THE INFLUENCE OF WORK ENVIRONMENTS ON EMPLOYEE ATTRACTION

Identifying the role of work environments in enhancing competitive advantage within the war for talent

Master Thesis | Shuly Themans | January 2020

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PREFACE

This graduation thesis is the result of a one year during research and is the final product of the Graduation Laboratory of the master track Management in the Built Environment of the Faculty of Architecture and the Built Environment at the Delft University of Technology. The research process started in February 2019 and lasts until the 23th of January 2020, the day that this graduation research will be presented and that I will graduate from this university.

While working on this thesis, I accidentally came across my motivation letter that was required for the application to the Architecture Faculty years ago. In 2013, I wrote down: "*After receiving my Bachelor's degree in Architecture, I don't know exactly in which direction I would like to go. I really like the creative side, but I am also someone who likes to have a lot of social contact and enjoys talking and organising. In addition, I will take, as an extra elective, a final high school exam in Economics. That is why the master Real Estate & Housing also attracts my attention*." However, as soon as I got accepted to the Architecture Faculty, I wanted to become an architect like most other students at the faculty. Nonetheless, after receiving my Bachelor's degree, I realised that the focus on the bigger picture of the real estate master, which was now called Management in the Built Environment, matched my interests perfectly.

In collaboration with my mentors of the TU Delft and of my graduation company JLL, the subject of this thesis was established: "the influence of work environments on employee attraction". My enthusiasm for this subject originated partly from my board year at study association BOSS, in which bringing students in contact with potential employers was the focus of my function as Real Estate Career Day commissioner. This field of interest in combination with my affection for real estate, appeared to be the perfect combination to become very enthusiastic about this research topic.

This thesis could not have been completed without some important people: my mentors, the interviewees, the survey respondents, and my friends and family.

In the first place, I would like to thank my university mentors, Philip Koppels and Tuuli Jylhä, for advising me, sharing their knowledge, and challenging me during the whole process. In addition, I would like to thank Gust Mariën, who advised me on the statistical analysis of the research results. Besides, I would like to thank my internship mentors, Jeroen Paul Meijler and Remco van der Mije, for advising me extensively and helping me with the distribution of the online survey among their clients.

Furthermore, I would like to thank all ten interviewees that took part in the structured interviews for helping me in determining the research variables of this thesis. In particular the discussions after the formal interviews provided inspirational insights for the overall research. In addition, I would like to thank all 368 survey respondents who invested their time in filling in the online survey.

Finally, I would like to thank my friends and family. At first my friends who made my student life an incredible and unforgettable period of my life. A special thanks to some of my master friends who were always willing to help me with my graduation process. At last, I would like to thank my mother for her unconditional support.

Enjoy reading!

Shuly Themans

Amsterdam, January 2020

ABSTRACT

Companies need a competitive advantage within the 'war for talent' in order to attract their employee target group. Now the amount of jobs and job vacancies keeps growing, companies started a battle to attract talented knowledge workers to gain the best organisational market position in the current knowledge-driven economy. There is assumed that work environments can be used strategically to attract employees, wherefore companies invest in their work environments. However, it has not been proven that work environments –involving characteristics on location, service & facilities, building, and workplace level– may lead to increased employee attraction. Therefore the main research question is: "What is the influence of work environments on attracting employees to enhance competitive advantage within the war for talent?". A literature review in combination with structured interviews and an online survey resulted in information on the influence that work environment characteristics have on the attraction of knowledge workers. The data on the influence of work environment characteristics is generated by implementing the value tree method in combination with the constant sum method within the survey. Subsequently, the data is statistically analysed in SPSS by mainly using a Repeated Measures ANOVA in combination with a Paired Samples T-Test or a Games-Howell Test. From the results can be concluded that the work environment is comparable influential as other, more general, employee attraction factors, but is not perceived as one of the most influential factors. Mainly the location-related factors, geographical location and accessibility, appeared to be high influential on people's choice for a job. In addition, significant differences between groups from different socio-demographic perspectives were found for almost all tested variables. Remarkable is that no significant differences were found between groups on the value that the influence of the work environment perceived when comparing to the general employee attraction factors. This indicates that there can be assumed that the survey respondents have a comparable opinion on the influence of the work environment on their choice for a new job. Besides, 74% of the respondents indicated that they are willing to give up a certain percentage of their (future) salary in exchange for their *ideal* work environment. However, as most of the variables did indicate significant mean differences concerning their influence of the work environment characteristics between different groups, the *ideal* work environment is different for each (socio-demographic) group and even for each individual. The advice for companies is to define their target group and link their target group to the employee profiles as presented in this thesis in order to increase the chance of attracting their employee target group, and thereby enhancing their competitive advantage within the 'war for talent'.

Keywords: work environments, employees, attracting, knowledge workers, war for talent

EXECUTIVE SUMMARY

INTRODUCTION

The job and job vacancy growth in The Netherlands has not stopped since 2013, wherefore companies got caught up in a competition for employees. Mainly the business services sector suffers from this employee shortage, wherefore there is currently a shortage in knowledge workers (CBS, 2018a). To express the competition for talented employees, the term 'war for talent' was introduced by McKinsey & Company. Many companies see employee attraction as their priority within their overall strategic challenges. To support corporate business strategies, companies can use their real estate as a strategic asset (Nourse & Roulac, 1993). Real estate related decision-making within private organisations and businesses is part of Corporate Real Estate Management (CREM). Real estate consultants express the importance of using real estate in a strategic way in order to attract and retain talent, which increases the awareness of this opportunity among companies. It is assumed that transformations of work environments into inspiring and enjoyable places with optimal facilities, and relocations to for example Central Business Districts, can be used as strategies in companies' attempts to attract employees. For these companies, it could be useful to know –before executing the transformations and relocations– what potential employees are looking for when searching for a job in order to actually attract their employee target group. Knowing work environment related preferences and the influence of the work environment on job choice decision-making could help companies in developing employee attraction strategies and therefore in enhancing their competitive advantage within the war for talent. The conceptual framework (figure i) shows the main concept of this thesis, including the (underlying) strategic goals that are aimed to achieve.

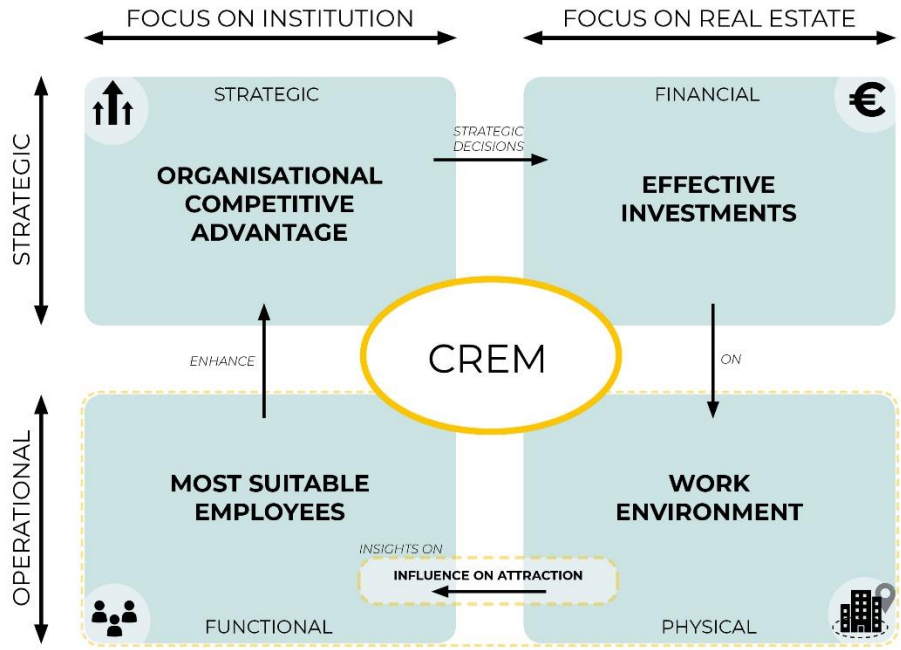

Figure i: Conceptual Framework.

PROBLEM STATEMENT

The problem that forms the incentive of examining this research topic, is that companies assume that work environments have an influence on employee attraction and therefore consider this as an

important reason to invest in their work environments, while it has not been proven that these investments could potentially lead to employee attraction.

Research Goal & Questions

In order to provide insights to companies to be used as part of their strategies on enhancing their competitive advantage within the war for talent, the goal of this research is **to identify the influence of work environments on employee attraction**.

The main research question of this research is as follows:

> **What is the influence of work environments on attracting employees to enhance competitive advantage within the war for talent?**

Sub questions have been formulated to answer the main research question:

1. What is the current knowledge on employee attraction by work environments?
   a. What is the role of work environments in research on employee attraction?
   b. What is the role of employee attraction in research on corporate real estate management?
2. Which work environment characteristics are taken into consideration in job choice decision-making by knowledge workers?
3. To what extent do knowledge workers take work environment characteristics into consideration in job choice decision-making?
4. How can companies use knowledge on work environments to enhance competitive advantage within the war for talent?

RESEARCH PLAN

The research questions that are formulated form the base of the three main phases of this research: theoretical research, empirical research and synthesis. This division is visualised in the research framework (figure ii). In the framework is shown that the output of each research phase is used as input for the subsequent phase.

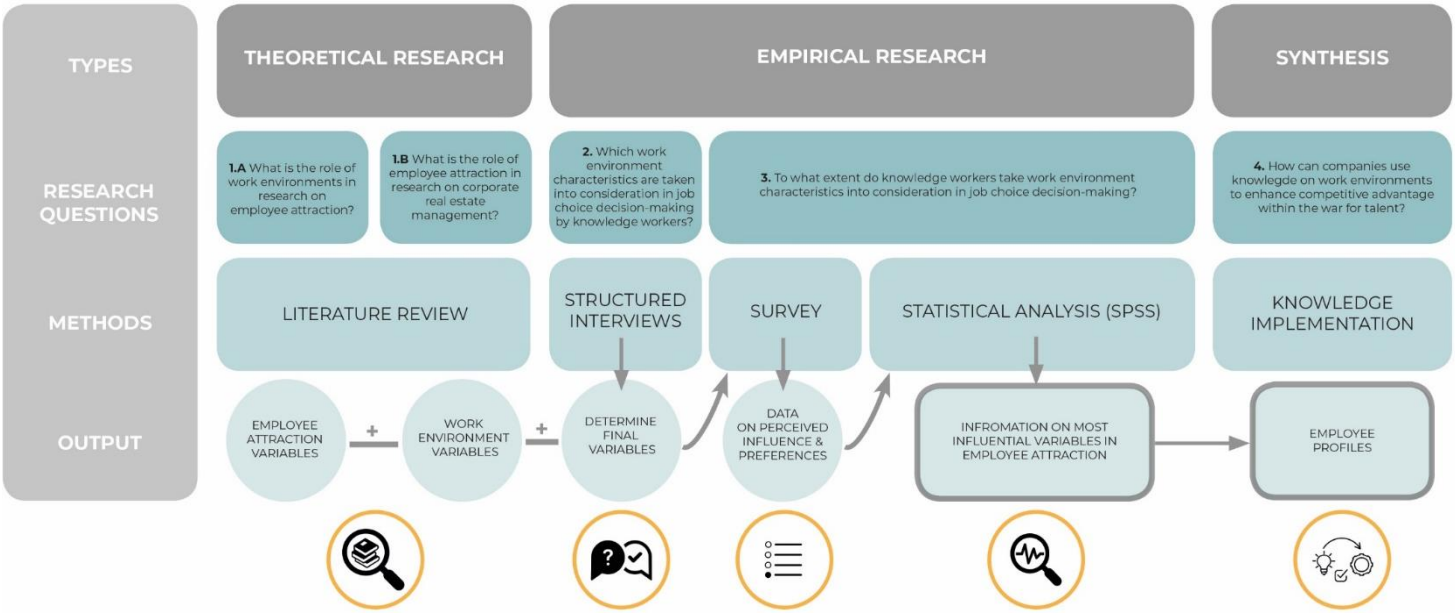

Figure ii: Research Framework

THEORETICAL REVIEW

EMPLOYEE ATTRACTION

Employee attraction is part of the *recruitment* section within Human Resource Management. In their recruitment strategies, companies are focused on their *employer brand* (Walker & Higgins, 2007). In the process of attracting employees, a positive employer brand can contribute in becoming an *employer of choice* (Armstrong, 2006). More specifically, the core of a company's employer brand is its *employer value proposition* (Zeuch, 2016; Armstrong, 2014). Work environment related aspects could be one of these *value propositions*. However, after an extended literature review, it appeared that work environment related aspects are barely mentioned as a *value proposition* to become an *employer of choice*. Only attraction factor *Location* was found in some literature on employee attraction (Chambers, 1998; Uggerslev et al., 2012; Rampl, 2014), and a few *workplace* related aspects were mentioned (Wong et al., 2017).
A literature review is conducted to find the most influential General Employee Attraction related factors. The factors that appeared most influential on employee attraction are included in the empirical part of this thesis.

WORK ENVIRONMENT PREFERENCES

Most studies that are focused on the relation between people and the work environment examine the consequences and impact of specific work environment characteristics on employee behaviour, satisfaction, productivity and well-being (Giuliani & Scoplliti, 2009; Rothe, 2011). In contradiction to a lot of research that is focused on *satisfaction*, the research of Rothe et al. is most comparable to the topic of this thesis, as it focuses on *preferences*, which is tightly linked to *attraction* (Rothe, et al., 2011). Therefore, a literature review is conducted to find work environment related factors that are most preferred by employees. Those factors can be divided into four main categories (based on Rothe, 2011): *Location, Services & Facilities, Building, Workplace*. The factors that appeared of influential when examining employee attraction are included within the empirical part of this thesis.

EMPERICAL RESEARCH

STRUCTURED INTERVIEWS

As there was not an extensive pool of literature found on the thesis subject, structured interviews are held with ten different people to examine the found variables in order to ensure a valid set of variables as basis for the survey. The interviewees represent the following perspectives: students, HR professionals, real estate consultants, and independent experts on the topic.

The structured interviews resulted in the determination of the following General Employee Attraction factors to be examined in the survey:

GENERAL EMPLOYEE ATTRACTION FACTORS	
Organisational Image	reputation, brand, familiarity, values, mission, delivered quality
Rewards	salary, bonusses, retirement agreements, other forms of compensation
Social Climate	relations with colleagues and managers, social activities, work atmosphere, culture
Development Opportunities	(international) promotion opportunities, trainings, personal development
Working Hours	flexibility of working hours, work-life-balance, pace and stress level, amount of overtime
Work Environment	location, building, services & facilities, workplace

Table i: General Employee Attraction Variables that are tested in survey

In addition, with help of the structured interviews, there is concluded to implement the following Work Environment Factors in the survey:

WORK ENVIRONMENT FACTORS		
LOCATION	Geograpical Location	specific location/ city
	Location Type	Central Business District, historical city centre, business park, former industrial site, country house
	Accessibility of the Location	by public transport as well as own transport
	Proximity of Amenities	e.g. park, restaurants, fitness center, physiotherapist
SERVICES & FACILITIES	ICT (helpdesk)	
	Coffee, tea, and other refreshments	
	Healthy Catering	
	Car Parking Places	
BUILDING	Building appearance	(architectural) appearance
	Networking Opportunities	with employees of other organisations within the building
	Sustainability Implementations	e.g. presence of solar panels or toilets that are flushed with rain water
WOKRPLACE	Interior	design, apprearance, lay-out
	Variety in Workplace Types	e.g. concentration, meeting, and informal places
	Personal Desk	whether or not having an assigned or a flexible desk
	Opportunities for Remote Working	ICT (services) that allow you to work e.g. at home or in the train
	Ergonomic Workplace	comfortable, functional and adjustable
	Amount of Light	daylight and lighting

Table ii: Work Environment Variables that will be tested in survey

SURVEY

The information derived from the survey is the data that is used for the statistical analysis in SPSS, which will eventually lead to the formulation of an answer to the main research question of this thesis. As the survey questions are based on preferences and hypothetical considerations when choosing for a future job, the data will be *stated preference data*. Stated preference data describes hypothetical or virtual decisions on existing or proposed choice alternatives.

In this thesis, two multi criteria analysis methods are combined, wherefore the advantages of both methods are implemented: the hierarchical implementation of the *value tree method*, combined with the

distributed weight allocation that provides calculable data of the *constant sum method*. The value tree including the selected variables, which forms the structure of the survey, is presented in figure iii.

This online distributed survey was aimed on the target group of this research: knowledge workers. Therefore is the survey distributed among knowledge workers -employed people-, and to-be-knowledge workers -students. . Including both groups will provide insights in whether having experience with work environments or not provides different opinions.

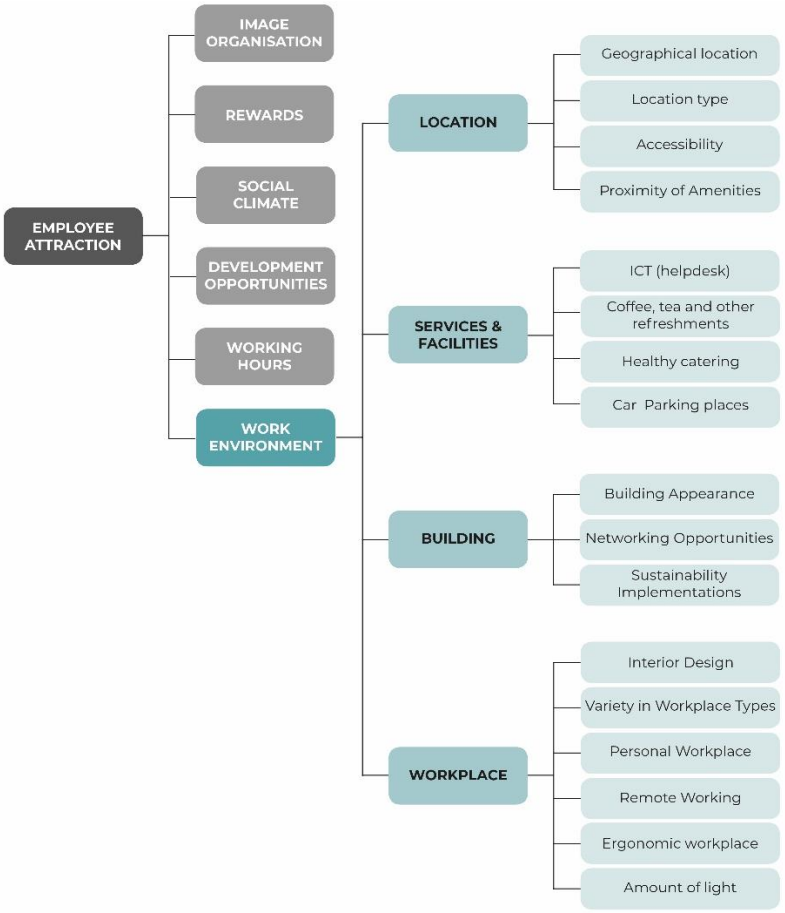

Figure iii: Value Tree Design

STATISTICAL ANALAYSIS

This part of the research will use the data generated in the survey to formulate conclusions and possibly find patterns in the data on the indicated influence and preferences.

The statistical analysis is mainly focused on finding variables that have significantly most influence on employee attraction. The first part analyses the whole sample of 368 respondents as one homogeneous group. The second part of the analysis is a heterogeneous analysis and compares groups of different (socio-demographic) perspectives in order to enable advising companies on attracting their specific employee target group.

The homogeneous data of the whole sample is analysed by a Repeated Measures ANOVA, followed by a Paired Samples T-Test. The heterogeneous data of the different groups within different perspectives are analysed by a Repeated Measures ANOVA, followed by an Independent Samples T-Test in case there were two groups to compare, or followed by the Games-Howell post hoc test, in case there were more than two groups to compare.

RESULTS

RESULTS: ANALYSIS OF INTEGRAL SAMPLE

SAMPLE AS ONE HOMOGENEOUS GROUP

To enable a comparison of the values of all different sub variables, the means of these sub variables are plotted in a value tree and multiplied by the means of the main variables (figure iv).

Variable *Work Environment* appears to be comparably influential as the other General Employee Attraction variables, despite it is ranked at the second-lowest place. In addition, it appears that the calculated means are strongly dependent on the number of presented General Employee Attraction variables. When solely asking the respondents about the influence of the work environment (without presenting other variables), they valued the work environment much higher with an average score of 52 degree of influence on a 100-point scale.

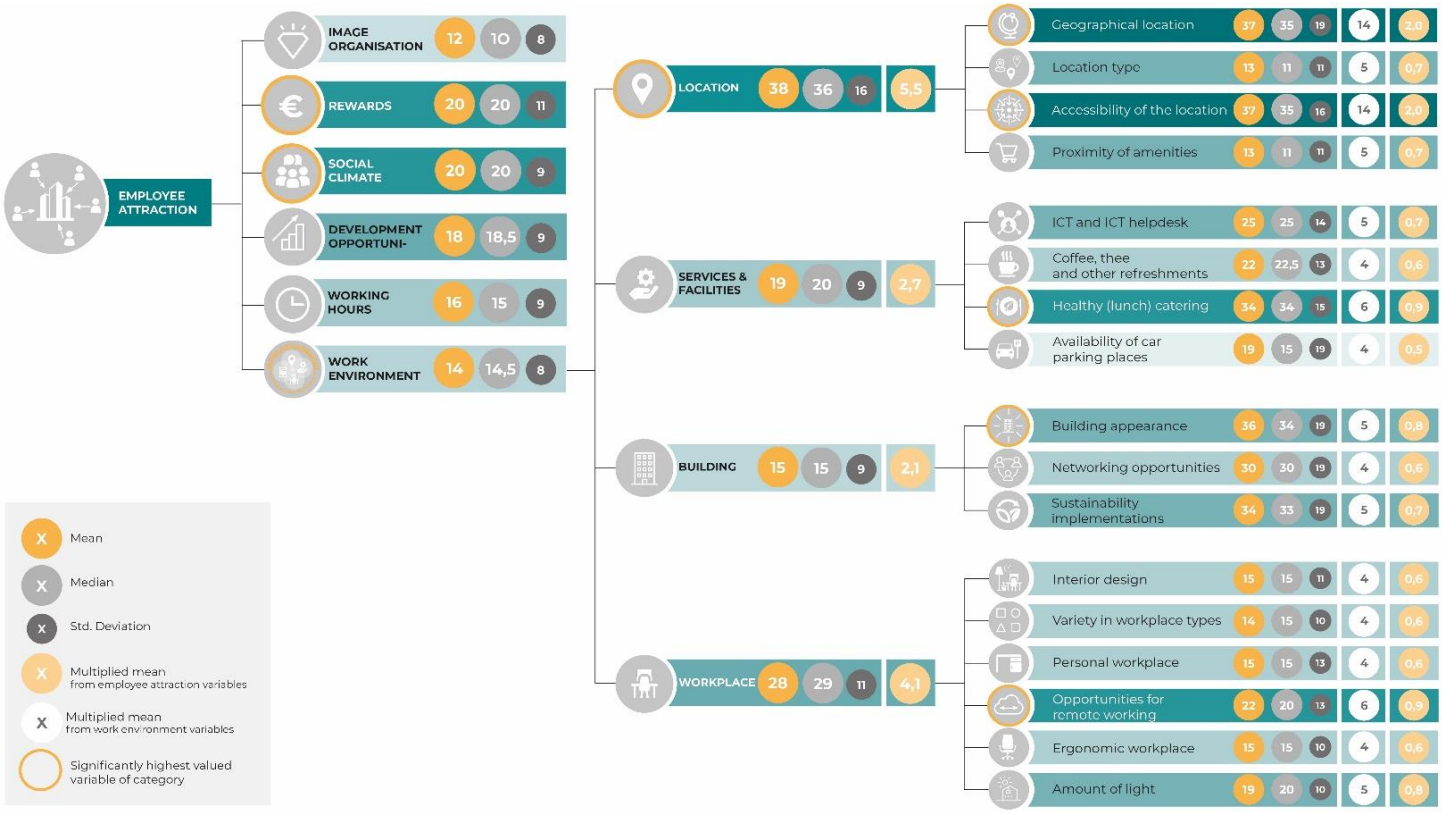

Figure iv: Research results in Value Tree

When evaluating the calculated means, the work environment variables can be placed in a rank order as presented in figure v. As main variable *Location* significantly received the highest value, it is logical that some *Location* variables are on the top of the rank order: *Geographical Location* and *Accessibility of the Location.*

Figure v: Work Environment variables in rank order

RESULTS: ANALYSIS OF DIFFERENT GROUPS

DIVISION OF THE SAMPLE IN HETEROGENEOUS GROUPS

The examined groups that are leading in this part of the results, represent the following perspectives: current situation, gender, generation, household composition, educational level, years of work experience, job level, working time, desk type. The analysis of the different groups is explained by using a scheme in which the results are visualised (figure vi). This scheme shows two different types of results: 1) per variable, significant differences between groups of different perspectives (horizontal), and 2) per group, the most influential variables for each variable category (vertical).

For almost all variables, significant differences between groups within the different perspectives are observed. Remarkable is that there are no significant differences found between the groups concerning the influence of the *Work Environment*.

