
Personal flexibility	2.5	2.4
Balance	2.5	2.3
Anticipation and optimization	2.7	2.6

Table 46 shows that the average scores of the academic staff and PhD-students are close together. PhD-students are slightly more positive about personal flexibility, balance and anticipation and optimization. The academic staff is more positive about occupational expertise and anticipation and optimization. A One-Way ANOVA test shows there are no significant relationships.

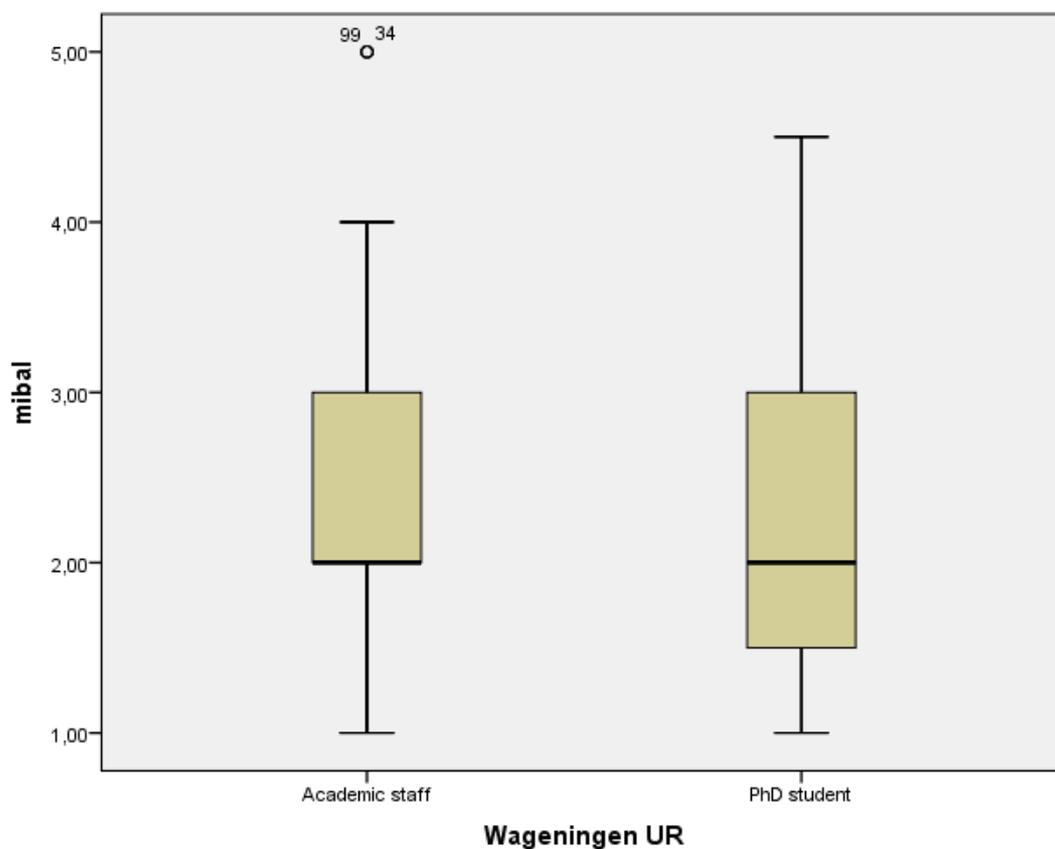
Occupational expertise * academic staff and PhD students of Wageningen UR



Personal flexibility * academic staff and PhD students of Wageningen UR



Balance * academic staff and PhD students of Wageningen UR



Anticipation and optimization * academic staff and PhD students of Wageningen UR