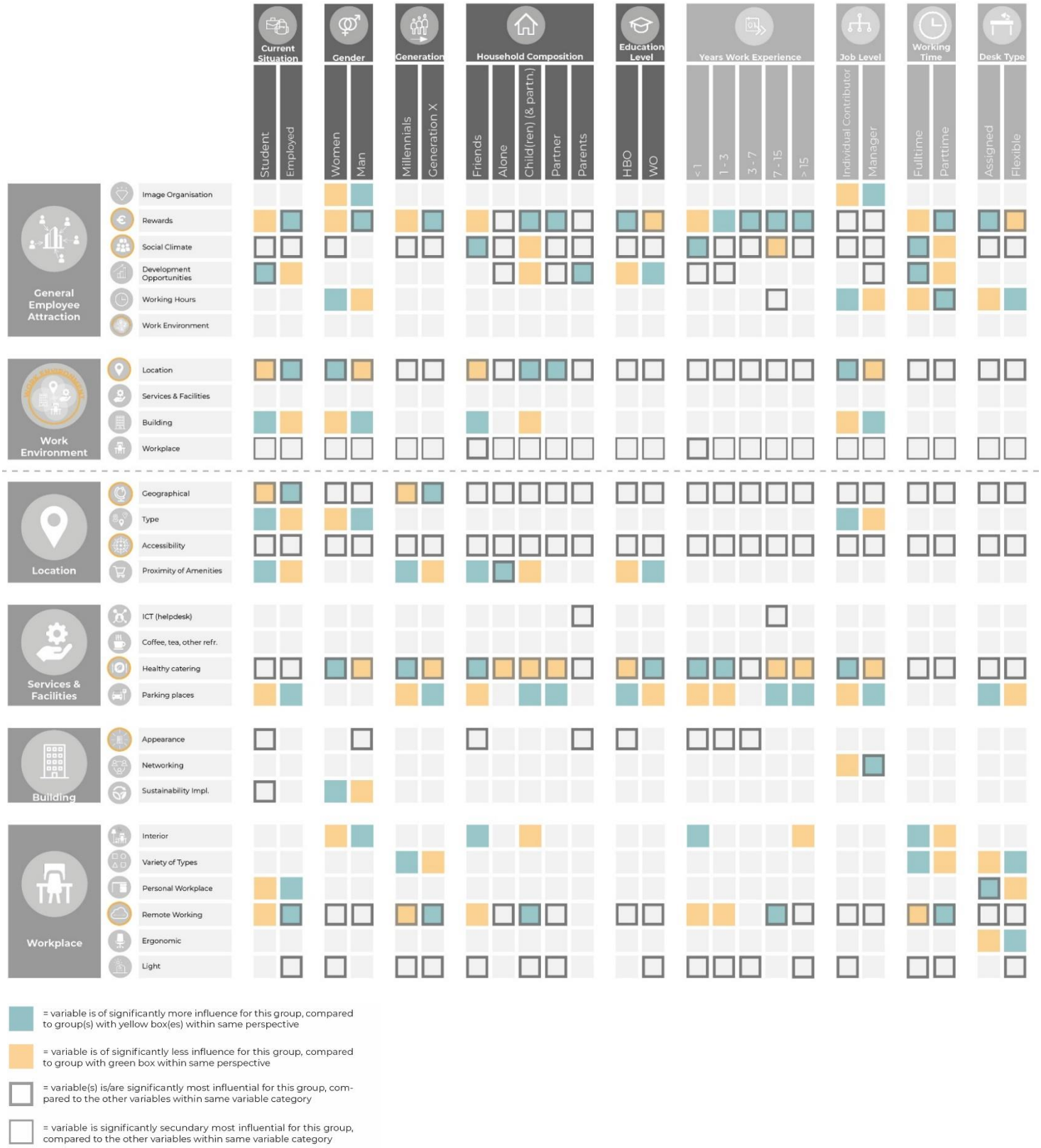

Figure vi: Results: significant differences between groups within different perspectives.

STNTHESIS

In the literature on Human Resource Management is recommended to specify a profile of the specific employee target group in order to tailor the recruitment practices to this group and attract the most suitable employees (Armstrong, 2014; Chambers et al, 1998; Hiltrop, 1999). Moreover, graduation organisation JLL emphasised their use of employee profiles to explain different types of employees to their clients. They recommended creating employee profiles as a useful way of applying the generated knowledge in practice. Hence, the results from the statistical analysis of the heterogeneous groups from different perspectives is used to create employee profiles. These employee profiles present the results of the heterogeneous data in a simplified and visualised way in order to make it usable for companies.

The created profiles cover the following groups of potential employees: students, starters, mid ranged employees, experienced professionals, managers, university educated, applied science educated, Millennials, and women. In addition, a reference profile is created that represents the results of the sample of the research as a whole: the homogeneous data.

The profiles that are concerned with the career path of (future) knowledge workers are combined into one scheme (figure vii), in which is shown how employee perceptions on the influence of work environments develop throughout the years of employment.

CONCLUSIONS

To conclude, an answer will be provided to the main research question: **What is the influence of work environments on attracting employees to enhance competitive advantage within the war for talent?**

There are many factors that have an influence on people's decision for a certain job at a certain employer. The influence of the *work environment* is tested against these General Employee Attraction factors. From the statistical analysis appeared that the *work environment* has a comparable influence on employee attraction as the other five factors. When rank ordered, *Social Climate* followed by *Rewards*, appeared most influential on employee attraction, and Work Environment received the second lowest place, just above *Image of the Organisation*. This second-highest place might insinuate that the *Work Environment* is not that influential on employee attraction. However, when taking into account that the Work Environment is barely discussed in literature on Employee Attraction within literature on Human Resource Management, this place in the rank order with a mean that does not differ that much from the other variables, could be considered as rather high and previously overlooked.

It is exceptional that in the analysis of the heterogeneous data, not a single significant difference is found between different groups within the tested (socio-demographic) perspectives concerning the influence that the *work environment* has on employee attraction. Therefore can be concluded that all survey respondents have a comparable opinion on the degree of influence that the *work environment* has on their choice for a new job.

When zooming in to the main categories that the work environment consists of, *Location, Services & Facilities, Building,* and *Workplace*, it can be concluded that *Location* has significantly most influence on

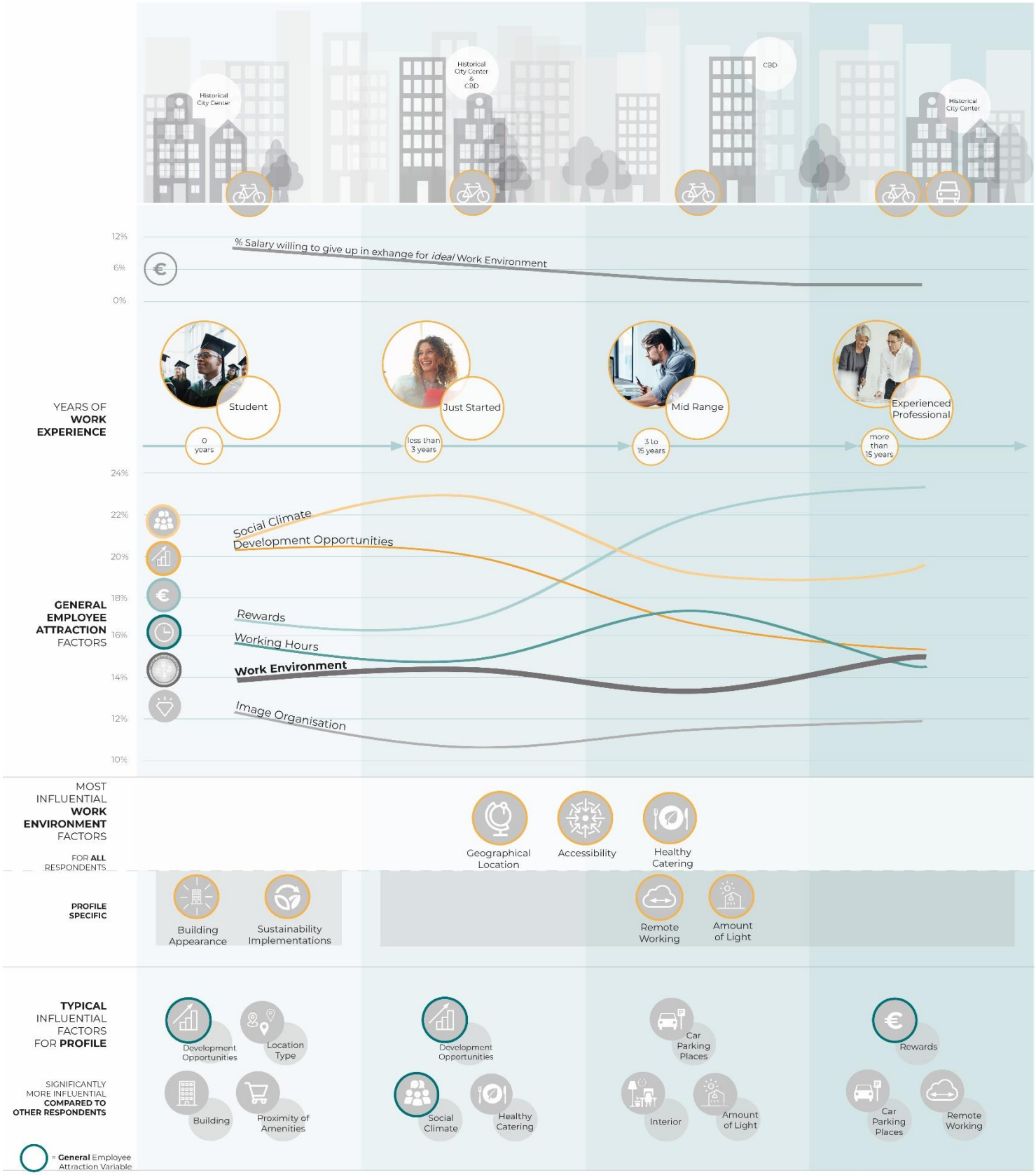

Figure vii: The Work Environment Career Path: the influence of the Work Environment throughout a career path.

knowledge workers' choice for a certain job. Besides, *Workplace* has significantly more influence than the other two variables, *Services & Facilities* and *Building*.

The respondents indicated that they are, on average, willing to give up 7,1% of their (future) salary in exchange for their *ideal* work environment. This demonstrates that the *work environment* has such an impact on people's choices for a certain job, that they would agree with a lower salary. However, to some (socio-demographic) groups this is more applicable than to others.

By examining the influence of the sub variables, it became clear that *Geographical Location* and *Accessibility of the Location* were extreme significantly higher valued than any other sub variable. Sub variables *Healthy Catering* and *Remote Working* appeared to be of high influence as well.

The *work environment* influences employee attraction in many ways. Some factors have more influence than others, and some people are more influenced by the work environment than others. But it can be stated that the *work environment* certainly competes with other influential factors as a strategic asset in this in this battle for employees!

DISCUSSION AND RECOMMENDATIONS

DISCUSSION

This research assumes that a potential employees know the work environment of a company they consider working for. However, this is not always the case. It can be assumed that when a potential employee has no (or little) information on the work environment of a company, the work environment has another degree of influence on employee attraction.
The War for Talent is of all times, and is not only present in a prosperous economy. However, in an economic recession, there can be assumed certain attraction factors -including the work environment- might play a smaller role or do not play a role at all for the people who are left out the War for Talent pool.

RECOMMENDATIONS

For future research, it is recommended to execute a similar research, but with a conjunct research method for the survey. This method allows a more unconscious way of answering the survey questions. Also the use of qualitative interviews are recommended to obtain more in-depth insights. In addition, case studies on office buildings that are well-known for their attractiveness could be used to examine whether these buildings actually attract the employee target group of the companies within these buildings.

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1 INTRODUCTION

This introduction starts with the provision of the relevant background information that leads to the problem statement. After the problem is explained, the main goal and objectives of this research are presented. Subsequently, the scope and boundaries of the research are explained, including an explanation of some terms that are used throughout this thesis. Thereafter, the scientific and societal relevance will be discussed, complemented by the motivation for the thesis topic. The introduction chapter concludes with presenting the research questions and the conceptual model, which combined form the foundation of the overall thesis.

1.1 BACKGROUND INFORMATION

As the job and job vacancy growth in The Netherlands has not stopped since 2013 (CBS, 2019a; CBS, 2019b; UWV, 2019), companies got caught up in a competition for employees. Employers indicate that vacancies are difficult to fill, and many of them expect that it will become even harder the coming year (UWV, 2019). Mainly the business services sector suffers from this employee shortage, as this sector counts the greatest amount of fast growing companies compared to other sectors (CBS, 2018a). The business services sector is part of the current mainly information-based and knowledge-driven economy. This economy is characterised by the central position of the work that employees conduct in the operations of companies, causing that people are the asset to gain organisational competitive advantage (Christopher & Sumantra, 2002). The importance of human ability and knowledge was already emphasised by Churchill in his speech at Harvard University in 1943 where he stated that "the empires of the future will be the empires of the mind" (1943).

To express the competition for talented employees, the term 'war for talent' was introduced in 1998 by McKinsey & Company, America's most popular and prestigious consulting firm (Chambers, Foulon, Handfield-Jones, Hankin, Michaels, 1998; Vault, 2019a; Vault, 2019b). McKinsey's definition for talent is: "the sum of a person's abilities – his or her intrinsic gifts, skills, knowledge, experience, intelligence, judgement, attitude, character, and drive. It also includes his or her ability to grow." (Michaels, Handfield-Jones & Axelrod, 2001, p. xii). With the statement "better talent is worth fighting for", McKinsey originally pointed out employees at senior levels of an organisation and stated that complex economy demands "sophisticated talent with global acumen, multi-cultural fluency, technological literacy, entrepreneurial skills and the ability to manage increasingly delayered, disaggregated organizations" (Chambers, et al., 1998, p. 45, 47). However, nowadays the term 'talent' is not specifically intended for employees at senior levels anymore, but is widespread used for everyone who has "natural or trained brainpower" and "the ability to think creatively" (The Economist, 2006).

A research of CBRE shows that 34% of the questioned companies see employee shortage and employee skills as their priority within their overall strategic challenges, which is double the percentage compared to 2018 (CBRE, 2019). Also the 'Big Four' accounting firms -EY, Deloitte, KPMG, and McKinsey- emphasise the importance of prioritising employee attraction (Atalla, 2017; Brown & Lepeak, 2016; Gardner, N., Park, J., Smith, M., Willcher, J., 2013 Hagel, 2012). More and more multinational companies even prioritise attracting and retaining talent over cost savings, which was 67% of the questioned

companies in 2014 according to CBRE (CBRE, 2014). In addition, McKinsey stated that companies should make talent a strategic priority to gain competitive advantage, but that they should constantly rethink their talent strategies as most of the companies are unable to attract, motivate and retain employees (Guthridge, Komm, Lawson, 2008). Therefore, when suitable employees are scarce and companies face a war for talent, companies could use Human Resource professionals in the "design, development and delivery of a company's strategy" (Christopher & Sumantra, 2002, p. 37).

To support corporate business strategies, companies can use their real estate as a strategic asset (Nourse & Roulac, 1993). Real estate related decision-making within private organisations and businesses is part of Corporate Real Estate Management (CREM) (Nourse & Roulac, 1993; De Jonge, Arkesteijn, Van de Putte, De Vries, & Van der Zwart, 2009). Nourse & Roulac (1993) distinguish several real estate strategies: occupancy cost minimisation, flexibility, promote human resource objectives, promote marketing message, promote sales and selling process, facilitate and control production, operations, service delivery, facilitate managerial process and knowledge work, capture the real estate value creation of business. Focusing on the human resource objectives strategy, Nourse & Roulac do not specifically emphasise the use of real estate when attracting talent, but are discussing the retention of skilled workers. They appoint that skilled workers may demand a particular location, specific amenities and facilities, and quality of space (Nourse & Roulac, 1993). Their recommendations for implementing human resources within the corporate real estate (CRE) strategy are: "provide efficient environment to enhance productivity, recognize that environments are important elements of job satisfaction and therefore compensation, seek locations convenient to employees with preferred amenities (transportation, shopping, reference, entertainment)" (Nourse & Roulac, 1993, p. 480).

In line with this vision, many organisations -particularly real estate consultants- are convinced that companies can use their real estate as an asset to attract and retain employees (CBRE Research, 2019; De Wit, 2019; Knight Frank & Newmark Grubb Knight Frank, 2016; Savills Commercial Research, 2019; Van der Mije, Bertens, Zoetmulder, Van der Kurk, 2017; Weeink, Frost, Duncan, & Carroll, 2017). Also urban area developers acknowledge that the office is more and more becoming a means to distinguish the company (Van der Krabben, 2013).

Leveraging real estate as a strategy to attract and retain talented employees can be explained financially: when observing the expenses of companies within the business services sector, employee expenses have a much larger share than the expenses on real estate (CBS, 2019d). In this sector in The Netherlands, the expenses on employees are on average even 12 times as large as the expenses on real estate (CBS, 2019d). Besides, the average costs of replacing an employee are very expensive. As an example, the costs of replacing an employee within the legal sector are –converted to euros– around €35.000, whereof approximately 15% of the costs go to recruiting a new employee and 85% to the lost output while that new employee is trained to reach optimal productivity (Oxford Economics, 2014). The loss of value can also be expressed by loss of training, knowledge, reputation, and client relationships (Knight Frank, 2016). Moreover, the loss of output can be even more if the vacancy is on a leadership spot, since others are reliant upon that employee (Knight Frank, 2016).
As organisational expenses on employees are much more costly than the expenses on real estate, using the work environment to improve employee efficiency, motivation and productivity, and to lower employee turnover, could be far more cost effective than trying to lower the already relatively low real estate costs (Earle, 2003; Knight Frank, 2016).

Real estate consultants express the importance of using real estate in a strategic way in order to attract and retain talent. Within the 'war for talent'-circumstances, the importance of a good office location and a good workplace environment are emphasised (CBRE, 2019; De Wit, 2019; Puybaraud, 2017; Savills Commercial Research, 2019; Van der Mije et al, 2017; Weeink et al., 2016). Within CRE strategies, a

transition can be noticed from the focus on 'location, location, location' to 'talent, talent, talent' (Weeink et al., 2016). This transition leads to a shift from 'location, location, location' as the most important requirement to a varied range of requirements for location, building and workplace (Van der Krabben, 2013).

According to research of different real estate consultancy companies, the awareness regarding the importance of using real estate strategically in the war for talent is increasing within organisations. In research of CBRE, the following is stated: "employee engagement and talent attraction & development [are] two of the three most important drivers of corporate real estate strategy, even ahead of cost-reduction" (CBRE, 2019, p. 2). Therefore, some companies make the decision to move their offices from peripheral business locations to more expensive and attractive Central Business Districts (Knight Frank, 2016). Another reason for companies to move their office location is the increasing demand for amenities within office areas: a multifunctional surrounding has become a priority (Van der Krabben, 2013).
Next to using office locations strategically, almost 60% of the companies would pay higher rents for a building with optimal facilities to be more attractive for potential employees (CBRE, 2019). Besides, some companies transform their offices into an "inspiring and enjoyable place" as a cost-effective asset to attract talented employees (Knight Frank, 2016, p.27). Moreover, with as specific reason to attract and retain talent, 28% of the companies want to use flexible space, which is 10% more than a year ago (CBRE, 2019). Implementing flexible working subsequently comes with the demand for better accessibility and less office space, which could be another reason for companies to relocate their office (Van der Krabben, 2013).

As explained in this introduction, companies assume that transformations of their work environments to inspiring and enjoyable places with optimal facilities and relocations to for example Central Business Districts, can be used as strategies in their attempts to attract employees. For these companies, it could be useful to know –before executing the transformations and relocations– what the potential employees are looking for when searching for a job in order to actually attract their employee target group. Knowing their preferences and understanding influential factors when making job choice related decisions could help companies in developing employee attraction strategies. In his 'Handbook of Human Resource Management Practice', Armstrong recommends companies who experience difficulties in attracting employees to "carry out a study of the factors that are likely to attract or deter candidates – the strengths and weaknesses of the organization as an employer." (Armstrong, 2014, p.228). In line with this recommendation, this thesis will examine factors that may have an influence on the attractiveness of an employer towards potential employees, with a focus on the work environment.

An overview of this introduction is visualised in Figure 1.1, which shows the context of this research.

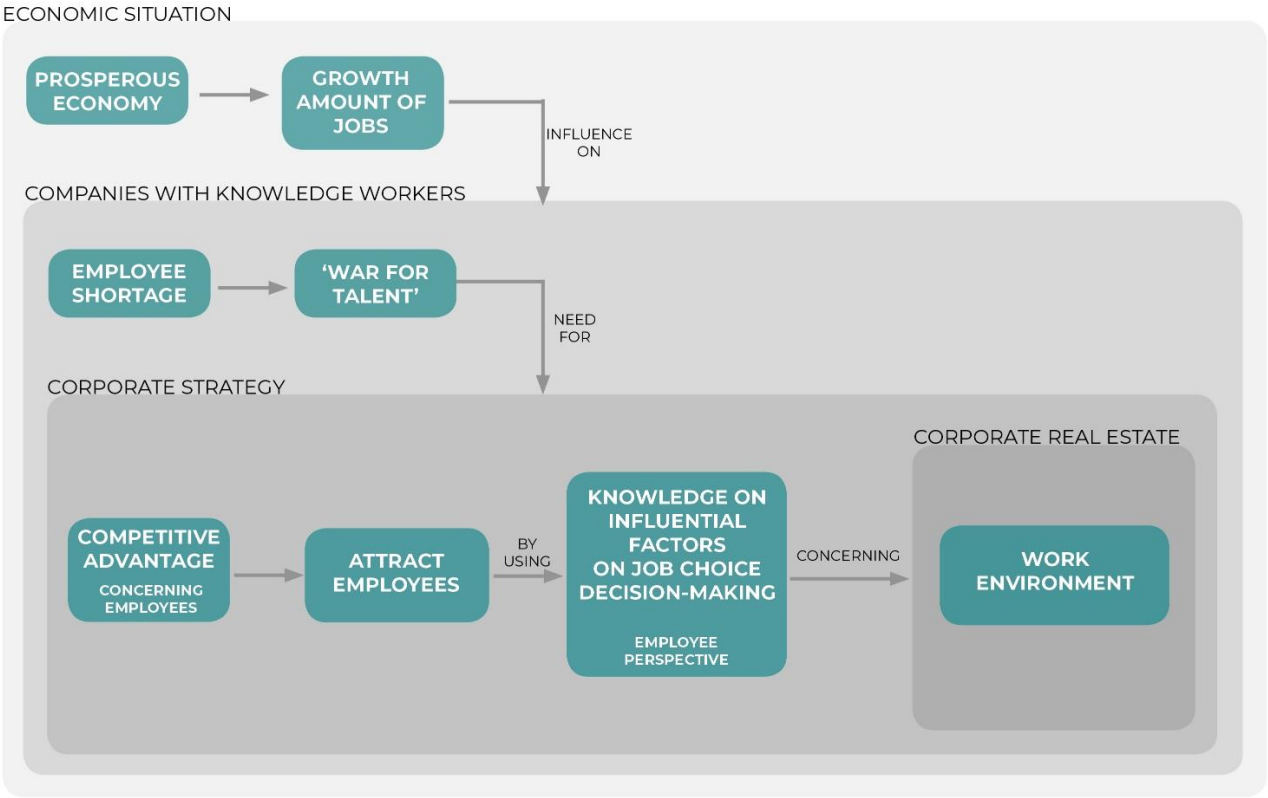

Figure 1.1: Research Context.

1.2 PROBLEM STATEMENT

As explained in the previous paragraph, companies are 'fighting' for the most suitable employees within 'the war for talent' and are prioritising employee attraction within their overall business strategies. Companies assume that work environments –consisting of a wide range of characteristics on location, service & facilities, building, and workplace level– could have a positive influence on employee attraction and are therefore relocating and transforming their work environments.

As companies invest in their work environments with the intention to attract employees, knowledge about the actual influence of their investments on this desired result will provide insights in the effectiveness of such investments.

However, there is very limited knowledge on the actual influence that work environments have on employee attraction. In scientific literature there is research on the influence of work environments on employee *satisfaction*, which focuses on experiencing an existing situation. However, there is very limited research on the *influence* of work environments on attraction and very limited research on employee *preferences*, which focuses on the greater liking of an alternative compared to others. Generating knowledge on the influence of the work environment on job choice decision-making of potential employees can therefore contribute to the existing body of knowledge and help companies in their real estate strategies.

Hence, the problem in this research is that companies assume that work environments have an influence on employee attraction and therefore consider this as an important reason to invest in their work environments, while it has not been proven that these investments could potentially lead to employee attraction.

1.3 RESEARCH GOAL & OBJECTIVES

In order to provide insights to companies to be used as part of their strategies on enhancing their competitive advantage within the war for talent, the goal of this research is **to identify the influence of work environments on employee attraction**. More specifically, the objectives of this research are:

1. To gain understanding about the role of work environments in employee attraction.
2. To gain understanding about the role of employee attraction in corporate real estate management.
3. To identify the work environment characteristics that might be taken into consideration in job choice decision-making by knowledge workers.
4. To determine the extent in which knowledge workers take work environments characteristics into consideration in job choice decision-making.
5. To define how companies can use knowledge on work environments in order to enhance competitive advantage within the war for talent.

1.4 RESEARCH SCOPE & BOUNDARIES

In this thesis some terms, concepts and words are used that could be interpreted in several ways. To prevent misunderstanding and to simultaneously set some boundaries, some ambiguous concepts are explained.

'Work environment'

In this thesis 'work environment' is not specifically about the physical workplace or office, but expresses the 'work environment' in a wider context. The location, building, services & facilities, and workplace are all included within this term. This division is based on the division Rothe (2011) makes in her licentiate thesis.

Location does not only indicate the geographical location of the work environment, but suggest a broader meaning. For example, themes as location type and accessibility of the location are included.

Services & Facilities indicate services and facilities that are part of the building or office.

Building indicates the general characteristics of the office building itself.

Workplace indicates aspects such as the overall floor lay-out, the different workspace types, and characteristics of the individual workplace. Also the 'flexible aspect' of working is included in this term, such as opportunities for remote working and desk sharing.

'Knowledge workers'

This thesis focuses on knowledge workers. Knowledge workers are defined as: "individuals who have high levels of education and specialist skills combined with the ability to apply these skills to identify and solve problems." (Drucker in Armstrong, 2014). Knowledge workers' primary task is non-routine problem solving using non-linear creative thinking, by using their own knowledge and the knowledge of colleagues as main resource (Reinhardt, Schmidt, Sloep & Drachsler, 2011; Liu, 2012).

In this thesis the term 'office workers' is intentionally not used, as employees are not solely bound to offices. Because of flexible working concepts, which will be explained in paragraph 3.2.2, work environments can be perceived from a much wider perspective than only the physical office environment.

'Employee'

An important motive for the topic of this thesis is the 'war for talent'. However, from literature studies (paragraph 3.1.3) becomes clear that the term 'talent' is a rather doubtful term: it is defined by many definitions, focusses on a very limited part of the entire workforce, and is on the other hand widespread used to refer to the entire workforce. Therefore, in this research the term 'talent' will only be used in the descriptive parts and not in the empirical part of the research. The terms 'employee', 'suitable employee', 'knowledge worker' will be used instead.

'Suitable employee' will be defined according to the often used combination of the following three competencies: knowledge, skills and abilities (KSA's) (Cheney, Hale & Kasper, 1990; Wright et al., 1994; Stevens & Champion, 1994).

> "*Knowledge* refers to the content and technical information needed to perform adequately in a job and is mostly obtained through formal education, on-the-job training, and information media, such as manuals.
> *Skills* are the specific psychomotor processes necessary to meet the current requirements of a specific job.
> *Abilities* refer to the cognitive factors that represent present capabilities or achievement levels." (Cheney, et al., 1990)

The proposed definition for 'suitable employee' will be: the employee possesses the knowledge, skills and abilities required for the specific job.

Business Services Sector

This research will focus on the tertiary sector of the economic sectors: the Business Services sector. The national Dutch organisation that collects, processes and publishes statistics for the government, science and business is called Central Bureau of Statistics (CBS) and has categorised all possible work sectors in their document 'Standard Business Division 2008' (SBI 2008, 2017). Their division has the letters A till U and has a more detailed subdivision, based on numbers. The subsectors within the Business Services sector are as follows:

- J: Information and communication
    - 61 Telecommunication
    - 62 Support activities in the field of information technology (IT)
    - 63 Information service activities
- K: Financial Institutions:
    - 64 Financial institutions, except insurance and pension funding
    - 65 Insurance and pension funding (no compulsory social security)
    - 66 Other financial Institutions
- L: Renting, buying and selling of real estate
    - 68 Renting buying and selling of real estate
- M: Consultancy, research and other specialised business services
    - 69 Legal activities
    - 70 Holding companies (not financial)
    - 71 Architects, engineers and technical consultancy
    - 72 Research and development
    - 73 Advertising and market research
    - 74 Industrial design, photography, translation and other consultancy

This thesis will focus on knowledge workers within all subsectors of the business services sector. Including all sub sectors enables to provide extensive and comprehensive insights in employee preferences concerning their work environment, without excluding certain knowledge workers in advance. Besides, including different sub sectors enables the comparison of employees preferences on the basis of the sub sectors they are working in. Moreover, not excluding subsectors will generate a higher chance of a sufficient amount of responses to the surveys in the empirical phase of the research.

Preferences

When job seekers have multiple companies to choose from, they are able to choose for the company that meets their preferences best. Therefore, when examining the influence of work environments on *attraction*, research should not be focused on employee satisfaction, which focuses on experiencing an existing situation.

There can be made a distinction between '*needs*' and '*preferences*' of office workers, whereby *needs* are "issues that are necessary to achieve a certain goal" and *preferences* are "things users would like to have if they had the choice" (Rothe, 2011, p. 5). Also in psychological science are *preferences* directly linked to choices by arguing that "the utility of a choice is equivalent to the sum of its preferences, that is, the sum of the weighted values of its attributes" (Simon, Krawezyk, Holyoak, 2004, p.331).

This research will focus on 'preferences', since identifying the work environment characteristics that potential employees would like if they have a choice, aligns the most with *attraction* when assuming that they can choose between different employers with their corresponding work environments.

Attracting

Most literature on the war for talent focuses on 'attracting and retaining' employees. Though, this thesis will focus on *attracting* in particular. In the existing literature on work environments, the focus is currently on *satisfying* employees, which is in direct link with *retaining* since it focuses on experiencing an existing situation. However, this thesis will contribute to the existing literature by examining an underexposed topic in literature on work environments: *attracting* employees.

Netherlands

The geographical location is the last set boundary for this thesis. The thesis is developed in The Netherlands and will also focus on the Netherlands. As cultural differences might cause different results for different countries, there is chosen to solely focus on one country to ensure coherence in the results. Moreover, as there is general interest in knowledge workers' preferences, there no need for geographical boundaries within the Netherlands.

1.5 RELEVANCE

1.5.1 SCIENTIFIC RELEVANCE

Current theories on CREM are often rather based on explanations and experiences of CREM professionals in practice, than on scientific evidence (Heywood, 2011). Therefore, scientific evidence in literature on CREM is limited in general.

Within the existing scientific literature on CREM there is research on the influence of work environments on people. However, most of the research is from an organisational perspective. There is for example research on the "keep" factors of office buildings to satisfy office tenants (Appel-Meulenbroek, 2008), on office building and location characteristics that cause office vacancy (Remøy, Koppels, van Oel & de Jonge, 2007), on the decision-making behaviour of office occupiers (Leishman & Watkins), and on preferences of office occupiers (Luoma, Niemi, Rothe, Lindholm, 2010; Remoy & van der Voordt, 2014). Besides, there is scientific literature about the influence of specific work environment characteristics on employee behaviour, satisfaction, productivity, job performance and well-being. Within this research, specific topics are for example: comfort, sustainability, office lay-outs, desk ownership, personalisation, lightning (Wells, 2000; Roelofsen, 2002; Van der Voordt, 2004; De Croon, Sluiter, Kuijer, & Frings-Dresen, 2005; Vischer, 2007; Haynes, 2008; Veitch, Newshman, Boyce & Jones, 2008; Feige, Walbaum, Janser & Windlinger, 2013; Kim, Candido, Thomas, Dear, 2016).

Research about the influence of work environments –including a wide range of work environment characteristics– on the satisfaction of end-users/ employees/ knowledge workers/ office workers, from their own perspective, is limitedly found (Appel-Meulenbroek & Feijts, 2007; Appel-Meulenbroek, Kemperman & Van Susante, 2015; Kim et al., 2016).

Most studies concerning work environments are focused on how current office users experience the work environments and the effect of work environments on the current office users (Rothe, 2011). However, when examining in this thesis what the influence of work environments is on attracting new employees, there should be identified what office users want. Research from the user-orientation to find out what the needs and preferences of office users are, without focusing on an existing work environment situation, is very limited (Rothe, 2011).
A few scientific publications on office user preferences, from an office user perspective, and including a wide range of work environment characteristics can be found limitedly (Rothe, 2010; Rothe, Lindholm, Hyvönen, Nenonen, 2010, 2011, 2012; Rothe, Beijer & Van der Voordt, 2011).

On the other hand, a domain wherein scientific research on attracting employees –from an employee perspective– can be found more extensively is Human Resource Management (HRM). However, the influence of physical work environments on employee attraction is only limitedly incorporated (Chambers et al., 1998; Berthon, Ewing, & Hah, 2005; Uggerslev, Fassina, & Kraichy, 2012; Wong Wan, & Gao, 2017).

Concluding, scientific research specifically focused on the influence of a wide range of work environment characteristics on knowledge worker attraction, from an employee perspective, cannot be found in scientific CREM or HRM literature. Since no connection can be found in scientific literature between (1) employee attraction within research on HRM and (2) work environment preferences within research on CREM, a gap in literature is determined. In Figure 1.2 a visualisation of the scientific gap can be found. The knowledge that will be the result of connecting information on 'employee attraction' and 'work environment preferences' will contribute to better alignment of scientific research on HRM and CREM.

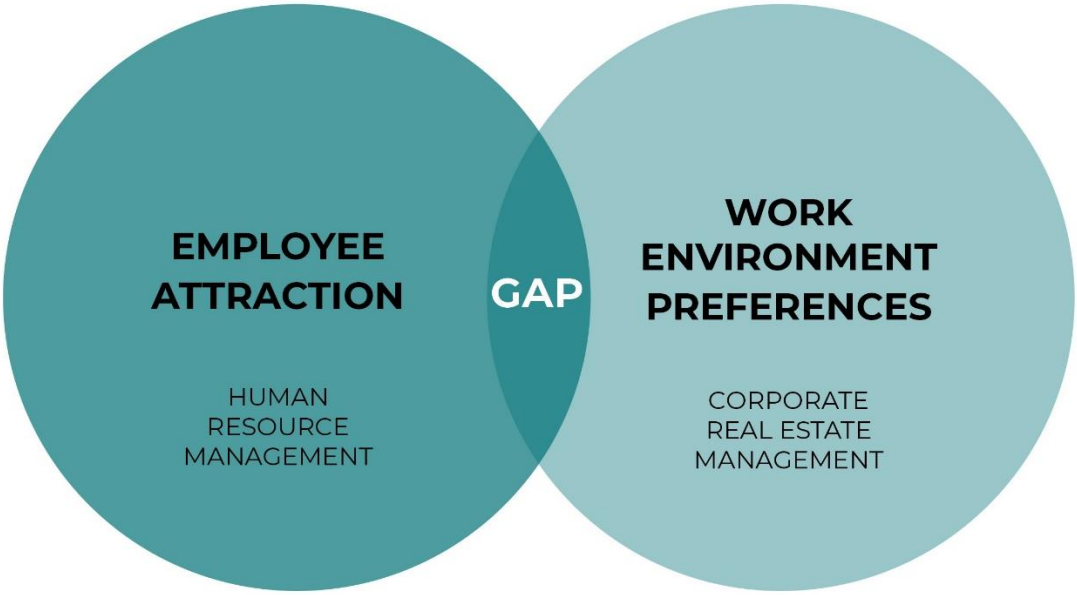

Figure 1.2. Visualisation of the scientific gap.

1.5.2 SOCIETAL RELEVANCE

For companies, it is important to attract talented employees, as it widely acknowledged that people are the asset to improve organisational positions in the current knowledge-driven economy.

The societal relevance of this research can be derived from the provided insights for companies into the alignment of work environment related investments and employee attraction. These insights could potentially lead to enhancement of the competitive advantage within the war for talent for these companies and consequently to an improved general organisational position.

The more knowledge is derived about the influence of different work environment characteristics on employee attraction, the more work environment related investments will be made effectively. Effective investments that will actually lead to attracting the most suitable employees to a company can eventually lead to higher profitability of that company and increase its value.

1.6 RESEARCH QUESTIONS

Considering the problem statement, the goal, and objectives of this research as discussed in the previous paragraph, the main research question of this research is as follows:

> **What is the influence of work environments on attracting employees to enhance competitive advantage within the war for talent?**

Sub questions have been formulated to answer the main research question:

5. What is the current knowledge on employee attraction by work environments?
   a. What is the role of work environments in research on employee attraction?
   b. What is the role of employee attraction in research on corporate real estate management?
6. Which work environment characteristics are taken into consideration in job choice decision-making by knowledge workers?
7. To what extent do knowledge workers take work environment characteristics into consideration in job choice decision-making?
8. How can companies use knowledge on work environments to enhance competitive advantage within the war for talent?

1.7 CONCEPTUAL MODEL

Companies should develop corporate real estate strategies that are aligned with their general business strategies in order to enhance their organisational success (Nourse & Roulac, 1993). Also the alignment of work environments with the needs of employees, is part of the corporate real estate strategy. The Corporate Real Estate Management (CREM) Framework combines four domains that should be in balance when creating a corporate real estate strategy (Den Heijer, 2011). More information on this framework is explained in paragraph 3.2.1.

The CREM Framework is adjusted to visualise the main concept of this thesis in the Conceptual Model, including the (underlying) strategic goals that are aimed to achieve (figure 1.3). The framework is adjusted in a way that it emphasises the core of this thesis: identifying the influence of work environments on employee attraction. Information on the influence will be generated on the basis of insights in employee preferences concerning work environments.

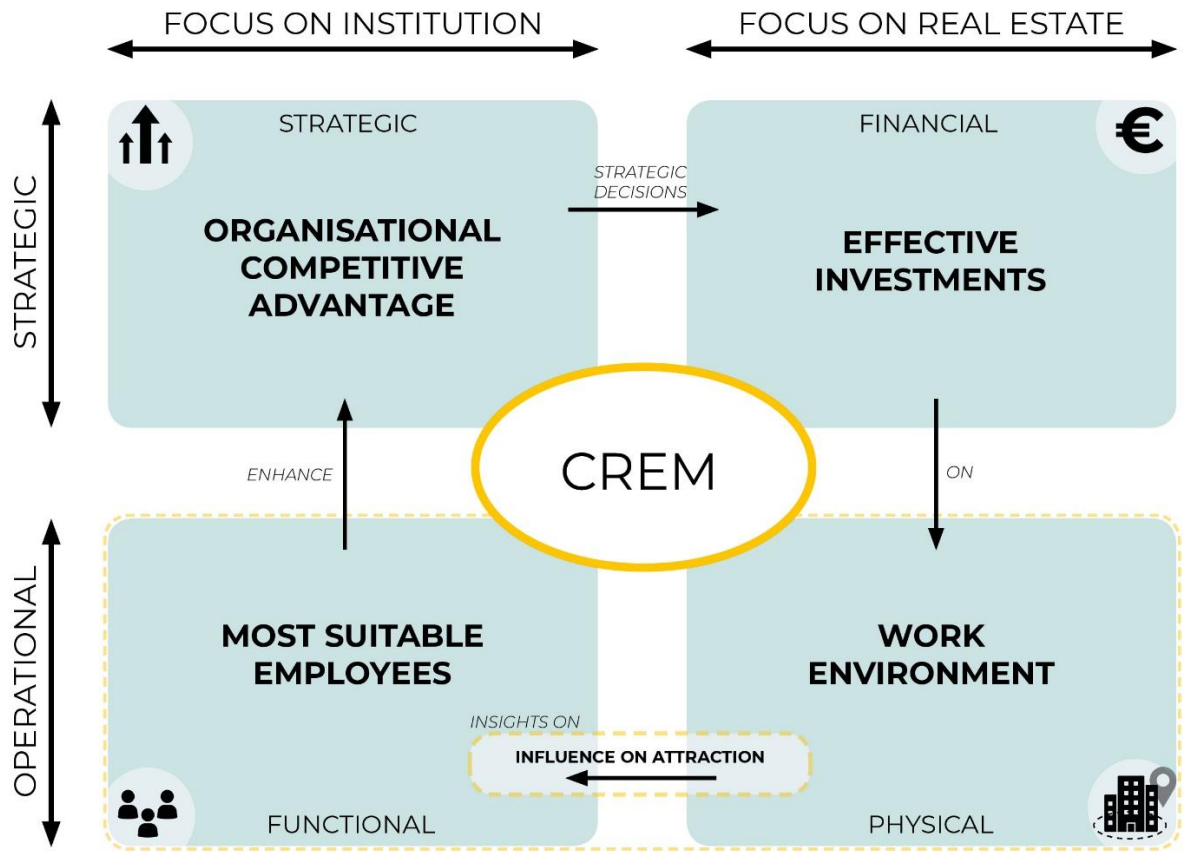

Figure 1.3. Conceptual Model. Own illustration (based on Den Heijer, 2011).

2 RESEARCH PLAN

2 RESEARCH PLAN

This chapter explains the overall research plan of this thesis, starting witch presenting the research framework. This research framework forms the base of the overall research design. After the research framework is explained, the different research methods are discussed according to the different phases within the research. Also, the types of study are explained based on different perspectives, followed by an explanation of the dissemination of the thesis and the audiences that may be interested in the outcome of the thesis. This chapter concludes with discussing the data plan and evaluating the ethical considerations.

2.1 RESEARCH FRAMEWORK

This research can be considered as 'social research'. Bryman (2012) describes social research as "academic research on topics relating to questions relevant to the social scientific fields…"(p.4). As 'management' is part of social sciences and this thesis attempts to solve a human resource management related problem within the corporate real estate management domain, this research can be acknowledged as social research.

The questions that are formulated in paragraph 1.6 form the base of the three main phases of this research: theoretical research, empirical research and synthesis. This division is visualised in the research framework (figure 2.1). The theoretical research is performed by a literature review and provides an answer to sub questions **1.A** and **1.B.** This research section generates an output that consists of relevant employee attraction variables and work environment variables, which serve as an input for the following research phase. Thereafter, the empirical research starts with providing an answer to sub question **2** by conducting structured interviews with people from different perspectives who are linked to human resource (management), corporate real estate (management), or the combination. These structured interviews are held to ensure that a valid set of variables is used in the subsequent phase of the research. The next part of the empirical research answers sub question **3** and consists of two different sections. In the first part, a survey is used to generate data on (future) knowledge workers' opinions concerning influential factors within job choice decision-making, with a focus on work environments. The information generated in this section is statistically analysed in SPSS to find patterns in data on the perceived influence of the factors and on employee preferences within job choice decision-making. In the last part of this research, the synthesis, sub question **4** is answered by the creation of employee profiles. The intention of the employee profiles is to simplify and visualise the generated knowledge, wherefore the application of this knowledge in practice is eased. In the next paragraph is elaborated on the different research methods.

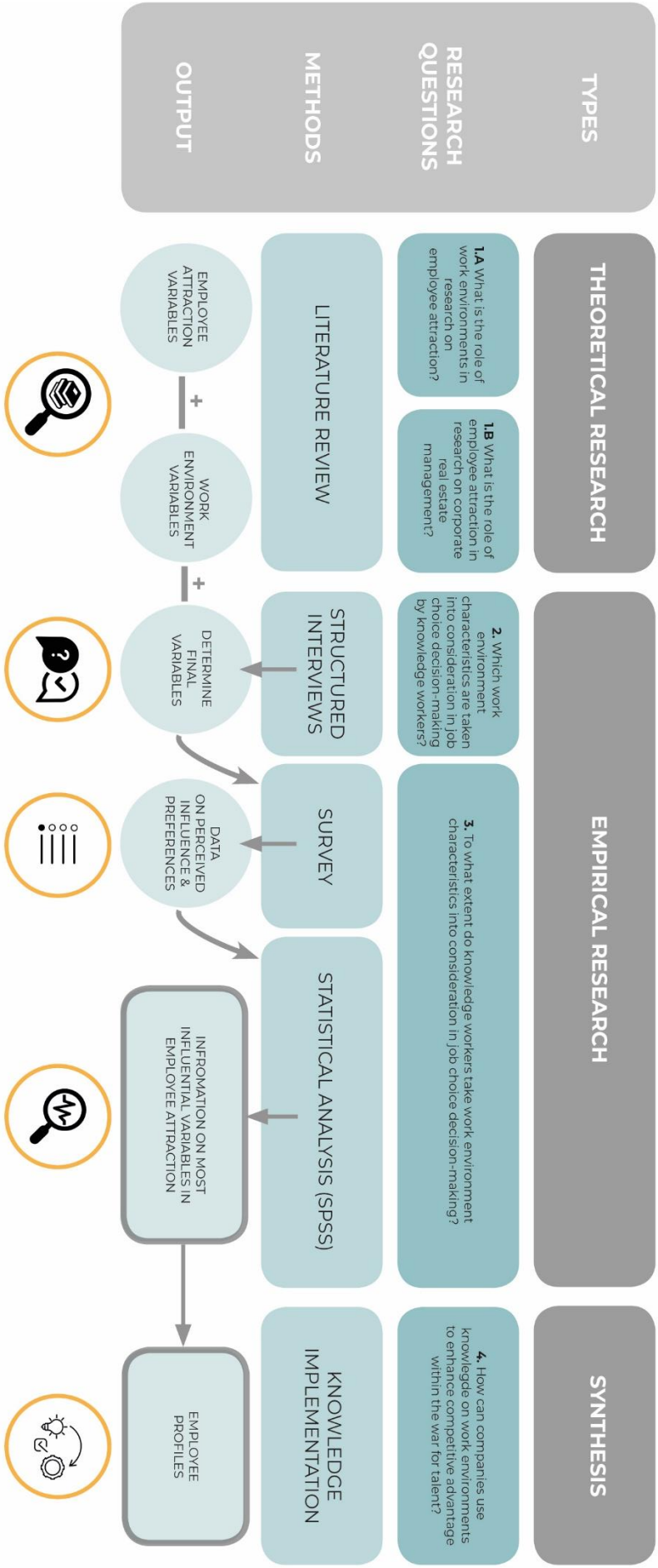

Figure 2.1: Research Framework

2.2 RESEARCH METHODS

2.2.1 LITERATURE REVIEW

Before gathering knowledge in practice, the already existing literature on the topic should be discussed to illustrate the already known information on the topic, the concepts and theories applied to the topic, the potential controversies and clashes in evidence concerning the topic, and who the key contributors to research on the topic are (Bryman, 2012). A literature study therefore forms the theoretical foundation for the research.

In the literature review the first sub question is answered: "what is the current knowledge on attracting employees by work environments?". This sub question is divided into two questions.
The first sub question (1A) is "what is the role of work environments in research on employee attraction?" and is answered with a literature review focused on the scientific research field of human resource management (figure 2.2). This part of the literature review generates general information on human resource management, recruitment and employee attraction. The aim of this literature section is to gain knowledge on the factors that are considered by knowledge workers concerning a job choice decision-making process and to examine the role of work environments within these considerations. This section provides the employee attraction variables that are used in the empirical part of the research.
The second sub question (1B) is "what is the role of employee attraction in research on corporate real estate management?" and is answered by conducting a literature review within the scientific field of corporate real estate management (figure 2.2). First, general information on the evolution and added value of corporate real estate management is provided as a general foundation for the research. Next, this research section elaborates on work environments and work related activities in combination with mobility. Afterwards, different factors examined in research on work environments in relation to people are discussed and the role of employee attraction within this research is reviewed. The relevant work environment characteristics used in previous research are used as input for the following part of this thesis.

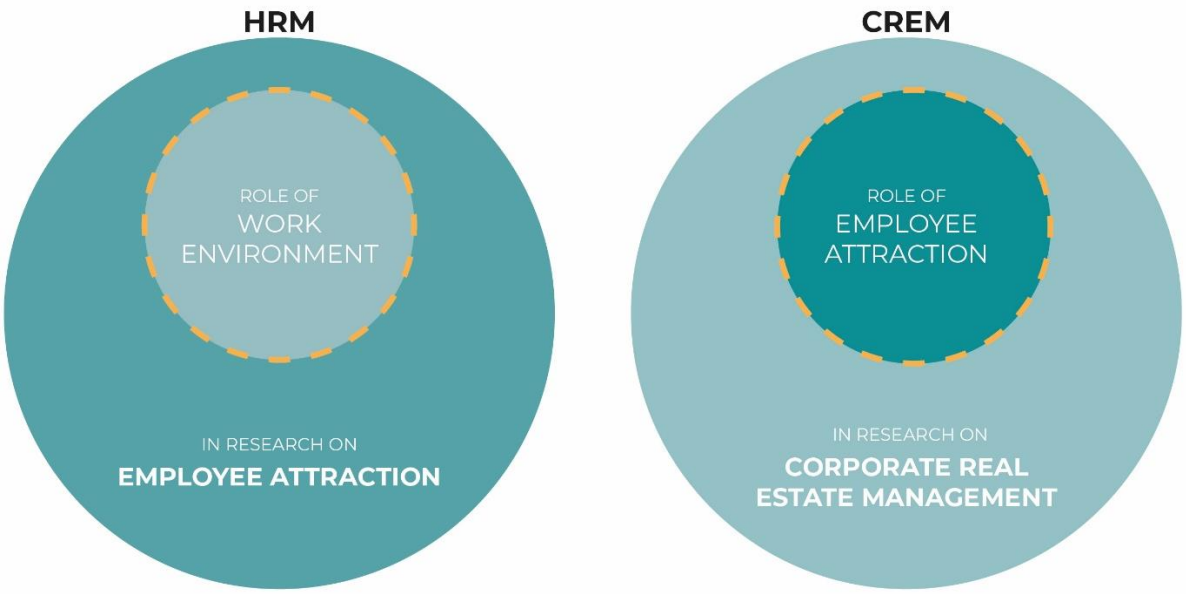

Figure 2.2: Visualisation of Literature Review

2.2.2 INTERVIEWS

Purpose and Method

Since there is no existing data about the influence of work environments one employee attraction, data is collected to be able to execute this research. The main part of the data collection is performed by an online survey. In order to create the survey, a literature review was conducted to find variables that could potentially have an influence on employee attraction. The found variables are split into two different lists: 1) employee attraction variables from HRM literature and 2) work environment variables from CREM literature. These two variable lists can be found in figure 3.3 and figure 3.11.

Concerning the work environment variables, the focus of the literature review within Corporate Real Estate Management is on people's *preferences* concerning the work environment. However, there was not found an extensive pool of literature. In order to ensure that a valid set of variables is used as a basis for the survey, structured interviews are held with ten different people to examine the found variables. More specifically, the interviews provide insights into the extent that variables are considered as influential on employee attraction with the purpose to 1) evaluate the variables that are discussed in literature, and 2) add potential new variables.

The ten interviews that are conducted are structured interviews, which is the common interview method when standardising answers and minimising their differences (Bryman, 2012). Standardised answers are suitable for the discussed purpose of these interviews, since they provide a clear overview of variables that can be used as input for the survey.

Interviewees

To conduct the structured interviews, ten different people from different perspectives were contacted. With these people, a one on one face-to-face meeting was held to conduct the interviews. Below, a short description can be found per interviewee category on the reason to include them in the interviews, complemented by a visualisation in figure 2.3:

1. Students
   Interviews with students generate insights in the general and work environment related factors that graduate students take into account concerning their job choice related decisions when looking for their first job. They will provide information from another perspective than the other interviewees, since they do not already have experience with work environments as the others do.

2. HR professionals
   Interviews with HR professionals are conducted in order to use their experiences on factors that play a role in employee attraction.

3. Real Estate Consultants
   Real Estate Consultants will be interviewed in order to get more insights from their perspective on the real estate related factors that could potentially play a role in employee attraction.

4. Independent experts on the topic
   Independent experts will be interviewed to accomplish a comprehensive and independent list of factors that potentially play a role in employee attraction. The independent experts are both scientific researchers who are experts on the influence of work environments on people.

Figure 2.3: Ten interviewees from different perspectives.

The Interview Design

The conducted interviews consisted of three parts (figure 2.4). The first part was focused on evaluating and finalising the general list of Employee Attraction variables. The interviewees was told that during the interview, they had to imagine that they were a (future) knowledge worker that was looking for a new job at a new employer. The students was asked to imagine that they were looking for a new job at a new employer themselves. Thereafter, they were given five pieces of blank paper and were asked to write down the five most influential factors when considering a potential employer. After collecting the five pieces of paper, the interviewees was explained that the research focusses on the work environment. This was not explained before the first question to prevent a bias. In the second part of the structured interviews, the interviewees were again provided with five pieces of blank paper. They were asked to write down the five most influential factors considering a potential employer, only focussing on the work environment. In the last part of the structured interview, the interviewees were given a composed list of work environment variables (appendix I.II), and were asked to select and rank the seven most influential work environment related factors when considering a potential employer. In paragraph 4.1.2 is explained how this list of work environment variables is created.

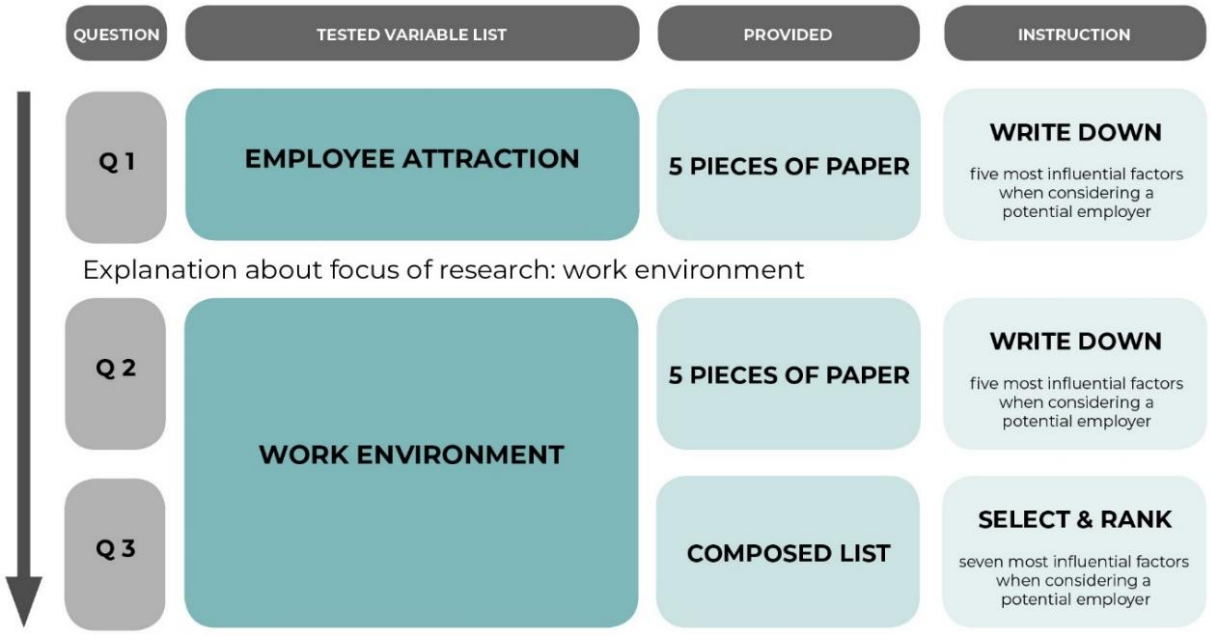

Figure 2.4: Design Structured Interview.

2.2.3 SURVEYS

By conducting the survey, information is gathered to answer the fourth sub question: "To what extent do knowledge workers take work environment characteristics into consideration in job choice decision-making?". The information derived from the survey is the data that is used for the statistical analysis in SPSS, which will eventually lead to the formulation of an answer to the main research question of this thesis.

As the survey questions are based on preferences and hypothetical considerations when choosing for a future job, the data will be *stated preference data*. Stated preference data describes hypothetical or virtual decisions on existing or proposed choice alternatives. Next to stated preference data, there is revealed preference data, which is actual data and is based on actual observations and actual behaviour (Louviere, Hensher & Swait, 2000). Therefore, when applying the results of this research, there should be taken into account that the results are not based on actual behaviour, but on stated preferences.

Survey Design

From the potential employee perspective, making the decision for a certain job can be based on many criteria. This thesis will analyse these criteria with a multi-criteria decision analysis in order to answer the main research question.

The first part of the survey focuses on the *influence* of the selected factors within job choice decision-making. These factors are tested by asking the survey participants to indicate the degree of influence that these variables have on their choice for a new job. These tested variables are selected through a combination of the theoretical review and the structured interviews, which is more extensively explained in chapter 4.1.

The influence of different variables is assessed in two different parts:

1. Questions focusing on general employee attraction variables (including the work environment).
2. Questions focusing on solely work environment criteria.

This division allows to examine (1) the degree of influence that the work environment has on job choice decision-making compared to other, more general, employee attraction variables, and (2) more thoroughly the influence specific work environment characteristics have on job choice decision-making compared to other work environment characteristics.

By first asking questions on general attraction criteria (including the work environment), the respondent is not aware of the work environment focus of the survey, which prevents biased answers and therefore biased data, and a biased conclusion. The results of these questions provide insights in the extent of influence of the work environment compared to general criteria.

The method that is used to enable the survey participants to indicate this degree of influence is by asking them to divide 100 points over a certain list of variables. In the second part of the survey, socio-demographic questions are asked in order to enable the possibility to find patterns in the collected data from a socio-demographic perspective. Moreover, people who are employed are asked some questions about their current work environment to enable the comparison of their current situation to their preferences, and potentially find correlations between them.

The used variables in this research can be divided into main variables and sub variables. To enable a comparison of the values of all different sub variables, while taking into account the values of the main variables, a multi-cirteria analysis method that takes hierarchy into account is required. For hierarchical multi-criteria analyses, a Value Tree method can be used (Weber & Borcherding, 1993). This concept is

visualised in figure 2.5. The *influence* related questions of the survey are designed in such a way that the results will enable the construction of the value tree. This will be explained further in paragraph 4.2.1.

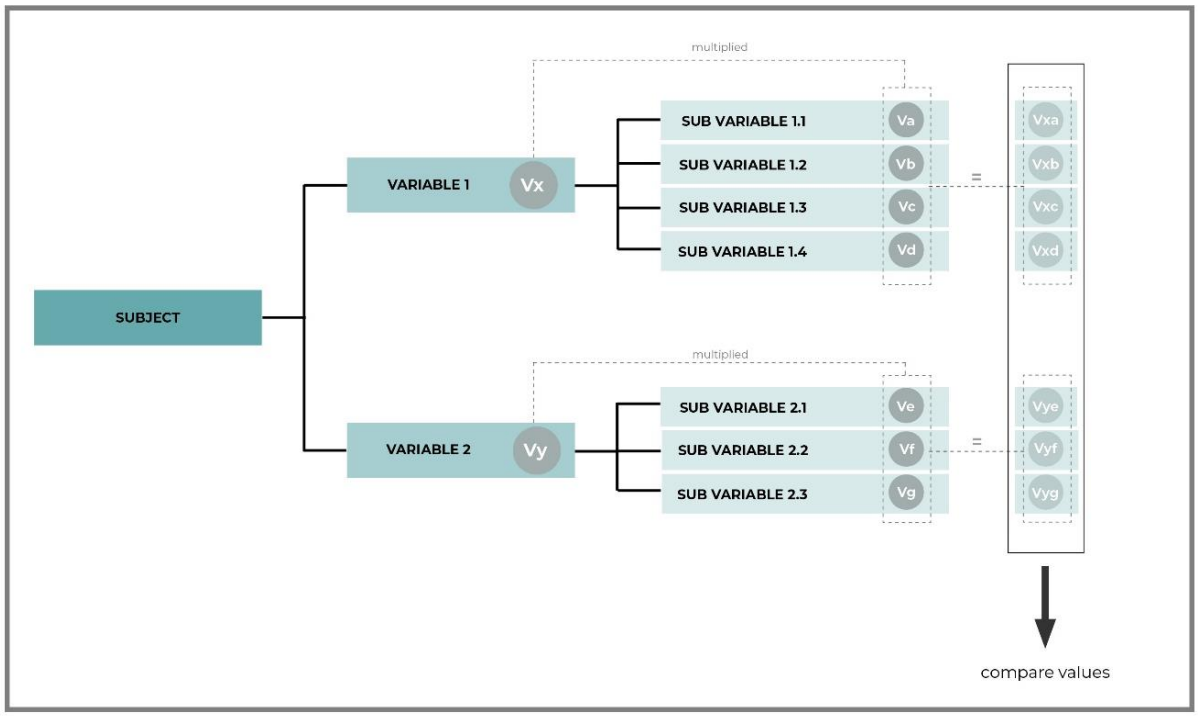

Figure 2.5: Value Tree method.

In the *influence* related questions, the survey participants is asked to divide 100 points over variables within multiple variable categories. A multi-criteria method in which allocated points sum up to a certain constant number is called a Constant Sum method (Chayes, 1960; Kodali, Prasad Mishra, Anand, 2009). A visualisation of the point allocation per variable for this method is showed in figure 2.6. In this thesis is decided to implement the constant sum method in order to force the survey participants to choose which variables they value of more influence than other variables. In this method the respondents have to allocate points to variables at the expense of the other variables of the category. These forced decisions result in useful data when advising companies on the work environment related criteria they should invest in to attract their employee target group. In addition, this method provides more information than for example a rank order question, because the results of rank order questions do not provide any information on value weight. Moreover, the information retrieved from a constant sum method can be used to calculate with, because it provides an absolute zero to the data.

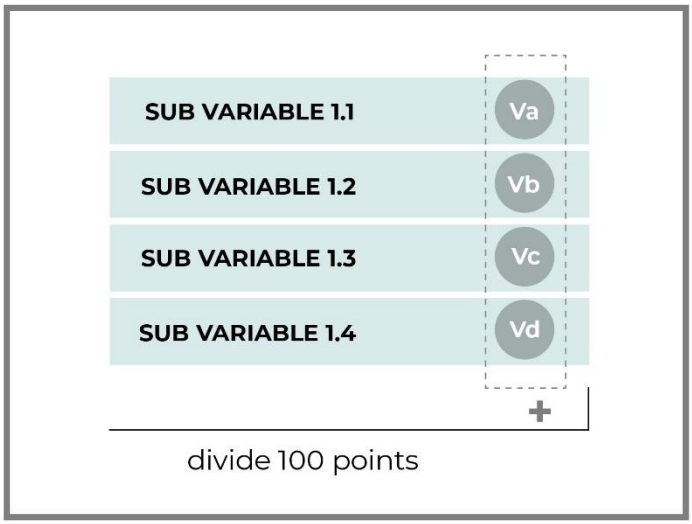

Figure 2.6: Constant Sum method (for 100 points).

In figure 2.7, the application of the constant sum method on multiple respondents is visualised. Each respondent allocates -in this case- 100 points to a list of criteria. By calculating the mean values of each criteria, the values of the criteria can be compared. According to Field (2009), the mean value is a hypothetical value and therefore "a model created to summarize our data." (p. 35).

Figure 2.7: Schematic representation of Constant Sum Method. Own Illustration based on Roberts & Goodwin (2002).

In this thesis, these two multi criteria analysis methods are combined, wherefore the advantages of both methods are implemented: the hierarchical implementation of the value tree method, combined with the distributed weight allocation that provides calculable data of the constant sum method. In figure 2.8 a visualisation of the method combination is presented. This combined method is barely used in research. However, a similar method is used in the research of Kodali et al., (2009), by using the name: 'analytical hierarchy constant sum method'.

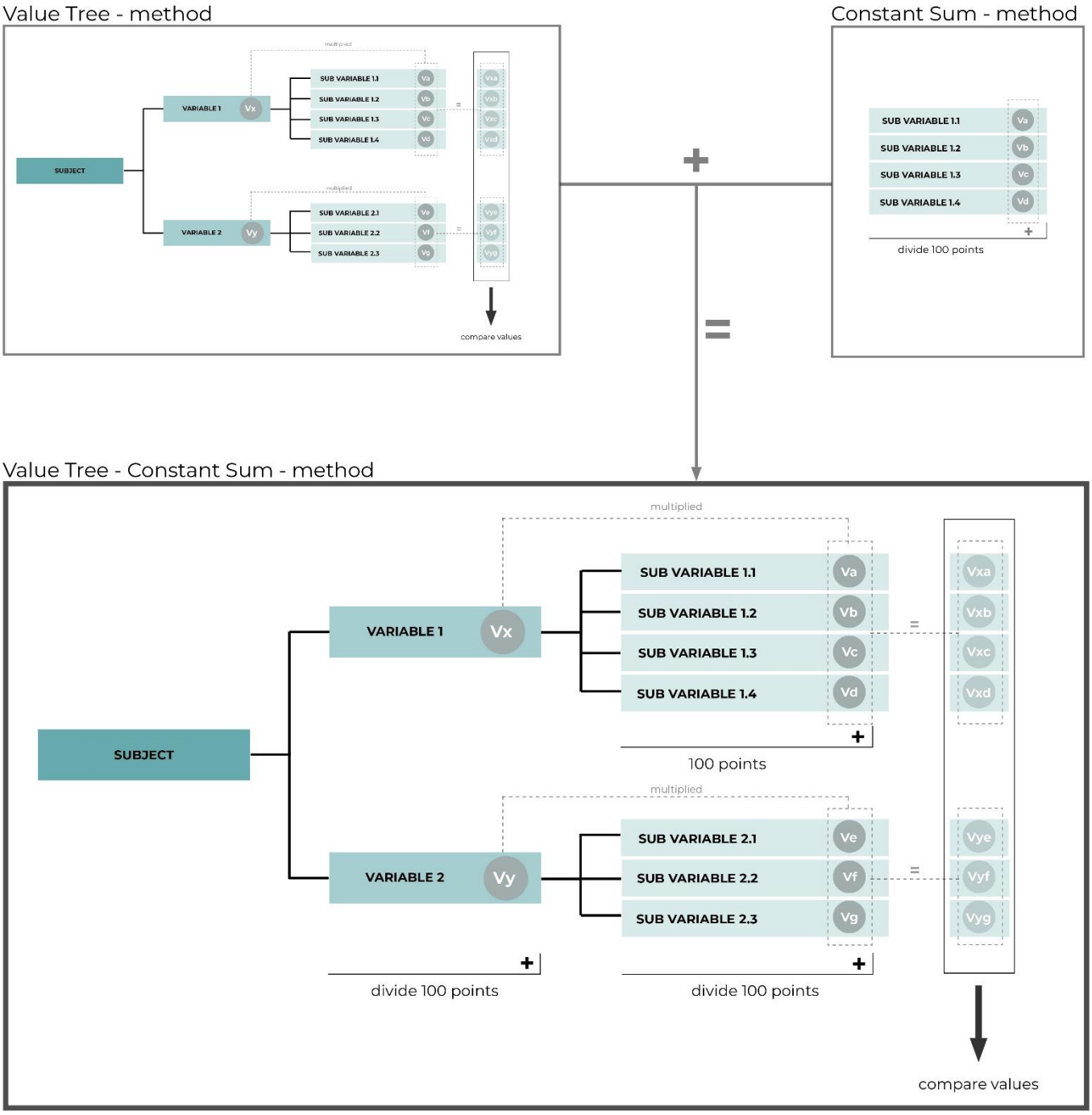

Figure 2.8: combination of Value Tree method and Constant Sum method.

This thesis focuses on knowledge workers, wherefore the survey is distributed among knowledge workers -employed people-, and to-be-knowledge workers -students:

1. <u>Knowledge workers</u>
   This target group is split into two categories: employed people and people who have been employed but do currently not have a job. The answers of these knowledge workers will provide data on the influence that the work environment has on job choice decision making from a perspective of people who are in a work environment on daily basis. The data they provide might be influenced by the considerations they took into account when choosing for

their current (or previous) job(s), but can also be based on the imagination of choosing a new job at a new employer.

2. Students
   This target group is split into two categories: students and just graduated/ stopped students who are currently searching for their first real job. The data they provide is based on the imagination of choosing a job.

Including also to-be-knowledge workers as survey participants, enables a comparison of the indicated influence of the work environment between people who already have sufficient experience with work environments and people who do not yet have sufficient experience with work environments. Including both groups will provide insights in whether having experience with work environments or not provides different opinions.

The survey is distributed online wherefore respondents can answer the questions in their own time and pace, which could positively contribute to the respondence rate. There is aimed to get as many respondents as possible, since more respondents will provide a better reflection of the population and therefore result in more valuable results (Field, 2009). Therefore is chosen to create the survey in Dutch as well as in English. The survey is created in the software Qualtrics.

The knowledge workers are targeted with help of graduation company JLL. Their clients were contacted with the question whether they could distribute the survey among their employees in exchange for a personalised report of the research results. In addition, the aim was to include companies from different sectors, as that would provide a more general reflection of the entire population. In an attempt to convince as many companies as possible to participate in the survey, a one pager was created to provide all relevant information in an attractive way (appendix II.III).

2.2.4 STATISTICAL ANALYSIS (SPSS)

The statistical analysis in SPSS will be the second half section in providing an answer to the sub question three: "To what extent do knowledge workers take work environment characteristics into consideration in job choice decision-making?". As was the previous part, conducting the surveys, about gathering data on employee opinions and preferences within job choice decision-making, this part will use that data to formulate conclusions and possibly find patterns in the data on the indicated influence and preferences.

SPSS stands for Statistical Package for Social Sciences and is used for complex statistical data analysis. This computer software can be used to simplify the analysis of individuals from a sample in order to generalise the results and draw conclusions about the population.

Homogeneous and heterogeneous analysis

The statistical analysis is mainly focused on finding variables that have significantly most influence on employee attraction. The first part analyses the whole sample of 368 respondents as one homogeneous group. The second part of the analysis is a heterogeneous analysis and compares groups of different (socio-demographic) perspectives in order to enable advising companies on attracting their specific employee target group.

To find out which variables have significantly more influence on job choice decision-making than other variables, the allocated points to different variables are tested on significant mean differences. A schematic representation of how the variables are mutually compared to test these significant mean differences is showed in figure 2.9. In the homogeneous analysis, the variables are all tested pairwise. In the heterogeneous analysis, the variable means of all different groups within each socio-demographic perspective are pairwise compared for each discussed variable.

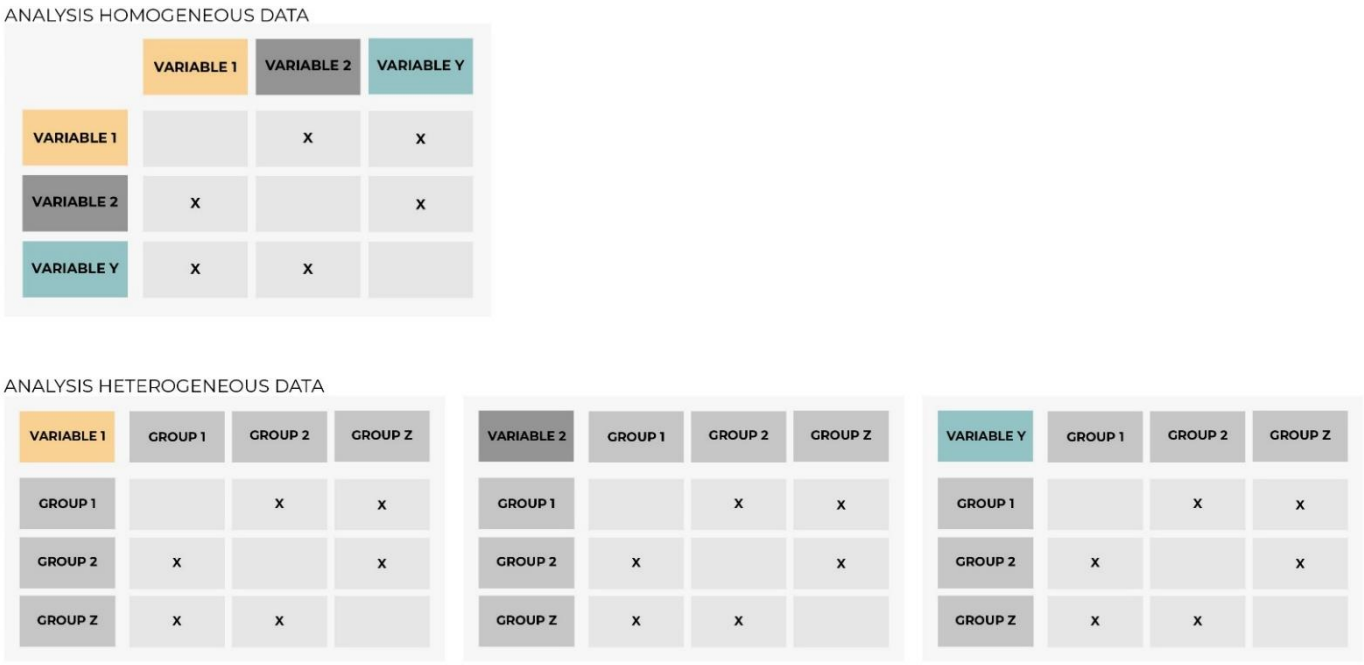

Figure 2.9 Schematic representation of the analysis of the homogeneous data and the heterogeneous data, and their relationship.

Standard Deviation, Skewness, and Kurtosis

The standard deviations of the variable values support the analysis of the results (chapter 5). These standard deviations are "measures of the 'fit'", as Andy Field describes in his book and provide insights in how well the means are representative for the data (Field, 2015, p. 38). The smaller the standard deviations are relatively to the mean, the more equivalent the answers of the respondents are, and therefore the more they could indicate a generalised opinion of the population.

The formula of a standard deviation for a sample of the population is:

$$s_x = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n - 1}}$$

s_x= sample standard deviation
Σ = sum of
$\bar{x}$ = sample mean
n = number of scores in sample

In the analysis, also at the skewness of the data is evaluated. The skewness says something about the symmetry in the data distribution. Positively skewed data indicates that most scores are at the lower part of the scale, wherefore most respondents allocated points to the certain variable that are lower than the mean. Negatively skewed data indicates the opposite. Skewness between 0 and 0,5 or -0,5 and 0 are considered as low skewed. Skewness between 0,5 and 1 or -0,5 and -1 is considered as moderate skewed, and skewness higher than 1 or lower than -1 is considered as highly skewed.
In addition is looked at the kurtosis of the data distribution. Positive kurtosis is called leptokurtic and indicates that the frequent values are clustered around the mean (peaked) and has many outliers (thick tails in histohram). Negative kurtosis is called platykurtic and indicates that the values are distributed widespread around the mean (flat) and has little outliers (thin tails in histogram).

Repeated Measures ANOVA

In this analysis, a Repeated Measures ANOVA is used to analyse the data. A Repeated Measures ANOVA is used when people are tested within different conditions (Field, 2009). This is the most appropriate method, because from an analysis point of view each different variable can be considered as a different condition.

A Repeated Measures ANOVA is a parametrical tests, wherefore the data in this research has to meet the assumptions for parametrical tests as modified for the Repeated Measure ANOVA:

Normal Distribution:

- Normal distributed data is needed to be able to reflect the sampled data to the population. However, when having samples that are greater than N = 30, there can be assumed that the data is somewhat normally distributed because of the central limit theorem, wherefore in that case this assumption is not needed (Field, 2009). When evaluating the data of this research there can be concluded that it is mostly normal distributed: the means and medians are highly comparable, the histograms indicate normally distributed data, as well as the Q-Q plots. In some cases, skewed data or leptokurtic or platykurtic data is detected. This is discussed per case.

Sphericity:

- This is the 'homogeneity of variance test' for a Repeated Measures analysis and implies that all tested mean scores are similar, which is tested with Mauchly's test. Whenever this assumption is not met, a correction is needed (see the next section).

Interval data:

- The data should be measured by interval data or ratio data. As the data in this research that is tested by the Repeated Measures ANOVA is ratio data (scale), it meets this assumption.

Independent observations

- In case of a Repeated Measures ANOVA, this means that the behaviour between the survey participants should be independent. As the survey participants were under no condition encouraged to provoke dependent behaviour, there can be assumed that this assumption is met.

Analysis Steps within SPSS

The steps within the statistical analysis in SPSS that is used for the analysis of the *influence* related questions are visualised in two figures. Figure 2.10 explains the steps within the analysis of the homogeneous data. Figure 2.11 explains the steps within the analysis of the heterogeneous data.

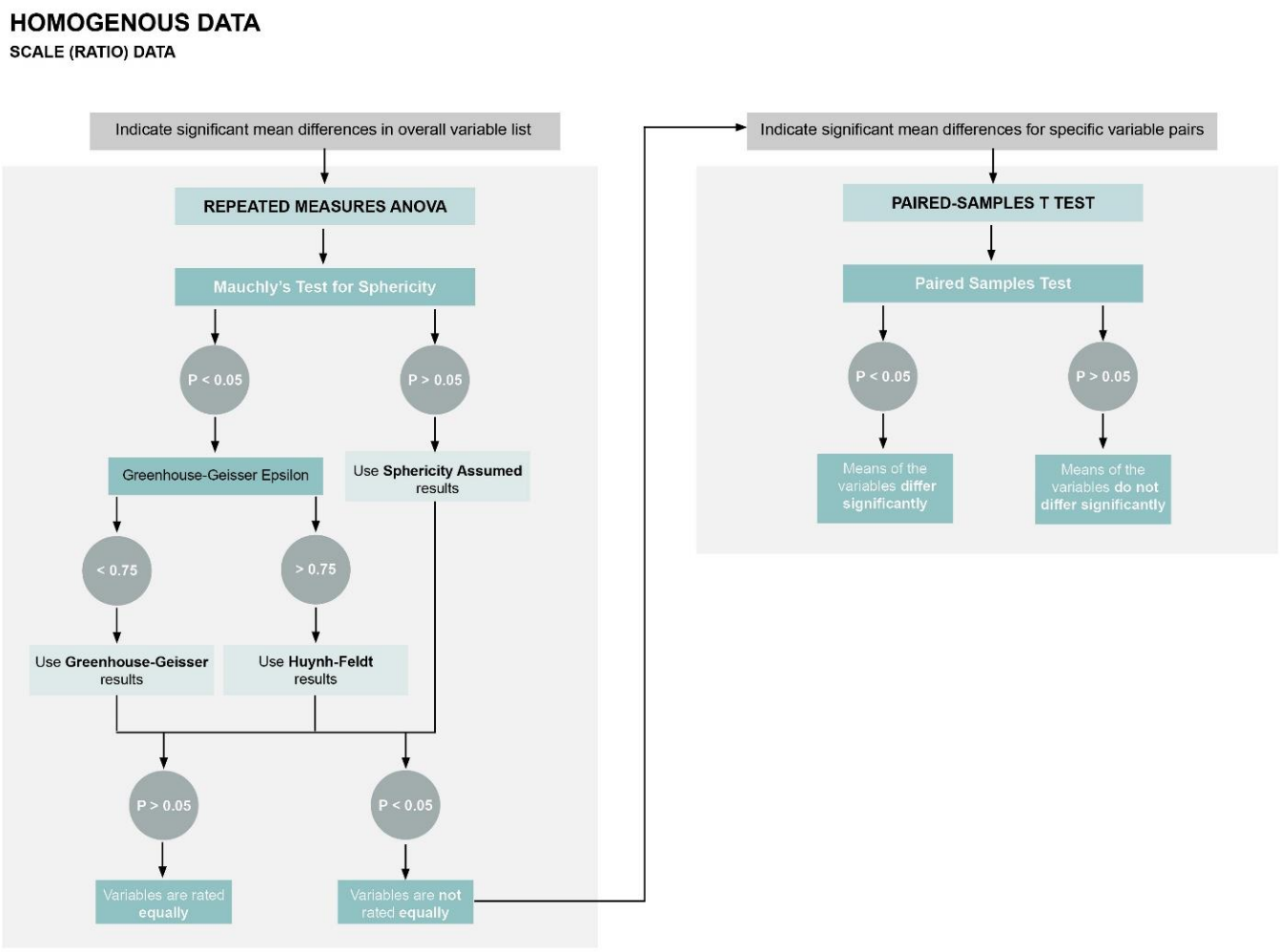

Figure 2.10: SPSS Decision Tree – Homogeneous Data.

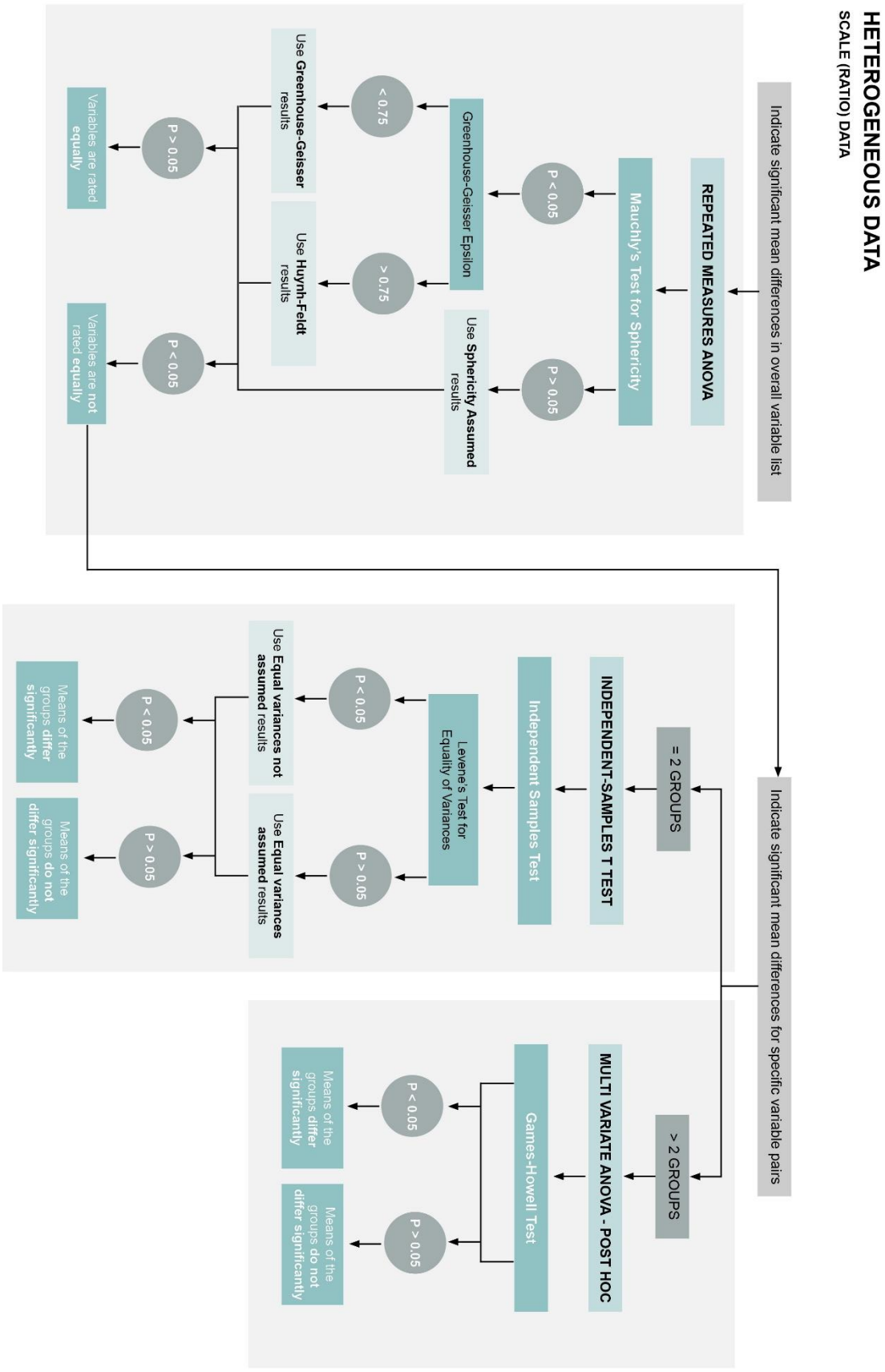

Figure 2.11: SPSS Decision Tree – Heterogeneous Data.

2.2.5 KNOWLEDGE IMPLEMENTATION

The intention of the last part of this research is to enable the generated knowledge to be applied in practice, the synthesis. In this section, sub question four will be answered: "How can companies apply knowledge on work environments to enhance competitive advantage within the war for talent?". Employee profiles are created to simplify and visualise the generated information. These simplified employee profiles serve as a medium that eases the application of the generated knowledge in practice when providing advice to companies on enhancing their competitive advantage within the war for talent.

2.3 TYPE OF STUDY

This research can be described as an empirical research when considering the aim of the research and the type of research question. Empirical research has a descriptive methodology which can be recognised by starting the main research question with "what is…" (Barendse, Binnekamp, De Graaf, Van Gunsteren & Van Loon, 2012). It deals with a knowledge-related problem: it is unknown what the influence of work environments is on attracting employees. Therefore this research aims to produce knowledge: gaining knowledge on the influence of work environments on attracting employees. The first two parts of this research are empirical by focusing on producing knowledge on the influence work environments have on attracting employees. The third phase of the research has an operational character since it allows for synthesis of the obtained knowledge in order to implement the gained knowledge in practice.
This research is mainly quantitative. Quantitative research can provide powerful and sufficient support to the prior gained qualitative information (Edmondson & McManus, 2007). The survey and subsequently statistical analysis can be categorised as a quantitative research approach since it is based on rationalism and aims to quantify information. Quantitative research is recognisable by the measurement of variables and drawing conclusions from large samples that can be generalised to make claims about the population (Kumar, 2019; Creswell, 2002).

2.4 DISSEMINATION AND AUDIENCES

This research will not only be an addition to scientific literature, but also aims to improve a practise related issue. The outcome of this research can be used in different domains within practice:

1. **Companies** can use the results as part of their real estate related strategies when attracting employees is part of that strategy. Interest from companies can come from two perspectives: (1) people who are concerned with the real estate strategy of the company, such as the inhouse real estate department and office managers, and (2) people who are concerned with attracting employees, such as human resource managers or team managers.
2. **Real Estate Consultants** can use the knowledge when advising companies on their real estate strategies, when attracting employees is part of that strategy.

When the outcome of the research is proved to be useful and interesting for graduation organisation JLL, there is a possibility that the findings of this research will be used by (1) the Strategic Consulting department of JLL in their real estate advise to their clients, and (2) the Research & Strategy department of JLL as input for a research they will probably start next year. In addition, this thesis will be rewritten into a research paper, which will be presented at the EuroFM congress in Barcelona, June 2020.

2.5 DATA PLAN

This thesis is processed in accordance with the FAIR Guiding Principles in order to make the scientific data Findable, Accessible, Interoperable and Reusable (Wilkinson et al., 2016). The final thesis is accessible by a publication on the educational repository of the Delft University of Technology, which can be found by using the following link: https://repository.tudelft.nl. Data that is not directly attached to the published thesis in the repository can be retrieved by sending an email to the author via shuly.themans@gmail.com (accessibility). In addition, in this thesis formal, accessible, shared and broadly applicable language is used and qualified references are included (interoperable). Also, the used data meets domain-relevant standards as it is easier to reuse data sets within a domain if they are similar (reusable).
Concerning sensitive (company) information as part of this thesis, there is ensured that this data is treated confidentially: the information is anonymised and no results that can be traced to a certain person or company is shared with third parties.

2.6 ETHICAL CONSIDERATIONS

Ethical principles and considerations in social research revolve around issues in the following four main areas (Diener and Crandall, 1978 as referenced by Bryman, 2016, p. 135):

1. Whether there is harm to participants;
2. Whether there is a lack of informed consent;
3. Whether there is an invasion of privacy;
4. Whether deception is involved.

There is ensured that the participants in the interviews and the respondents of the survey in this researched are not harmed and there is no invasion of privacy, which is done by making their statements anonymous and unidentifiable. To prevent a lack of informed consent, all participants of the research are informed on the goal of the research. Besides, with all participants is communicated that participating in the research is on a voluntary basis and that they are in no way obliged to answer the questions. Lastly, to prevent involvement of deception, all components within the research represent the real nature of the work without pretending to be something else.

3 THEORETICAL REVIEW

3.1 Employee Attraction

- 3.1.1 Human Resource Management
- 3.1.2 Recruitment Defined
- 3.1.3 War for Talent
- 3.1.4 Determining Target Group
- 3.1.5 Attraction Methods
- 3.1.6 Employer Brand
- 3.1.7 Employee Value Proposition
- 3.1.8 Role of Work Environment in literature on Employee Attraction

3.2 Work Environment Preferences

- 3.2.1 Corporate Real Estate Management
- 3.2.2 Work Environments
- 3.2.3 Work Related Activities & Mobility
- 3.2.4 CREM in relation to employees
- 3.2.5 CREM in relation to employee attraction

3 THEORETICAL REVIEW

This literature review is divided into two main parts: 1) employee attraction, and 2) work environment preferences. The review will start with the section on employee attraction to make sure that this topic is examined in an unbiased way without already focusing on work environments. Following this sequence, the literature will be discussed from a broad scope, including all factors that potentially have an influence on employee attraction, to a smaller scope, focussing on work environment related factors that potentially have an influence on employee attraction. In figure 3.1, a visualisation is represented of the theoretical research as part of the whole research.

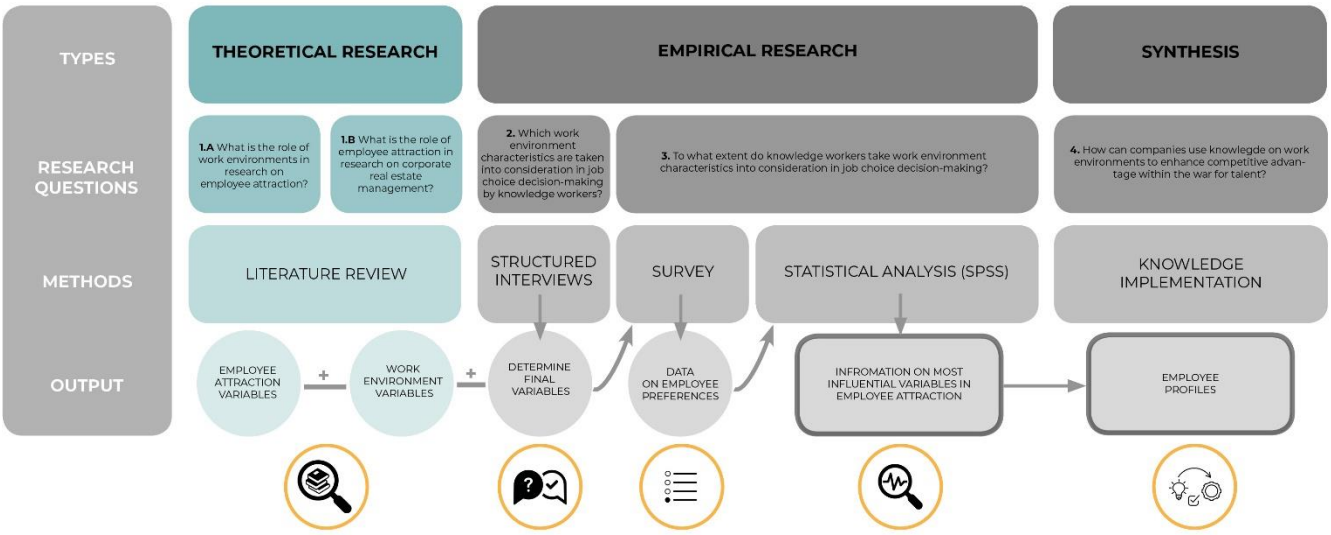

Figure 3.1: Theoretical Research within the Research Framework.

The literature review aims to provide an answer to the first sub question of this research: "What is the current knowledge on employee attraction by work environments?". The output of this theoretical research -relevant employee attraction variables and work environment variables- serve as input for the subsequent section of this research in which these variables are evaluated within structured interviews. The variables derived from this literature review form the foundation for the empirical research and therefore for the rest of this thesis.

3.1 EMPLOYEE ATTRACTION

This chapter provides an answer to sub question 1A: "what is the role of work environments in research on employee attraction?". To answer this question, a literature review focused on the scientific research field of human resource management is conducted. The first part of this chapter generates general information on human resource management, recruitment and employee attraction in order to discuss the context of this research, including relevant concepts and terms. The aim of this literature section is

to gain knowledge on the factors that are considered by knowledge workers concerning a job choice decision-making process and to examine the role of work environments within these considerations. The final part of this chapter provides the employee attraction variables that are used in the empirical part of the research (figure 3.2).

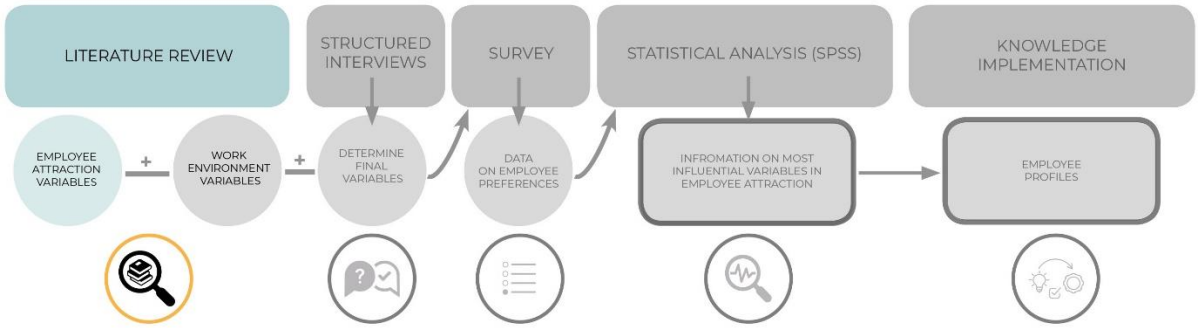

Figure 3.2 First part of Literature Review within the Research Framework.

3.1.1 HUMAN RESOURCE MANAGEMENT

Attracting employees within organisations is part of Human Resource Management. "Human resource management (HRM) is concerned with all aspects of how people are employed and managed in organisations" (Armstrong, 2016). When HRM is carried out well, it could improve organisational performance and is therefore of interest to organisations (Guest, 1997; Armstrong, 2016). The term *human resource management* is developed during the last century, taking over terms as *labour management* and *personnel management*. The concept of HRM was founded in the 1980's when academic's perspectives on people in organisations started to change towards a more strategic approach: "People, not machines, capital or geography, becoming the new source of competitive advantage" (Storey, 1989; Armstrong, 2016; Beechler & Woodward, 2009, p. 274). The view on managing people in organisations changed to a more long-term perspective wherein people are considered an asset rather than merely a cost to be minimised (Beer et al., 1984; Storey, 1989). HRM was founded by launching the *matching model* which stated that human resource systems and organisational structures should be managed in a way that is aligned with organisational strategy (Fombrun, 1984). Besides, other HRM pioneers developed the *Harvard Framework*, wherein was stated that "human resource management involves all management decisions and actions that affect the nature of the relationship between the organization and employees – its human resources" (Beer et al., 1984, p.1). Beer et al. had the opinion that many pressures demanded "a broader, more comprehensive and more strategic perspective with regard to the organization's human resources" (Beer et al., 1984, p.4).

Strategic human resource management –the combination of strategic management and human resource management– is based on the resource-based view, which implies that an organisation's resources produce its unique character and its competitive advantage (Boxall, 1996; Armstrong, 2014). An organisation's unique character, described as "valuable, rare, inimitable and non-substitutable", can lead to competitive advantage when organisations are implementing a "value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy" (Barney, 1991). Human resources are one of the organisation's resources that are "hard-to-imitate and hard-to-substitute" and therefore part of the organisation's unique character that could lead to competitive advantage (Armstrong, 2014). The unique characteristics of people as a resource are also defined as *human capital*: "…knowledge, skills and

abilities of the people employed in an organization." (Wright, McMahan & McWilliams, 1994; Armstrong, 2014). These three human characteristics create value for organisations, wherefore organisations should focus on "attracting, retaining, developing and maintain the human capital they represent" (Armstrong, 2014).

Nowadays, many definitions of human resource management are used in literature. Three of them are:

> "*Human resource management* is a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce using an integrated array of cultural, structural and personnel techniques" (Storey, 1995, p.5).
>
> "*Human resource management* can be defined as a strategic, integrated and coherent approach to employment, development and well-being of the people working in organisations" (Armstrong, 2014, p.5).
>
> "*Human resource management* is the process through which management builds the workforce and tries to create the human performances that the organisation needs." (Boxall and Purcell, 2016, p.7)

Human resource strategies, policies and practices consist of many subcategories, derived from HR philosophies (Armstrong, 2014). Fobrun et al. explained the *human resource cycle* that should be performed and aligned in all organisations, consisting of: selection, appraisal, development and rewards (Fobrun, 1984). Nowadays the practices of human resource managers are described by a much more complex system, with the following main categories (Armstrong, 2014):

- **Organisation** – diagnosing organisational behaviour.
- **Resourcing** – workforce planning, recruitment and selection, attracting and retaining people, managing employee turnover, absence management and talent management.
- **Learning and development** - ensuring that the organisation has the knowledgeable, skilled and engaged workforce it needs.
- **Performance and reward** – ensuring that individual and team performance develops and that the contribution people make to achieve organisational, departmental and team goals is recognised and rewarded.
- **Employee relations** – managing the employment relationship and the psychological contract.

3.1.2 RECRUITMENT DEFINED

Attracting employees is part of the *recruitment* section within the Resourcing category of human resource management: "recruitment includes those practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees" (Barber, 1998, p. 5). A more recent definition focusses on the strategic importance of recruitment: "Recruitment involves actions and activities taken by an organization in order to identify and attract individuals to the organization who have the capabilities to help the organization realize its strategic objectives. In particular, such activities should generate a pool of desirable candidates; enhance their interest in and attraction to the organization as an employer; and increase the probability that they will accept a job offer" (Saks, 2005, p.48). Since the strategic function of employees is of such importance in the literature on HRM, this thesis follows Saks' definition of recruitment. The recruitment and selection of employees is even considered crucial to organisational success and survival, since an organisation's success is dependent on the limits of its human capital, wherefore the current and future employees "contribute

significantly to the value-creating capacity of the firm" and subsequently "steer the organization towards the competitive performance" (Philips & Gully, 2015; Scarborough & Elias, 2002, p.27; Rabbi & Ahad, 2015, p.210).

Zeuch makes a division in organisational recruiting between (1) the activities that are focused on attracting new employees, what he calls *HR Marketing or Recruitment Marketing*, and (2) the other activities that are focused on hiring people such as workforce planning, employee sourcing, pre-assessment, selection, job offer, and contracting, what he calls *Recruitment* (Zeuch, 2016).

Attracting potential employees comes after some other activities within the recruitment process: when the future demand for the workforce in the organisation is identified and planned, and the requirements for the future employees are set, then the process of attracting the potential employees will start (Armstrong, 2016).

According to Chambers et al., (1998), organisations should recruit continuously to become a highly successful company, rather than starting a recruitment process just to fill job openings.

3.1.3 WAR FOR TALENT

A large part of literature and research on recruitment and employee attraction is focused on 'talent', 'talent attraction', and 'war for talent'. Moreover, Talent Management is currently considered the most important term in the field of human resources (Capelli & Keller, 2017).
The focus on 'talent' started with the publication of McKinsey & Company 'The War for Talent' wherein they studied 77 companies within different industries and interviewed almost 6000 managers and executives (Chambers et al, 1998). They launched the term 'War for Talent' as they recognised that companies have difficulties in attracting and retaining talented people due to a worsening shortage of suitable people, and stated that "better talent is worth fighting for" (Chambers et al., 1998, p.45). Moreover, they stated that a company's success was increasingly dependent on the performance of its top managers (Chambers et al., 1998). With 'talent' they meant 'superior job performance' and gave it the following definition: "the sum of a person's abilities – his or her intrinsic gifts, skills, knowledge, experience, intelligence, judgement, attitude, character, and drive. It also includes his or her ability to grow." (Michaels, Handfield-Jones & Axelrod, 2001, p. xii). In addition, many other publications emphasise the importance of talented employees and additionally talent management for the success of organisations (Beechler & Woodward, 2009; Iles, Chuai, Preece, 2010; Stahl, 2012; Oppong, 2013). In their publication 'War for Talent, part two', McKinsey reports that companies who are taking great effort in managing talent had much better organisational results with their 'A players', raising "operational productivity, profit, and sales revenue much more than average performers" (Axelrod et al., 2001).

The shortage in talented employees that McKinsey discussed, had according to their publication the following main drivers:

1. **The more complex economy**. The complexity "demands more sophisticated talent with global acumen, multicultural fluency, technological literacy, entrepreneurial skills, and the ability to manage increasingly delayered, disaggregated organization" (Chambers et al., 1998, p. 47).
2. **Competition from other companies**. Many companies are targeting the same people: large companies get a lot of competition from small and medium-sized companies, such as start-ups.
3. **Increasing job mobility**. People are changing jobs more often, which is expected to increase even more.

Talent shortage is of all times: it is not just an issue when the economy is prosperous, but also in economic crises (Hewitt Associates, 2008; Scullion, Sparrow & Farndale, 2011). According to Beechler & Woodward, attracting, developing, motivating and retaining talent is a critical strategic issue to survive and recover from a financial crisis (2009). So is claimed that "jobs are present even in down times but talent is always scarce" (Beechler & Woodward, 2009).

Many organisations adopted the term 'talent' to refer to their A level employees (Beechler & Woordward, 2009). After McKinseys publication, some others defined 'talent' as: "A players [that] are the top 10% of talent available in all salary levels, best of class." (Smart, 2005, p. xviii), and an elite group with high impact, but with high maintenance who can deal with a lot of complexity (Robertson and Abbey, 2003). David Ulrich, widely recognised as expert on HRM related topics, defines 'talent' according to competence, commitment and contribution: *competence* stands for the knowledge, skills and values that are required, *commitment* for the willingness to work hard and use their abilities in favour of the organisation, and *contribution* for finding meaning and purpose in their work (Ulrich, 2006).

The term 'talent' brings some discussion. On the one hand, it is considered to refer to a too limited group of the workforce. Some research states that solely focusing on 'talent' is not beneficial for the organisational performance when it refers to the top 10% 'stars'. There is argued that the value of human capital is context-dependent, that natural talent is overrated, that IQ only correlates 0.04 with job performance, and that the "talent mind-set is rooted in a set of assumptions and empirical evidence that is incomplete, misleading and downright wrong" (Elias et al., 2004; Pfeffer and Sutton, 2006, p. 90).
On the other hand, the term 'talent' is considered to be used too widely. Now the term Talent Management almost has become an equivalent of the term Human Resource Management, the word 'talent' is used as a substitute for 'employee' in many cases. In articles and in research is stated that the term has become a "synonym for the entire workforce" and is used for everyone who has "brainpower" and the "ability to think creatively" (Beechler & Woordward, 2009, p.274; The Economist, 2006).
As the term 'talent' appears to be a rather doubtful term, this term will only be used in the descriptive parts of this thesis and not in the empirical part. The terms 'employee', 'suitable employee', 'knowledge worker' will be used instead. In chapter 1.4, these concepts are explained more extensively.

3.1.4 DETERMINING TARGET GROUP

The process of recruiting employees comes with setting up a profile of the employee looked for in order to be able to tailor the recruitment practices to this specific target group (Hiltrop, 1999; Armstrong, 2014): the required education level, qualifications and experience of the desired employees should be specified (Chambers et al, 1998; Armstrong, 2014), but also the desired type of person with regard to the extent they are likely to fit the culture, values and norms of the organisation (Armstrong, 2006). Another part of setting up the employee profile is identifying where the potential employee can be found: internal or external. The internal pool consist of employees within the organisation, however, attracting new employees is about searching within the external pool, e.g. at other organisations or from educational establishments (Armstrong, 2014; Rabbi & Ahad, 2015). When taking external candidates into account, potential parts of the county where they could come from could be identified (Armstrong, 2014).

The potential employee pool can be distinguished into active and passive job seekers. Active job seekers can be targeted by relatively passive recruiting methods, whilst passive job seekers have to be attracted by active approaches (Acikoz, 2018).

The method of setting up employee profiles as the basis of the recruiting process, forms the foundation of the synthesis part of this thesis, in which employee profiles are created to ease the application of the research results in practise.

3.1.5 ATTRACTION METHODS

This thesis aims to find out whether work environments could be used strategically as part of an employee attraction method. Organisations can use different types of techniques and methods when attracting potential employees. It is claimed that various techniques and methods should be used in order to find the right talent and that the recruitment process should be tailored to the specific target group (Armstrong, 2006; Hiltrop, 1999).

Traditional methods of recruitment include advertisements, employment agencies, referrals –by friends, relatives and employees–, internal job postings, walk-ins –reaching the office for a job interview without any prior appointment–, job fairs, and campus visits (Zottoli & Wanous, 2000). Advertisements can be divided into different types of the advertisement media, such as internet, TV and billboards (Acikgoz, 2018).
Using the internet, in addition to the traditional methods, has become an established practice for recruitment during the last two decades: company websites, online job boards and social networking websites are often integrated in recruitment practices (Acikgoz & Bergman, 2016). LinkedIn, the world's largest professional social networking website, is extensively used by recruiters to find and approach potential employees for their job openings (Jobvite, 2016). According to Acikgoz (2018), professional networking sites as LinkedIn are especially effective in targeting passive job-seekers because of the large number of reached potential employees.

In order to attract graduate students, it could be a strategy to focus on a few key schools to establish long-term relationships with. Besides, internships and trainee programmes are a main strategy to attract and assess young talent (Zeuch, 2016).

In the survey of CIPD, wherein 1000 HR professionals were questioned, it appeared that 74% of the respondents choose their own corporate website as effective recruitment method, 60% professional networking sites, 58% commercial job boards and 52% considered recruitment consultants as one of the most effective recruitment methods (CIPD, 2017).

3.1.6 EMPLOYER BRAND

Employer attractiveness can be defined as "the envisioned benefits that a potential employee sees in working for a specific organisation" (Berthon, Ewing & Hah, 2005, p. 156). In exposing these envisioned benefits to potential employees, an organisation's *employer brand* plays a big role. The pioneers of this term defined 'employer brand' as: "the package of functional, economic, and psychological benefits provided by employment, and identified with the employing company" (Ambler and Barrow, 1996, p. 8). A later definition was as follows: "a set of attributes and qualities –often intangible– that make an organization distinctive, promise a particular kind of employment experience and appeal to people who will thrive and perform their best in its culture." (Walker & Higgins, 2007, p.3). In short, the term means "the image presented by an organization as a good employer" (Armstrong, 2014). According to the

survey of CIPD wherein over 1000 HR professionals were questioned, nine in ten of the organisations made efforts in 2016 to improve their employer brand (CIPD, 2017).

In the process of attracting employees, a positive employer brand can contribute in becoming an 'employer of choice' (Armstrong, 2006). With the shortage in suitable employees, it is important to have a reputation as 'employer of choice' and thereby convincing employees to start working for the organisation, rather than for another organisation (Chhabra & Mishra, 2008; Zeuch, 2016; Armstrong, 2014).

In order to create an employer brand, Armstrong (2014) advises organisations to (1) analyse what ideal potential employees need and want, (2) establish to what extent the core values of the organisation are in line with what potential employees consider as attractive and ensure that these values are presented as executive values, and (3) define the features of the employer brand based on areas that positively affect the perceptions of people on an employer brand.

3.1.7 EMPLOYER VALUE PROPOSITION

The core of a company's employer brand is its *employer value proposition* (Zeuch, 2016). The employer value proposition (EVP) outlines the attractive aspects of an organisation as employer: "what an organization offers that prospective or existing employees would value and which would help to persuade them to join or remain with the business" (Zeuch, 2016; Armstrong, 2014, p. 211).
The extent an employee can associate his/ her own values to the organisational values is in relation to the extent he/ she is attracted to that organisation (Schneider, 1987; Cable and Judge, 1996; Judge and Cable, 1997). When job seekers' individual needs are met in the employer value proposition, the employer becomes an 'employer of choice' (Armstrong, 2006).

3.1.8 ROLE OF WORK ENVIRONMENT IN LITERATURE ON EMPLOYEE ATTRACTION

In order to find out which organisational characteristics play a role in job choice decision-making and whether *work environment* plays a role in this literature field, an extended literature research is conducted. In figure 3.3 all found organisational characteristics in research on human resource management and recruitment are combined (second row), and are divided based on more general categories (first row). On the right side of the table, nine different resources are shown. These literature resources are placed in chronological order. The first eight are scientific literature resources, while the last research is an institutional survey report. The crosses within the table indicate that the specific variable is discussed within the specific research and the numbers indicate the rank order of the variables, in case the variables were ranked within the research. This overview of employee attraction variables gives an indication of the variables that are included within existing literature and the role *work environment* plays within this field of literature. Therefore, this overview provides a starting point for the empirical part of this thesis (figure 3.3).

When analysing the overview, it becomes clear that *work environment* barely plays a role in literature on *employee attraction.* Only attraction factor *Location* was found in some literature on employee attraction (Chambers, 1998; Uggerslev et al., 2012; Rampl, 2014), and some *workplace* related aspects such as 'nice seating', 'personal office', 'good view' were mentioned (Wong et al., 2017). However, the CIPD report on 'Resource and Talent Planning' explicitly included the 'Physical workplace'.

	EMPLOYEE ATTRACTION VARIABLES	Chambers et al., (1998)	Hiltrop et al. (1999)	Berthon et al. (2005)	Armstong (2006)	Uggerslev et al. (2012)	Rampl (2014)	Bellou (2015)	Wong et al. (2017)	CIPD (2017)
ORGANISATIONAL IMAGE	General organisational image					X	7	X		
	Organisational reputation					X	1		X	7
	Values and culture	1			X					1
	Organisational mission/ goals	13			X					6
	Industry leader/ commercial image	9						X	X	5
	Company has exiting challenges	6								
	Familiarity					X				
	Size					X				
	Well managed	4			X	X				
	Many talented people	10			X					
	High quality products/ services	7		15						
PERSONAL IMAGE	Feeling good about yourself because of employer			9						
	Feeling more self-confident as because of employer			8						
ORGANISATIONAL SPECIFIC VALUES	Customer oriented			18						
	Social responsibility			20				X		11
	Sustainable							X		
	Innovative	12		17				X		
	Creativity			14					X	
REWARDS	Salary	8	10	2	X	X	4	X	X	3
	Bonusses (related to successes)				X			X		
	Other forms of compensation	7		3					X	
	Retirement agreements								X	
	Recognition			13				X	X	
WORK CONDITIONS	Flexible working								X	4
	Work-life balance/ acceptable pace and stress	17			X	X			X	
	Working hours		5							
	Holiday terms									
	Job security	16	11	7	X	X			X	
	Use of technology								X	12
	Respect for lifestyle	14								
ACTUAL JOB	Job has exciting challenges	3	6		X	X			X	
	Job responsibilities		7							
	Job variety		4							
	Interesting work/ work content				X	X	3			
	Rewarding work				X					
	Autonomy	2	9		X	X			X	
	Leadership									9
	Teach others			19						
	Freedom	2			X					
	Teamwork					X				
	Travel					X			X	
PERSONAL DEVELOPMENT OPPORTUNITIES	Training		3					X	X	
	Learning/ self development			19	X			X	X	
	Specialisation opportunities									
	Springboard for future employers			12						
	Internal promotion		8	6		X	5		X	
	Career development oppportunities	5		5	X	X			X	2
	International career opportunities		2							
RELATIONS	Boss/ manager/ superiors	7		10		X		X	X	
	Colleagues	15		4		X		X	X	
	Diversity/ inclusion					X				13
	Employee treatment/ involvement/ respect			11		X			X	10
	Social climate/ work culture/ work environment		1	1**	?		6		?	
	Social activities					X				
REAL ESTATE RELATED	Physical workplace								X*	8
	Location	11				X	2			

Variables on recruitment processes are not mentioned since they are not within the scope of this research.
* comfortable working atmosphere, nice seating, personal office, good view.
** Nr 1 is 'happy work environment'. 'Fun work environment' and 'working in an exciting environment' are ranked lower.

	are ranked variables
numbers in red	are top 5 highest ranked variables

Figure 3.3: General Employee Attraction Variables

3.2 WORK ENVIRONMENT PREFERENCES

This chapter provides an answer to the second sub question 1B: "what is the role of employee attraction in research on corporate real estate management?". This question is answered by a literature review within the scientific field of corporate real estate management. First, general information on the evolution and added value of corporate real estate management is provided as a general foundation for the research. Next, this research section elaborates on work environments and work related activities in combination with mobility to describe the current context of the research. Afterwards, different factors examined in research on work environments in relation to people are discussed and the role of employee attraction within this research is reviewed. The relevant work environment characteristics used in previous research are used as input for the following part of this thesis (figure 3.4).

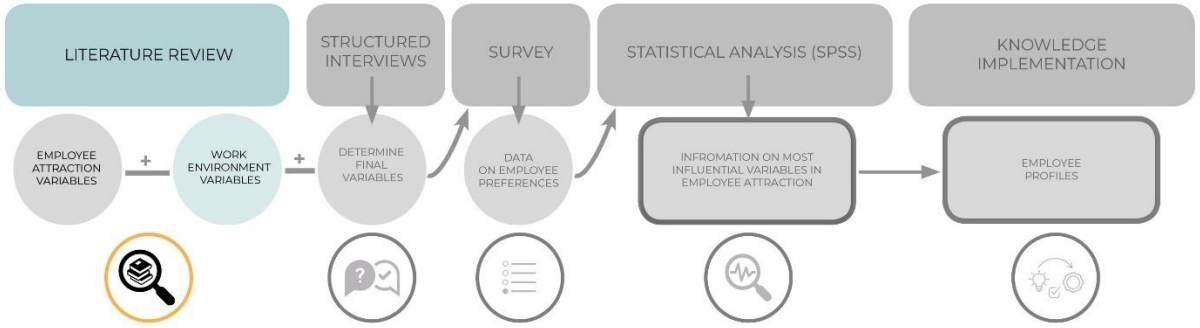

Figure 3.4: Second part of Literature Review within the Research Framework.

3.2.1 CORPORATE REAL ESTATE MANAGEMENT

Real Estate Management focuses in general on the match between demand for and supply of space (Den Heijer, 2011). There are various specialisations within Real Estate Management: Portfolio Management, Public Real Estate Management (PREM) and Corporate Real Estate Management (CREM) (De Jonge, et al., 2009). Portfolio Management focuses on the financial goals of real estate from an investor's perspective and PREM is management of real estate with public purposes. CREM is management of the real estate portfolios of private organisations –corporations– who are both owners and occupiers of their real estate, and "focusses on the performance of the organisation (benefits) in relation to the resources that are spent on real estate (costs) (Den Heijer, 2011, p. 104).

The perspective on corporate real estate evaluated last centuries to become the nowadays recognised Corporate Real Estate Management (Krumm, 2001). History on buildings was originally merely focused on the glory of the church, the state and the army, which changed when the industrial revolution required accommodations especially for industrial processes. After Wold War II, the corporate real estate portfolio diversity increased due to continuous corporate growth and an increasing geographical spread of business activities, wherefore real estate management activities were focused on the need of additional accommodation. Instead of their previous mainly functional focus, real estate departments adopted from the 1960s a more consulting role, based on a geographical orientation. The oil crisis in 1973 caused the next important paradigm within the perspective on buildings. As the costs of accommodation raised and the real estate market changed, the (financial) added value of real estate began to be noticed. The rising costs, combined with the introduction of computers, IT and globalisation eventually led to a management approach to buildings and building-related services (Krumm, 2001). Since the focus on real estate changed to the added value it has to organisations and the recognition of real estate as the fifth resource, next to capital, human resources, technology and information, Corporate

Real Estate Management became a management field on its own (Joroff, Louargand, Lambert & Becker, 1993; De Jonge et al., 2009).

The evolution of CREM and its changing role can be divided into five stages that are additive in nature, as displayed in figure 3.5 according to the description of Joroff et all. (1993). The Tasksmanagers stage has a technical focus and indicates the need for physical space. In the Controller stage, cost minimisation became a primary objective. In the Dealmakers stage, the creation of financial value for organisations by real estate emerged. During the Entrepreneurs stage, the corporate real estate departments within organisations started to propose real estate alternatives to match the real estate with the organisational business plan. In the Business strategists stage, the real estate department started to anticipate on business trends and to use real estate in contribution to the overall value of the organisation.

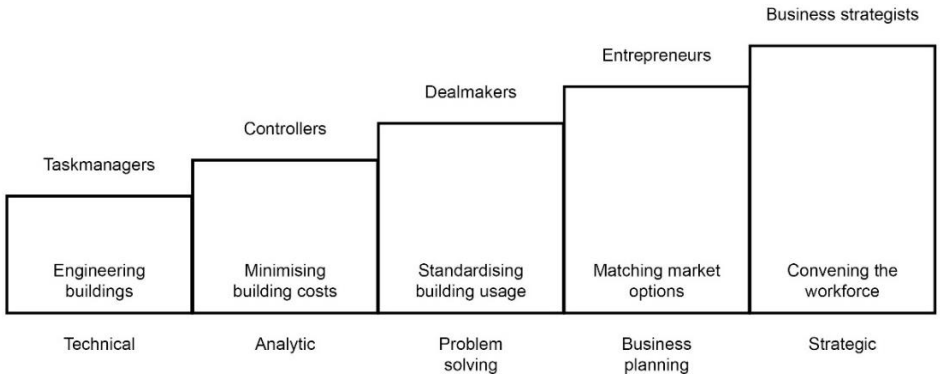

Figure 3.5: corporate real estate competency shifts (Joroff et al., 1993)

The added value of real estate

The aim of the strategic perspective on corporate real estate management is to use real estate in order to add value to the business (Krumm et al., 2000). In this context, 'added value' can be defined as "the contribution to organisational objectives" (De Jonge et al., 2009).

The first statement made on adding value to the organisation by using real estate was made by Nourse and Roulac (1993). They claimed that organisations' real estate decisions are effective if such decisions support their overall business objectives.

According to De Vries (2007), real estate can add value to the organisation according to the three organisational objectives –productivity, profitability, distinctiveness– in ten ways: (1) increasing productivity, (2) supporting image, (3) enhancing flexibility, (4) improving culture, (5) stimulating innovation, (6) increasing satisfaction, (7) enhancing synergy, (8) reducing costs, (9) controlling risks, and (10) expanding funding possibilities.

Different adding value components can be divided into 'exchange value' and 'use value' (Meulenbroek, 2014). The 'exchange value' adds primarily value to the overall organisation by reducing costs, investing the value of assets and increasing flexibility. On the other hand, the 'use value' adds value to the users of the real estate by increasing innovation, increasing employee satisfaction, increasing productivity, and promoting marketing and sales.

The added value of CREM can also be discussed from different management domains. Den Heijer (2011) elaborated on theories and models of De Jonge (1997) and Krumm (1999) and created the *CREM Framework* wherein four quarters are distinguished, as shown in figure 3.6. A division is made between the focus on institution (demand side) and real estate (supply side) on the horizontal axis and the focus

on strategic and operational level on the vertical axis (Den Heijer, 2011). The following domains are identified: (1) general management focuses on the institutional strategy, which includes the overall goals and objectives of the organisation, (2) asset management has a strategic focus on real estate by using the available financial resources, (3) facility management is focused on the users performing the primary processes of the organisation, and (4) project management focuses on the physical sides of real estate such as the spatial and technical aspects.

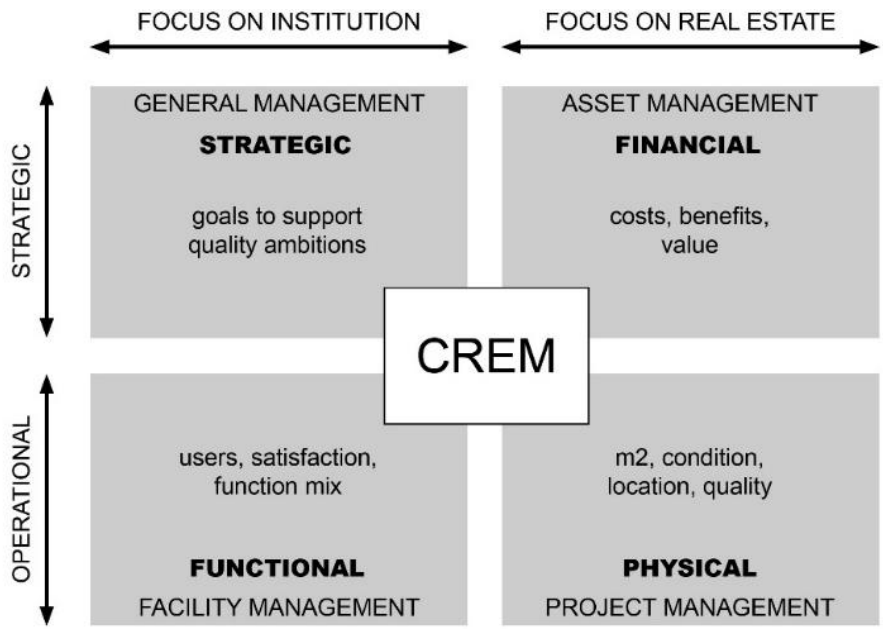

Figure 3.6: CREM framework (De Jonge, 1997; Den Heijer, 2011), edited.

Within this thesis, main aspect 'employees' fits within the Functional domain of the framework. In addition, the other main aspect 'work environment' fits within the Physical domain of the framework. Therefore is this research, from this theoretical perspective, mainly based on the synergy of the Functional and Physical domains.

3.2.2 WORK ENVIRONMENTS

In this paragraph, current ways of working and current used physical work environments are discussed to describe the context in which this research is conducted.

Ways of working

Work environments transformed over the years in response to the changing nature of work and the way in which people work (Haynes, Nunnington & Eccles, 2017). The traditional way of working required all employees to work at the same time at their own personal desk (Van der Voordt & Vos, 2001). However, the increasing challenges of globalisation and competition require a more dynamic and agile approach of working. Another paradigm that changed the way of working is the shift from individual process working towards knowledge work, involving team-based and collaborative working (Haynes, et al., 2017).

Moreover, by using ICT, executing work does not necessarily requires offices. An international architecture practice, DEWG, created a framework which represents the 'distributed workplace' (Haynes, et al., 2017). The framework divides three levels of privacy and accessibility within work processes that can all be performed in a physical environment or virtual environment: private,

privileged and public. The *private* category entails individual or collaborative work that has protected access which is e.g. supported by physical environments as offices and home offices, and by virtual environments as private networks. The *privileged* category entails collaborative work in organisational meeting spaces with open access. This work can be performed in physical spaces such as clubs and airport lounges, and by virtual environments such as video conferences. The *public* category entails informal interactions with open access and can be performed in physical places such as cafés/ hotel lobbies, and virtually at internet websites (Hardy et al. in Haynes, et al., 2017). Haynes et al. (2017) elaborates on the model by dividing the distributed workplace into three components (Figure 3.7). The components represent a combination of the location and the nature of the work activity.

This thesis mainly focuses on factors concerning 'working in the office', but also takes the other components 'working virtually' and 'working out of the office' into account.

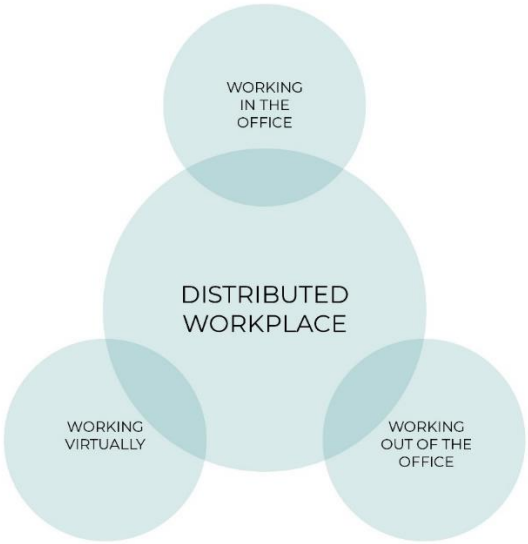

Figure 3.7. Components of the distributed workplace (Haynes, et al., 2017)

Physical work environments

Virtual working and working out of the office became a big part of the current work style. However, the physical office environment still plays a role in today's business environment as it enables face-to-face contact with colleagues, and can provide "meaning, a sense of belonging and [can] even [be] a place of experience" (Jones Lang LaSalle in Haynes, et al., 2017, p. 101). Besides, Haynes, et al. (2017, p. 101) state that offices "represent the culture and the branding of an organisation as well as provide a variety of spaces to match a variety of work style needs".

Van Meel defines in his book Workplaces Today (2015) ten different office types, which are divided into traditional offices, new offices, non-offices, and other. In Figure 3.8 a more extended division is displayed. In his division similarities with the three components of Haynes can be identified as both studies emphasise the possibility to work at other places than the physical office.

TRADITIONAL OFFICES	NEW OFFICES	NON-OFFICES	OTHER
- Studios - Modernist offices - Process offices - Cell offices	- Co-work offices - Play offices - Flex offices	- Home offices - Public spaces	- Recycled offices

Figure 3.8. Office typologies (van Meel, 2015)

The fact that people can work whenever and wherever they want, causes that traditional cellular offices do not longer support the current network society (Van der Voordt & Vos, 2001). The more flexible way of working and therefore the decrease in people working in physical offices results in under-utilised desks. Also other causes of absence such as meetings within and outside the office, in combination with causes of absence such as holidays and illness, requires a more flexible use of physical offices.

Flexible work environments are recognisable by non-territorial shared desks. The number of desks is less than the amount of people working (Van Meel, 2015), and are limited to the actual needed amount of desks based on the average occupation in peak moments. The desks are not assigned to specific people and are claimed on temporary basis. This leads to more efficient use of office space and thereby to real estate related cost reductions (Van der Voordt & Vos, 2001). Companies can save up to 30% on their costs for office buildings when implementing flexible working (Jensen & Van der Voordt, 2017). Besides, organisations become more flexible in adaption to organisational changes such as expansion, downsizing and mutations in team structures (Gibson, 2003).

In a flexible work environment, different types of lay-out and use can be implemented. Open-plan office environments are recognisable by the minimisation of cellular spaces and working in open floor plans (Haynes et al., 2017). A flexible office concept that emerged from the open-plan offices is called the 'activity based workplace' (ABW). This office concept originates from the idea that work activities should not be performed in just one specific work environment, but that office users should be able to choose from a variety of workplaces, based on a particular work activity. In an activity based office, the work environment is designed in a way that it can be adapted at every moment to suit the needs of a specific activity (Haynes, et al., 2017).

In these flexible offices with open lay-outs, a big open floor plan with removable walls are not the only work environment characteristics that should be implemented. A great diversity of settings is needed in order to align with all the performed activities: "…while some traditional settings including conventional meeting rooms, and workstations may still be necessary, new types of work areas such as reflective space, focused space, team-based work settings, standing settings, quiet-focused rooms and phone rooms need to be integrated into workplace design" (Haynes et al., 2017, p. 107).

3.2.3 WORK RELATED ACTIVITIES & MOBILITY

In the previous paragraph is explained that successful work environments should provide a diversity of settings in line with the activities employees perform. When applying for a job and already knowing which activities are involved with that job, job applicants can make an assessment of how much time they will spend behind a desk and in the office. It might be a probability that the amount of time spent behind a desk and in the office has an influence on how important the physical office is perceived in job choice decision-making. Therefore, in this paragraph different work related activities and the associated time spent behind a desk and in the office are discussed.

A long list of different work related activities is set up by Leesman (2017). When analysing the list, three different perspectives can be recognised: individual activities that require work environments for an individual, shared activities that require work environments for multiple people, and activities that can be performed by individuals as well as multiple people. The divided list of activities can be found in figure 3.9.

INDIVIDUAL	SHARED	BOTH
- Individual focused work, desk based - Telephone conversations - Reading - Private conversations - Thinking / creative thinking - Individual routine tasks - Individual focused work away from your desk	- Planned meetings - Informal, un-planned meetings - Collaborating on focused work - Informal social interaction - Collaborating on creative work - Business confidential discussions - Learning from others - Hosting visitors, clients or customers - Larger group meetings or audiences	- Audio conferences - Video conferences - Spreading out paper or materials - Using technical / specialist equipment or materials - Relaxing / taking a break

Figure 3.9. Work related activities (Based on Leesman, 2017)

In the research of Leesman (2017), in which over 70.000 employees from 615 workplaces were questioned, four types of mobility profiles were created on the base of the performed activities and time spent at their desk and working at other places within the office. In figure 3.10 these employee mobility profiles are displayed. From the percentages corresponding to the profiles becomes clear that employees working in an activity based working environment make much more use of the entire office compared to employees who do not work with ABW and are mostly tied to one particular work setting.

Despite the mobility profiles are not included in the empirical research within this thesis, it should be taken into account that employees within different mobility profiles might value the influence of the work environment (characteristics) on their job choices differently.

MOBILITY PROFILES	DISCRIPTION	REPRESENTS X% OF TOTAL WORKFORCE (non ABW)	REPRESENTS X% OF TOTAL WORKFORCE (ABW)
 THE CAMPER/ SQUATTER	Performs most/ all activities at a single work setting and rarely use other locations within the office.	42%	30%
 THE TIMID TRAVELLER	Performs the majority of the activities at a single work setting but aslo uses other locations within the office.	44%	41%
 THE INTREPID EXPLORER	Performs some of the activities at a single work setting but often uses other locations within the office.	11%	19%
 THE TRUE TRANSIENT	Uses multiple work settings and rarely based at a single location within the office.	3%	10%

Figure 3.10. Mobility Profiles (based on Leesman, 2017).

3.2.4 CREM IN RELATION TO EMPLOYEES

In general, it is acknowledged that employees have become organisations' most important assets, wherefore organisations are increasingly concerned with the satisfaction, productivity and well-being of their employees in order to achieve organisational competitive advantage (Chan et al., 2007; Rothe, 2011). This is a frequent topic within literature on HRM, as became clear in chapter 3.1, but also often discussed in literature on Corporate Real Estate Management.

In their pioneering paper on corporate real estate management, in which Nourse & Roulac made the first attempts of linking real estate decisions to corporate strategies, they distinguish 'human resource objectives' as an alternative strategy (Nourse & Roulac, 1993). Nourse & Roulac do not specifically emphasise attracting employees, but are discussing the retention of skilled workers. They appoint that skilled workers may demand a particular location, specific amenities and facilities, and quality of space (Nourse & Roulac, 1993). Their recommendations for implementing human resources within the corporate real estate (CRE) strategy are: "provide efficient environment to enhance productivity, recognize that environments are important elements of job satisfaction and therefore compensation, seek locations convenient to employees with preferred amenities (transportation, shopping, reference, entertainment)" (Nourse & Roulac, 1993, p. 480).

There are many studies examining the consequences and impact of specific work environment characteristics on employee behaviour, satisfaction, productivity and well-being (Giuliani & Scoplliti, 2009; Rothe, 2011). For example, research has been conducted on the effects of the work environment on productivity (Haynes, 2008), job performance (Vischer, 2007; Roelofsen, 2002), well-being (Wells, 2000), well-being and performance (Veitch, Newshman, Boyce & Jones, 2008), comfort and productivity (Feige, et al., 2013), productivity and satisfaction (Van der Voordt, 2004), and satisfaction, productivity and health (Kim, et al., 2016). Themes that were discussed in these example researches are: office comfort, sustainability, desk ownership, personalisation, lightning, and office environments in general. Besides, research on 49 publications concludes that office concepts –location, layout and use– do affect office worker's (1) *job demands*: cognitive workload and working hours, (2) *job resources*: communication, work autonomy, privacy and interpersonal relations at work, and (3) *short-term reactions*: physiological and psychological responses (De Croon, et al., 2005).

Some interesting and sometimes contradictory conclusions are made on the influence of different kind of work environments on people. Spatial layouts can for example result in friendship opportunities (Heerwagen, Kampschroer, Powell & Loftness, 2004), while De Croon et al. (2005), conclude that open workplaces reduce job satisfaction. On the other hand, Danielsson & Bodin (2008) state that cellular offices, flex offices, and shared room offices result in highest job satisfaction. Appel-Meulenbroek (2015) examined the difference in employee satisfaction between traditional ways of working and working with the new ways of working. There was concluded that in traditional environments employees are more satisfied with their desk, privacy, storage and general facilities. On the other hand, were employees performing new ways of working more satisfied with seclusion rooms, climate, indoor design, cleanliness and leisure possibilities.

The most relevant conclusions from the conducted research are drawn by Rothe et al., as their research is focused on *preferences* which is tightly linked to *attraction*. In their research on user preferences of office occupiers, they discovered that preferences concerning work environment characteristics vary among office users on demographic issues (such as age and gender) as well on the way they work. For example, it is found that the virtual environment is more important for users who work remotely or who collaborate a lot, but that preferences concerning the virtual work environment do not significantly differ per age group. Besides, from the results became clear that sustainability related preferences are more important to women, but do not significant differ per age group. Another discovery is related to

preferences concerning the indoor climate. Being able to adjust the indoor climate is more important to older people, women and people who spend their whole week in the office.
The research concludes the following: "designing one solution fits all will end up compromise for all.". They state that: "Future work environments have to allow the user to make more decisions themselves. Adjustability, self-customisation, and possibilities to choose will be key features of tomorrow's work environments." (Rothe, et al., 2011, p. 93).

3.2.5 CREM IN RELATION TO EMPLOYEE ATTRACTION

Scientific research on the influence of the work environment on employee attraction is very limited. However, what Appel-Meulenbroek (2007) does acknowledge is the influence that office buildings have on visitors and the (first) impression visitors may have of work environment characteristics such as temperature, smell, and lighting. Other researchers add that, likewise as in psychological theories, individuals are partly judged by their environment, wherefore the first impression of a work environment might influence the impression of an organisation positively or negatively (Slangen-de Kort, 2001; Wyon, 2004). The 'visitor' these researchers are discussing, could be a job applicant. Therefore might these theories be applied to theories on employee attraction.

Heather A. Earle, part of the Real Property Policy team of the Government in Canada, wrote a General Review on 'using the work environment to attract and retain top talent' (Earle, 2003). She claims that the work environment has a great impact on people by stating that "the work that people do and the place where they go to do it play a significant and often understated role in their lives. For most people, the workplace is where they spend the majority of their waking lives." (Earle, 2003, p. 249). In her conclusion she makes the following statement:
"The work environment is not, nor will it ever be, the sole factor upon which people base their employment decisions. Quality of life, however, is something that factors into every major decision that is made, and is something that is profoundly affected by the environment." (Earle, 2003, p. 256).

One of the resources Earle discusses in her review to come to this conclusion is a research of the American Society of Interior Designers (ASID, 1999). In their research they investigate whether the physical work environment, defined as a company's interior design, is a key factor in recruiting and retaining qualified workers. In their study, 663 office workers and office work seekers were asked in an open-ended question to list the factors that have influence on their decisions to accept or leave jobs. The physical workplace was one of the top three factors that appeared to have an influence on people's decision to accept or leave a job, mentioned by 21% of the respondents. Only 'compensation' and 'benefits' were mentioned more often by respectively 62% and 22%. Moreover, when asked specifically whether the physical workplace would impact their decision to accept a job, 41% of the office workers and office work seekers said it would.
The ASID did also a case study on the Internet-based career centre Monster.com that moved in 1998 from a traditional work environment to an interactive work environment. From the survey that was conducted among the employees of Monster.com, turned out that 68% of the employees who joined the organisation since the move to the new office said the physical environment was an important factor in their decision to accept the job. Moreover, 38% of this group even declared it an important or critical factor. However, this research is not completely adequate for Corporate Real Estate Management as it is conducted from an Interior Design perspective.

In current literature on work environments, no scientific research is conducted to explicitly find out which work environment characteristics could potentially attract employees. Therefore an extended

literature research is executed to find work environment characteristics that are used in current literature on employee *satisfaction* and *preferences.* In figure 3.11, all found work environment characteristics in research on employee satisfaction, importance, and preferences are displayed. The discussed characteristics in literature on employee *preferences* are emphasised, since *preferences* have a stronger relation with *attraction* than *satisfaction*, as explained in chapter 1.4.
On the right side of the table, the five different resources are shown. These literature resources are placed in chronological order. The crosses within the table indicate that the specific variable is discussed within the specific research and the numbers indicate the rank order of the variables, in case the variables were ranked within the research. The extensive list of factors can be divided into four main categories (based on Rothe, 2011): *Location, Services & Facilities, Building, Workplace*. This overview of work environment variables gives an indication of the variables that are included within existing literature and provide a starting point for the empirical part of this research (figure 3.11).

CATEGORIES	SUB CATEGORIES	WORK ENVIRONMENT VARIABLES	Appel-Meulenbroek & Feijts, 2007	Rothe, 2011	Rothe, Beijer & Van der Voordt, 2011	Appel-Meulenbroek et al., 2015*	Appel-Meulenbroek et al., 2015**	Kim et al., 2016
LOCATION	GENERAL	Image of area		X				
		Safety and cleanliness of area		X				
		Central location		X				
	ACCESSIBILITY	Accessibility general			3			
		Accessibility by car		X				
		Accessibility by public transport		X				
		Accessibility by walking/ bike		X				
	PROXIMITY OF FACILITIES	Proximity of nature		X				
		Proximity restaurants/ cafetarias/ bars		X		6		
		Proximity leisure and culture services		X				
		Proximity bank, post, healthcare		X				
		Proximity fitness center		X				
		Proximity kindergarten		X				
		Proximity physioterapist		X				
SERVICES AND FACILITIES		General facilities (management)			12	7		
		Practical/ hospitality services		X		5		
		Lobby/ reception		X				
		Parking places (car, motorbike, bicycle)		X				
		ICT (services)		X	10		2	
		Work related services		X				
		Shower and changing facilities		X		2		
		Storage space			18		4	X
		Coffee, tea, other refreshment facilities				1		
		Restaurant offering in the building		X				
BUILDING	GENERAL	Overall building		X	17			X
		Building image/ appearance/ aesthetics	X	X	16			
		Building layout	X					
		Networking opportunities in the building		X				
		Health and safety provisions				4		
		Cleanliness				3		
	CLIMATE	(Adjustability of) indoor climate	X	X	4			
		Lightning/ day light		X	11		5	X
		Temperature		X			3	X
		Air control					8	X
		Acoustics/ noise			13		7	X
		Material properties (e.g. reflection, isolation)	X					
WORKPLACE	GENERAL	Floor layout	X					
		Interior design			9		10	
		Choice of workplace		X				X
		Amount of workspace/ density						X
		Room booking systems					14	
		Opportunities for remote working			8		9	
		Openness and transparency of environment			15			
		Influence on workplace development		X	19			
	TYPES	Variety in workspace types			7		17	
		Meeting places		X			6	
		Social/ informal places		X			13	X
		Open places		X				
		Innovative places		X				
	INDIVIDUAL WORKPLACE	Individual workplace layout	X					
		Functionallity and comfort/ ergonomics of workplace	X		1			
		Personalisation of work area					15	X
		(Comfort of) furnishing					1	X
		Possibility to adjust workplace	X	X			11	X
	CONTACT	Privacy		X	6		12	?
		Concentration		X	2			?
		Accessbility/ interaction on workfloor	X		14	5	16	X
		Opportunities to communicate			5			
		Environment supports collaboration		X				X
OTHER		Space supports organisational image and values		X				
		Environmental impact		X				

Preferences
Importance
Satisfaction

Variables that do not apply to knowledge workers are not mentioned
Variables that are from their nature not able to have an influence on employee attraction are not mentioned
*Focused on facilities.

Figure 3.11: Work Environment Variables

4 EMPERICAL RESEARCH

4 EMPERICAL RESEARCH

This chapter discusses the empirical research that is conducted within this thesis. The empirical research is divided into three parts: 1) structured interviews, 2) an online survey, and 3) a statistical analysis in IBM SPSS Statistics 25. Since there is no existing data on the subject of this thesis, an online survey is used to collect the desired information. In addition to the literature review, structed interviews with ten different people from different perspectives are held to determine the variables that should be examined in the online survey. Next, the online survey is distributed among five organisations and on social media, which resulted in 368 respondents. The statistical analysis in SPSS provides results that enables answering the research question of this thesis. In figure 4.1, the empirical research is displayed as part of the whole research of this thesis.

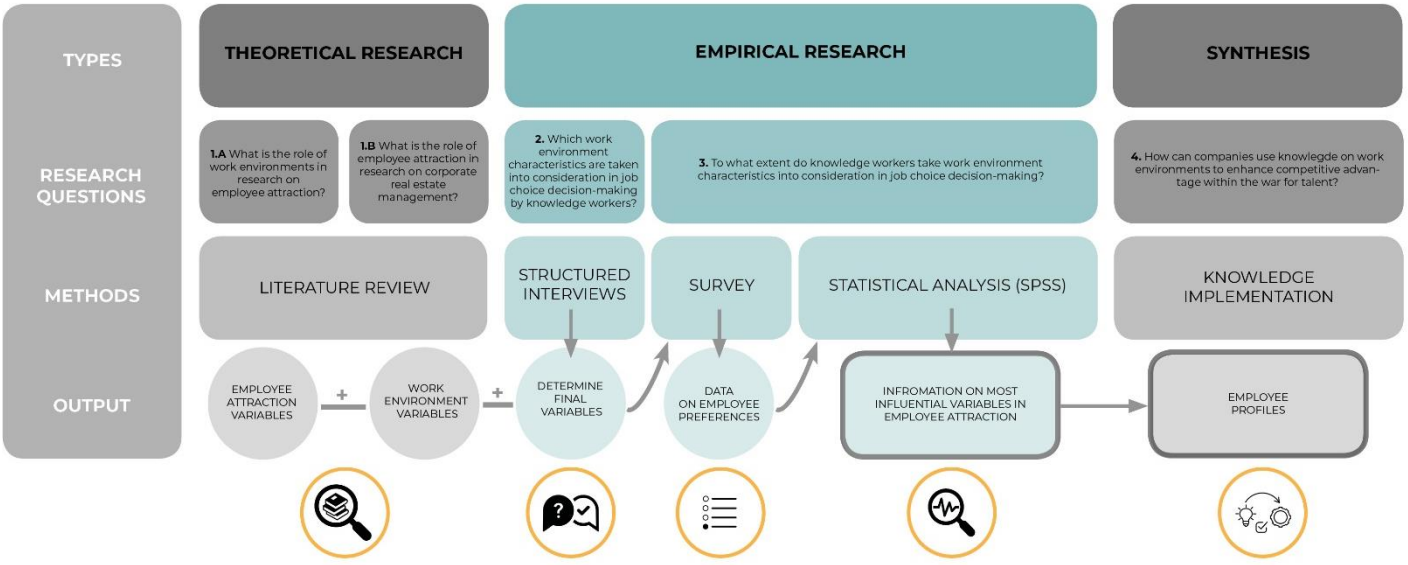

Figure 4.1: Empirical Research within the Research Framework.

4.1 STRUCTURED INTERVIEWS

The structured interviews aim to provide an answer to sub question 2: "Which work environment characteristics are taken into consideration in job choice decision-making by knowledge workers?". In paragraph 2.2.2, the purpose of the structured interviews is explained. In that same chapter, the interviewees are discussed: the perspectives they represent and the reason these perspectives should be included in the interviews. The final part on interviews in paragraph 2.2.2 explains the interview design.

In figure 4.2 is displayed how the structured interviews fit within the overall research process.

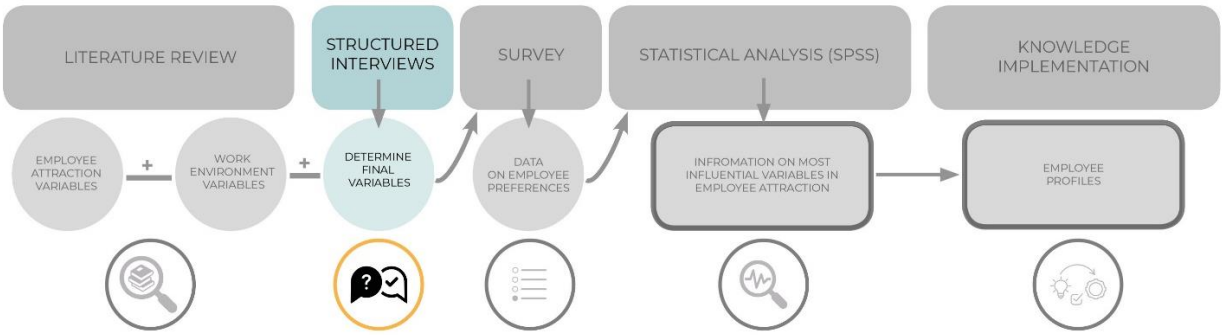

Figure 4.2: Structured Interviews within the Research Framework.

4.1.1 INTERVIEW PREPARATION

After answering the first interview question, the interviewees was explained that this research focusses on the work environment. To support this explanation, a visualisation of the work environment concept was created and was shown to the interviewees (figure 4.3). The interviewees could use this image as a source of inspiration, whilst writing down the five work environment factors as instructed for the second interview question.

Figure 4.3: Visualisation of Work Environment concept

As part of the structured interviews, the interviewees were asked to select and rank the work environment variables that they perceive as most influential on (future) knowledge workers' choices for a potential new employer.

Since the work environment variable list that is collected in the literature review (figure 3.11) is too extensive to include all variables in the interviews, a pre-selection was made. This selection is made according the requirement that variables should be testable by potential employees through:

- Common knowledge, or;
- Using recourses (e.g. internet), or;
- Noticing when visiting the office, or;
- Asking (on a job interview) when appropriate.

If a variable could not be tested by potential employees according to the discussed criteria, the variable is left out. In appendix I.I is shown how the variables are evaluated regarding these criteria. Moreover, some similar variables were merged to shorten the list. The final variable list that was provided to the interviewees for this part of the interview can be found in appendix I.II.

4.1.2 RESULTS

In this paragraph the results of the interviews are discussed. At the beginning of the interviews, the interviewees were asked to imagine that they are a (future) knowledge worker who is looking for a new job at a new employer. Thereafter, they were asked to write down the most influential factors on their choice for a new job at a new employer, from that perspective. The students were asked the same question, but from their own perspective. To organise the results, the factors were categorised according the composed variable lists in the literature review (figure 3.3 and figure 3.11). In some cases, the factors that the interviewees wrote down are (almost) similar to variables from these composed lists. In other cases, the written down factors could be categorised into variables from the lists, but are expressed with different words. In the latter case, the specific noted factors of the interviewees are mentioned. Many of the factors from the interviews are translated from Dutch to English in order to use them in this thesis.

Q1. General Employee Attraction Variables – open question

In the first open question, the ten interviewees were asked to write down five general factors that they perceive as most influential on (future) knowledge workers' choices for a potential new employer. The students were asked the same question, but from their own perspective. The factors are categorised according the variables found in literature (figure 3.3). Four variables were mentioned the most, since five out of ten interviewees wrote down a factor that can be categorised in the following four variables: 'Salary', 'Career Opportunities', 'Social Climate'*, 'Working Hours'**.

*Specific noted factors: "(pleasant) atmosphere/ (relationship) with colleagues", "colleagues from same generation", "friendly people".
**Specific noted factors: "not too much overwork", "flexibility in work", "flexibility in working hours", "work-life balance", "freedom in work".

Two other variables were also mentioned by a large part of the interviewees, as four out of ten wrote down factors within the following two variables: 'Image Organisation'*, 'Accessibility'.

*Specific noted factors: "reputation" , "DNA", "brand", "known via friends", "corporate identity", "corporate culture".

Three out of the ten interviewees wrote down factors within the following variables: 'Working Conditions', 'Development Opportunities'*, 'Physical Work Environment'**.

*Specific noted factors: “support when starting career”, “development opportunities”, “training opportunities”.
**Specific noted factors: “Activity Based Working”, “Work Environment”, “appearance”, “concentration”, “indoor climate”

Also, two out of the ten interviewees mentioned: services.

Other factors that were written down by the interviewees, but cannot be categorised in the variable list of figure 3.3, are: “type of work”, “varied work”, “focus on sustainability”, “social responsibility”, “social relevance”, “human image”.

In appendix I.III the results of interview question 1 can be found, complemented by an overview table of these results in appendix I.IV.

Q2. Work Environment Variables – open question

The second open question focusses on the work environment. The interviewees were asked to write down five work environment related factors that they perceive as most influential on (future) knowledge workers’ choices for a potential new employer. The students were asked the same question, but from their own perspective. The factors are categorised according the variables found in literature (figure 3.11).

Regarding the work environment variables, six out of the ten interviewees wrote down a factor that can be categorised as: ‘Accessibility of the Location’. This variable was the most mentioned work environment variable. Another variable that often came across in the answers of the interviewees was: ‘High Quality Coffee, Tea and Other Refreshment Facilities’. Five out of ten interviewees mentioned this variable.

Four out of the ten interviewees wrote down factors that could be categorised in the variable: ‘High quality and newest ICT’* and ‘Variety in Workspace’.

*Specific noted factors: “fast WiFi”, “technical facilities”, “technology-connectivity”, “technology & ability to be mobile at work”.

Factors that could be categorised as ‘Proximity of Amenities’, ‘High Quality Office Restaurants’, and ‘Interior Design’* were all written down by three of the ten different interviewees.

*Specific noted factors: “interior design”, “inspiring fit-out (light, design, variation)”, “fit out (look and feel, experience)”.

Variables of the work environment list (figure 3.11), or factors that could be categorised as variables within this list that were mentioned by two out of ten interviewees were: ‘Geographical Location’*, ‘Building Appearance’, the topic ‘Own desk or Flexible desk’**, ‘Workplace Environment supports collaboration’, ‘Disturbance/ Noise Level’, ‘Informal Spaces’, ‘Possibility to adapt temperature’.

*Specific noted factors: “A1 location”, “well accessible by public transport”, “location: travel time”.
** Specific noted factors: “Primary work station”, “freedom of choice (is flex desk obliged or can you have an own desk?)”.

Also some other variables from the variable list (figure 3.11) were recognisable in the written factors of the interviewees. The following variables were each recognisable by factors derived from one interviewee: 'Availability of Car Parking Places', 'Floor lay-out', 'Opportunities for remote working', 'Cleanliness', 'Amount of light'.

Besides, some other factors were noted by the interviewees that are not mentioned in the work environment variable list (figure 3.11): "Outdoor area", "Comfortable desks and seats & adjustability", "Comfortable, Ergonomic Workplace", "Safe Location", "Visibility/ interaction with corporate culture. Promotes healthy corporate culture", "Ergonomic furniture. Company car".

In appendix I.V the results of interview question 2 can be found, complemented by an overview table of these results in appendix I.VI.

Q3. Work Environment Variables – select & rank question

In the third question, the interviewees were given the work environment variable list as displayed in appendix I.I and were asked to select and rank the seven most important work environment related factors when considering a potential employer. A number 1 score is considered as most important and a number 7 score is considered as least important.

In appendix I.VII, an overview of the results of question 3 are displayed per interviewee. In this scheme, the rank numbers that the interviewees provided to the variables are displayed converted to points. The conversion to points enables the use of a quantitative method in determining the most important factors. Using this method, the selecting and ranking of variables can be combined in evaluating the results. The conversion of rank numbers to points is performed according table 4.1:

Rank numbers from interviewees	Converted to points
1	7
2	6
3	5
4	4
5	3
6	2
7	1

Table 4.1: Ranks converted to points

As can be seen in table 4.2, there is a big difference in the amount of points that the variables obtained. The variable that got the highest number of points is 'Variety in Workspace' and got selected by seven of the ten interviewees. However, this variable was not the most selected one, but got high ranks by the interviewees who selected this variable: three of them ranked this variable at the top of their list. The variable with the second highest number of points is 'Accessibility of the Location' and got selected by six interviewees. The variable with the third highest number of points is 'Disturbance/ Noise level' and got selected by half of the interviewees. 'High Quality Coffee, Tea, and other Refreshments' got almost the same amount of points. Besides, the latter is the most selected variable and got selected by eight

interviewees. However, most of the interviewees ranked this variable at the lower bottom of their rank list (appendix I.VII).

Other variables that got often selected and were ranked quite high are: 'Geographical Location', 'Opportunities for Remote Working', and 'Amount of Light'. These variables got 20 to 22 points and were each selected by four to six interviewees. Moreover, 'Geographical Location' was the highest ranked variable by two of the interviewees.

Variables that seemed important to fewer of the interviewees but still got selected by some, are: 'High Quality ICT Services', 'Building Appearance', 'Floor Layout', and the topic 'Own desk or Flexible desk'. The topic 'Own desk or Flexible desk' got only selected by two interviewees, but ranked second highest by both which leads to a high number of points.

A part of the variables was selected by just one or two interviewees: 'Type of Location', 'High Quality Hospitality Services', 'High Quality and Newest ICT', 'High Quality Office Restaurants', 'Availability of Car Parking Places', 'Sustainability Implementations', 'Interior Design', 'Amount of Workspace', 'Workplace Environment supports Collaboration', 'Privacy', and 'Informal Spaces'.

Variables that were not selected by the interviewees are: 'Image of the Location', 'Networking Opportunities', 'Cleanliness', and 'Possibility to Adapt Temperature'.

CATEGORIES	FACTORS	POINTS	Selected by number of interviewees:
LOCATION	Geograpical location	20	4
	Image of the location	0	0
	Type of location	8	2
	Accessibility of the location	30	6
	Proximity of amenities	2	1
SERVICES AND FACILITIES	High quality hospitality services	4	1
	High quality ICT services	10	3
	High quality and newest ICT	6	2
	High quality coffee, tea, or other refreshment facilities	24	8
	High quality office restaurants	2	1
	Availability of car parking places	5	1
BUILDING	Building appearance	4	3
	Networking opportunities	0	0
	Sustainability implementations	7	1
WORKPLACE	Floor layout	10	2
	Interior design	7	2
	Own desks or flexible desks	17	3
	Opportunities for remote working	22	6
	Amount of workspace	8	2
	Variety in workspace	39	7
	Workplace environment supports collaboration	4	1
	Privacy	6	1
	Disturbance/ noise level	25	5
	Informal spaces	8	3
	Cleanliness	0	0
	Amount of light	20	5
	Possibility to adapt temperature	0	0

≤9
10 till 19
20 till 29
≥ 30

0
1&2
3 & 4
> 5

Table 4.2: Summary Results Interview Question 3

4.1.3 CONCLUSIONS

The structured interviews are used to determine the variables that are used in the survey of this research. Thereby, the sub question that is answered by the structured interviews is: "Which work environment characteristics are taken into consideration in job choice decision-making by knowledge workers?". By asking the interviewees two open questions, one focused on general employee attraction variables and one focused on work environment variables, and a select & rank question, conclusions can be drawn about the variables that are taken into consideration in job choice decision-making by knowledge workers. Moreover, the informal talks after the formal interviews appeared to be important when selecting variables for the interviews. Namely, some variables were barely mentioned or selected by the interviewees but were addressed in informal talks after the interviews and emphasised as of (great) influence when considering a potential new employer.

General Employee Attraction Variables

When evaluating the general employee attraction variable list derived from HRM literature (figure 3.3), four variables stand out: 'Values and Culture', 'Salary', 'Career Development Opportunities' and 'Social Climate/ Work Culture/ Work Environment'. These four variables are mentioned in five or more of the nine resources or are multiple times ranked as number one within these resources.

When evaluating the results of Question 1, focused on the general employee attraction factors, factors within four variables got mentioned most: 'Salary', 'Career Development Opportunities', 'Social Climate/ Work Culture/ Work Environment', and 'Flexibility & Work-Life Balance'. Remarkable is that three of the four are overlapping with the outstanding variables from the HRM literature (figure 3.3) and are therefore included in the final variable list: 'Salary', 'Career Development Opportunities', and 'Social Climate/ Work Culture/ Work Environment'.

The variable 'Flexibility & Work-Life Balance' is not one of the four variables that were mentioned most and ranked highest in literature. However, when looking at the employee attraction variable list in figure 3.3, it becomes clear that this variable is divided in different other variables (flexible working, work life-balance/ acceptable pace and stress, and working hours), and is actually mentioned in many resources when combined (Armstrong, 2002; Chambers et al., 1998; CIPD, 2017; Hiltrop et al. ,1999; Uggerslev et al., 2012; Wong et al., 2017). As the interviewees mentioned this variable multiple times and a big part of the resources discussed aspects of this variable, is decided to implement this variable in the final employee attraction variable list.

Two other variables that were mentioned multiple times in Question 1 are: 'Accessibility' and 'Reputation/ DNA/ Brand'. The variable 'Accessibility' is part of the work environment variable list and is therefore not included in the general employee attraction variable list. The variable 'Reputation/ DNA/ Brand' is very similar to the variable 'Values and Culture' which stands out in the list derived from literature. Therefore is decided to merge these two variables into one overarching variable: 'Image Organisation'.

The five variables that are included in the general employee attraction variable list are rephrased in such a way that they cover the broader spectrum of what they stand for. For example, 'Salary' is rephrased in the broader word 'Rewards'. However, in the survey the variables are supported by some words to clarify the variables to the survey participants. The final employee attraction variable list that is included

in the survey is displayed in table 4.3. Also the 'Work Environment' variable is included in the list, since the influence of the work environment is tested against the general employee attraction variables to examine their interrelated influence.

GENERAL EMPLOYEE ATTRACTION FACTORS	
Organisational Image	reputation, brand, familiarity, values, mission, delivered quality
Rewards	salary, bonusses, retirement agreements, other forms of compensation
Social Climate	relations with colleagues and managers, social activities, work atmosphere, culture
Development Opportunities	(international) promotion opportunities, trainings, personal development
Working Hours	flexibility of working hours, work-life-balance, pace and stress level, amount of overtime
Work Environment	location, building, services & facilities, workplace

Table 4.3: General Employee Attraction Variables that are tested in survey

Work Environment Variables

The focus in this thesis, and therefore in the structured interviews as well, is the work environment. Work environment related variables that seemed of importance to the interviewees when considering a new employer, but that were not emphasised in the formal part of the interviews, are for example: 'Image of the Location', 'Type of Location' and 'Interior Design'. In the informal discussions after the formal interviews appeared that these factors have -according to these interviewees- a great influence, but in an extremely unconscious way. Therefore is decided to include these, and some other variables that seemed of great influence by the interviewees after the formal interview part, in the survey.

From the interviews became clear that some of the variables should not be categorised a *preference* – which is linked to *attraction*, as explained in paragraph 1.4- but as a *need*, when applying the variables to the literature of Rothe (2011). According to Rothe, *needs* cause dissatisfaction when not met. Some of the variables in the list of question 3 can be considered as *needs*. 'Amount of Workspace', 'Disturbance/ noise level', 'Cleanliness', and 'Possibility to Adapt Temperature' were addressed in some of the interviews as factors that require a "minimum standard". In other words, these factors need to be included in a work environment and need to meet a minimum expected quality, otherwise potential employees will be discouraged. However, this thesis focuses on attraction variables, which are linked to *preferences*. Therefore, the just mentioned variables that could be considered as *needs* are not included in the final variable list of the survey.

In appendix I.VIII, an overview can be found of the variable selection. Taken into account in this selection are:

- The number of times the variables were written down in Question 2
- The points derived from the ranks in Question 3
- The informal talks with the interviewees after the formal part of the interview
- The focus of the research on *preferences* and not on *needs*

Besides, some variables are combined as they were perceived very similar by the interviewees:

- 'Image of the Location' and 'Type of Location' and combined to 'Location Type' with 'Image of the Location' as one of the subcomponents.

- ‘High Quality ICT Services’ and ‘High quality and newest ICT’ are combined to ‘High quality ICT and ICT helpdesk’
- ‘Floor Layout’ and ‘Interior Design’ are combined to ‘Interior Design’ with ‘Floor Layout’ as one of the subcomponents.

Moreover, one variable is added to the work environment list: ‘Ergonomic Workplace’. An ergonomic workplace was included in the work environment list that was composed in the theoretical framework (figure 3.11), but was left out of the list that was shown to the interviewees because it was not often mentioned in literature. However, in the second open ended question, three of the ten interviewees came up with ‘Ergonomic Workplace’ themselves as top five most influential factors considering a new employer when focusing on the work environment. Therefore, the variable ‘Ergonomic Workplace’ is included in the final list of variables for the survey. The final list of work environment variables that is tested in the survey are presented in table 4.4. In the table is also presented which words are shown to the survey participants in order to clarify the variables.

WORK ENVIRONMENT FACTORS		
LOCATION	Geograpical Location	specific location/ city
	Location Type	Central Business District, historical city centre, business park, former industrial site, country house
	Accessibility of the Location	by public transport as well as own transport
	Proximity of Amenities	e.g. park, restaurants, fitness center, physiotherapist
SERVICES & FACILITIES	ICT (helpdesk)	
	Coffee, tea, and other refreshments	
	Healthy Catering	
	Car Parking Places	
BUILDING	Building appearance	(architectural) appearance
	Networking Opportunities	with employees of other organisations within the building
	Sustainability Implementations	e.g. presence of solar panels or toilets that are flushed with rain water
WOKRPLACE	Interior	design, apprearance, lay-out
	Variety in Workplace Types	e.g. concentration, meeting, and informal places
	Personal Desk	whether or not having an assigned or a flexible desk
	Opportunities for Remote Working	ICT (services) that allow you to work e.g. at home or in the train
	Ergonomic Workplace	comfortable, functional and adjustable
	Amount of Light	daylight and lighting

Table 4.4: Work Environment Variables that are tested in survey

4.2 SURVEY

In figure 4.4, the survey section is shown as part of the whole research.

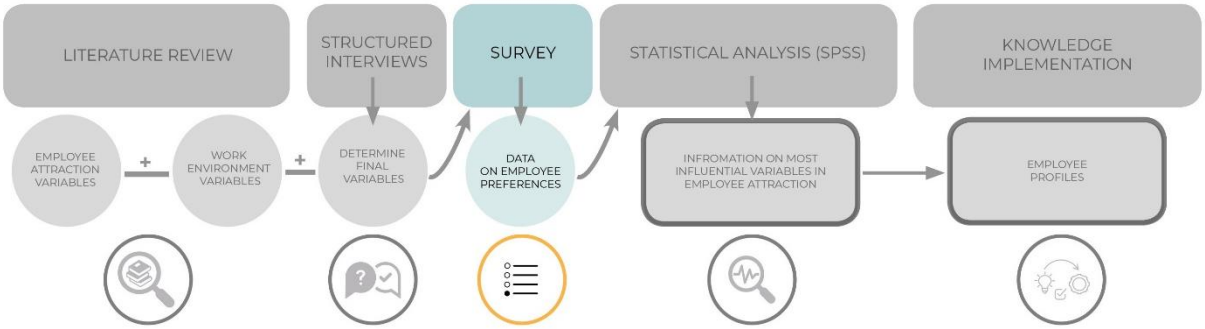

Figure 4.4: Survey section within the Research Framework

4.2.1 SURVEY PREPARATION

To enable the creation of the survey, the selected variables where plotted within the Value Tree (figure 4.5). The use of a Value Tree is explained in chapter 2.2. This Value Tree forms the basis the *influence* related questions. In figure 4.6 an extensive overview of all questions of the survey are shown. In this Survey Design is visualised that the first question generates a split within the survey participants in order to provide all participants questions that apply to them personally. The first set of questions is focused on the general employee attraction variables and the extent in which the work environment plays a role on employee attraction among these other variables. The second set of questions focuses on the influence that the work environment related variables have on employee attraction, divided in the categories: Location, Services & Facilities, Building, and Workplace. Whenever a respondent allocated zero points to a certain main variable (*Location, Services & Facilities, Building,* or *Workplace*) in the beginning of the survey, the following corresponding questions about this variable were not presented. This prevents that respondents are forced to answer questions on topics that they perceive of zero influence, which might prevent prematurely quitting the survey.
The final questions about the influence of the work environment focuses solely on the influence of the work environment, without comparing it to other variables. In addition, the participants are asked whether they would like to mention something about the influence of the work environment, based on their own experiences. The results of this answer provide more qualitative information to support the quantitative data.

Thereafter, participants who are employed (or were previously employed) received some questions about their current (or previous) work environment to enable a comparison between their own work environment situation and their preferences, and potentially find correlations between them.

The survey finishes with a set of socio-demographic questions, asked in order enable the possibility to find patterns in the collected data from a socio-demographic perspective.

The quantitative operationalisation table of the survey can be found in appendix II.I and the survey questions itself, as presented to the respondents, can be found in appendix II.II.

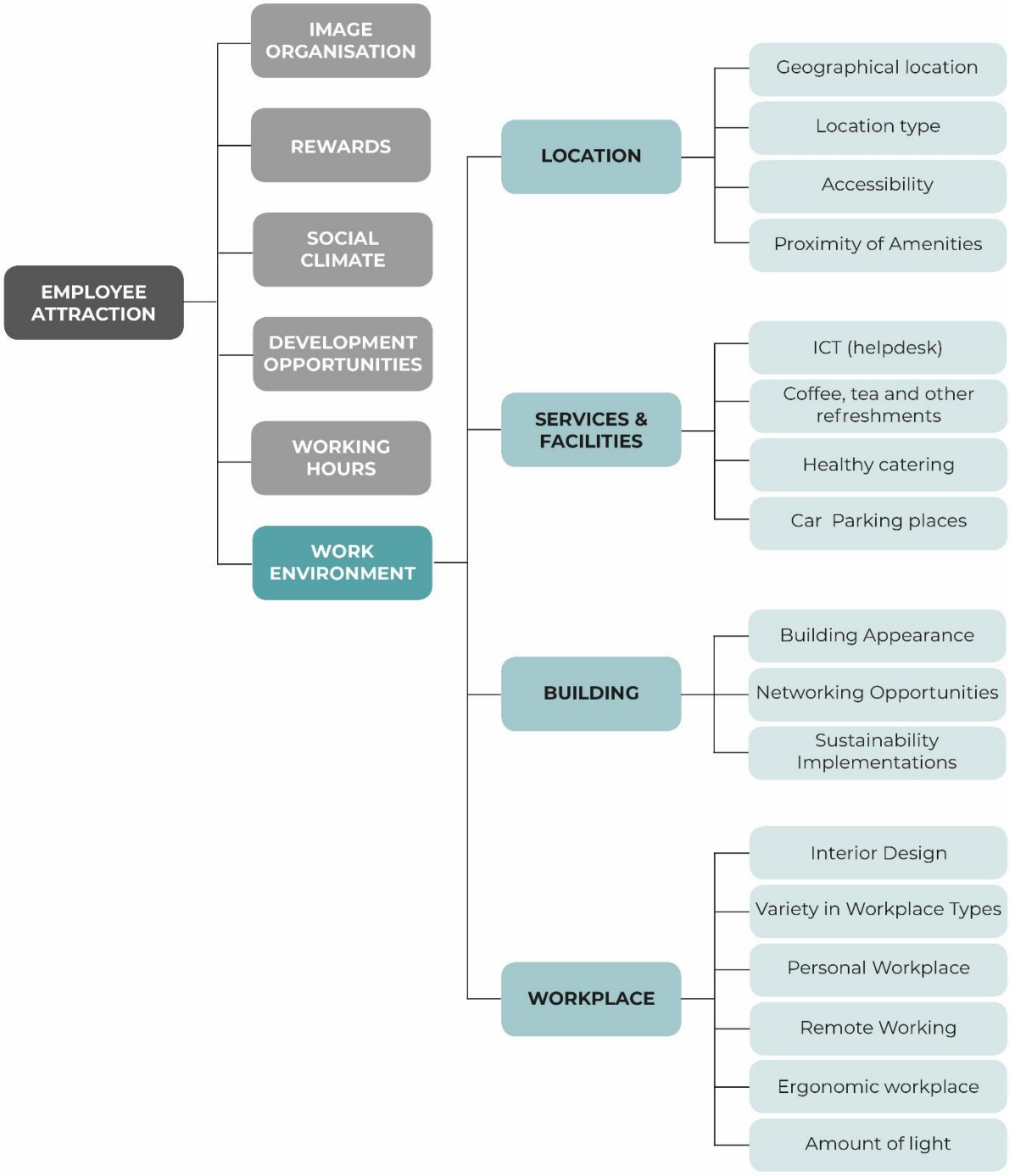

Figure 4.5: Value Tree Design

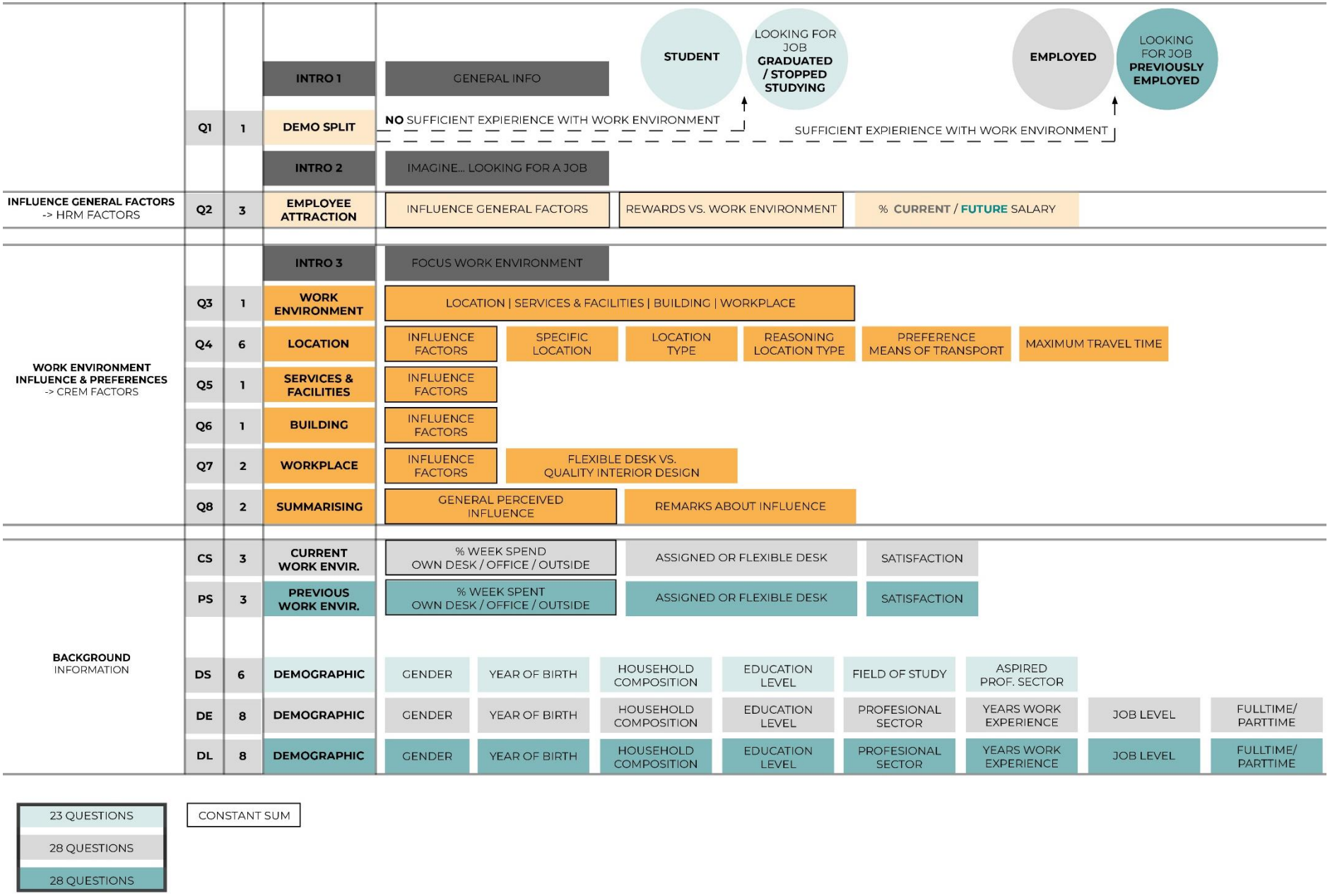

Figure 4.6: Survey Design

4.2.2 DISTRIBUTION

The companies that eventually decided to distribute the survey among their employees provide a varied range of employment sectors. These companies are:

JLL

- JLL is the graduation internship organisation and is a real estate services firm. The potential number of respondents was 180. Eventually 58 employees of JLL participated in the survey, wherefore the response rate was 32%.

Genmab

- Genmab is a biotechnology company and provided a potential number of 300 respondents. Eventually 47 employees of Genmab participated in the survey, wherefore the response rate was 16%.

IPGmediabrands

- IPGmediabrands is a marketing company and provided a number of 350 potential respondents. Eventually 43 employees of IPG Mediabrands participated in the survey, wherefore the response rate was 12%.

Loyens&Loeff

- Loyens & Loeff is a law firm and decided to select a pool of 76 employees to which the survey was sent. Eventually 23 employees of Loyens & Loeff participated in the survey, wherefore the response rate was 30%.

ICS Adviseurs

- ICS adviseurs is a real estate consultant and provided a number of 82 potential respondents. Eventually 15 employees of ICSadviseurs participated in the survey, wherefore the respondense rate was 18%.

All companies, except from ICS Adviseurs, are international companies. However, because of the scope of this research is chosen to distribute the survey only among the employees who are working in the Netherlands. The overall response rate of these five companies was 19%. But 53% survey participants are not an employee of one of these companies and were approached via social media.

4.3 STATISTICAL ANALYSIS

In figure 4.7, the statistical analysis section is shown as part of the whole research.

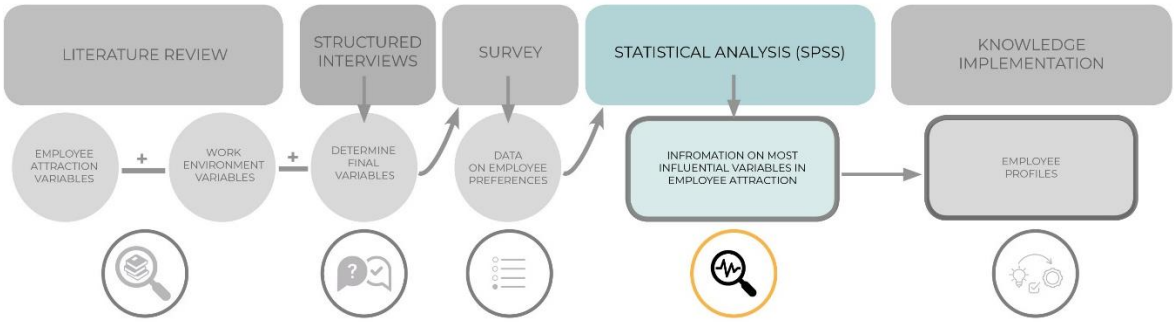

Figure 4.7: Surveys within the Research Framework

4.3.1 DATA PREPARATION

Missing values

The first step of the data preparation was excluding all cases in which the first question on the influence of the general employee attraction factors (Q2.1_1 to Q2.1_6) was not completely answered. This question is considered very important in answering the research question of this thesis and therefore placed at the beginning of the survey. All cases in which this question was fulfilled are therefore useful for the data analysis. After excluding the cases that did not finish answering this question, 368 cases are left. From these 368 respondents, 337 finished all main questions about the influence of the work environment and their preferences. Eventually 329 respondents finished the complete survey, including the socio-demographic questions and, for employed people, the questions about their current work environment.

As not a single respondent selected 'I am looking for a job (prior work experience)' in Q1, all corresponding empty columns about their previous work environment (PS1 till PS3) and about their socio-demographic background (DL1 till DL8) were removed from the data set.

Recoding

Similar socio-demographic data (same questions and same answer options) that only differed in the way of asking in order to personalise the question to certain groups that were determined in Q1, could be combined:

DS1 & DE1:	Gender
DS2 & DE2:	Birthyear
DS3 & DE3:	Household_Comp
DS4 & DE4:	EducationLevel
DS6 & DE6:	Prof_Sector

In addition, some groups of certain socio-demographic perspectives are combined, because these groups were too small to draw valid conclusions from about the population.

Current Status: The data of cases that selected 'I am looking for a job (recently graduated or stopped studying)' was combined with 'I am a student', because the 'I am looking for a job (recently graduated or stopped studying)'- group was too small (N = 6) to draw significant conclusions from. For the purpose of this research, these two groups are highly comparable (both do not have sufficient experience with work environments) and can therefore be combined.

Gender: None of the respondents answered 'other', wherefore this value could be removed from the data set.

Birthyear: The birthyears were firstly divided over four generation categories: Baby Boomers (1946 – 1964), Generation X (1965 – 1979), Millennials (1980 – 1998), and Generation Z (1999+). Which is based on (Appel-Meulenbroek, Vosters, Kemperman, & Arentze, 2019). However, as the Generation Z group was extremely small (N = 2), this group is combined with the Millennial Generation. In addition, for research on significant differences between different generations, the Baby Boomer generation was left out as their sample sizes was too small (N = 13) to compare with the other two generations: Generation X (N = 68) and Millennials (N = 247).

Household_Comp: 'Living with child(ren)' and 'living with partner and child(ren)' is combined to 'Living with child(ren) (and partner)' as the group 'Living with child(ren) was too small (N = 11) to compare this group on significance within the Household Composition perspective. These groups can be combined, because the most important aspect within the analysis from this socio-demographic perspective is whether the respondent has children or not.

Education_Level: 'Primary School' was left out the values (N = 0). VMBO, HAVO, and VWO were merged to 'High School' which was in total N = 9. HBO bachelor (N= 78) and HBO master (N=20) were combined to HBO, because HBO bachelor is a significantly bigger sample. WO bachelor (N = 10) and WO master (N = 181) were combined to WO, because the bachelor sample was too small to analyse. 'PhD' was not a selection option, but was often mentioned at the 'Other, please specify' option, wherefore this value was created in the data set.
For the analysis in which different Education levels are tested on significant mean differences, only HBO and WO (including PhD) are taken into account, as the samples of high school (N = 9) and MBO (N = 11) were too small to statistically compare with the other groups.

Job level: For the statistical analysis of different groups, Managing Board (N = 13) and Supervisor (N = 49) are merged to Manager, and compared with Individual Contributor (N = 189), as the Managing Board group was too small to make a statistical comparison. An Individual Contributor is an employee who does not have a managerial function.

4.3.2 DATA DESCRIPTION

In this paragraph, the most relevant socio-demographic characteristics of the survey respondents are described. These characteristics are used for the analysis, mainly for the heterogeneous part, but also indicate the extent of the representativeness of the sample in comparison to the population. Therefore, the data of this research is compared to the data from CBS. The newest data that could be found in the CBS databank, Statline, is from the third quarter of 2019. The CBS data that is used, is the data on the high educated working population within the labour force (HBO and WO level), as that group is most comparable with the scope of this research: knowledge workers. There should be noted that the data from CBS represents the whole high educated working population of the Netherlands and does not focus on office workers or specifically knowledge workers. However, this data is most accurate data that could be found to compare the representative sample with. In appendix III.I, some other socio-demographic characteristics from the representative sample are described.

Current Status

In figure 4.8 the distribution of 'people with a different current status' are visualised. Split in: employed people and students. The 'student' group contains students and people who selected 'I am looking for a job (recently graduated or stopped studying)'. Since the question that results in this data is mainly asked to examine whether people have sufficient experience with work environments (employed) or not yet (students), the split in these two groups is sufficient for this research.

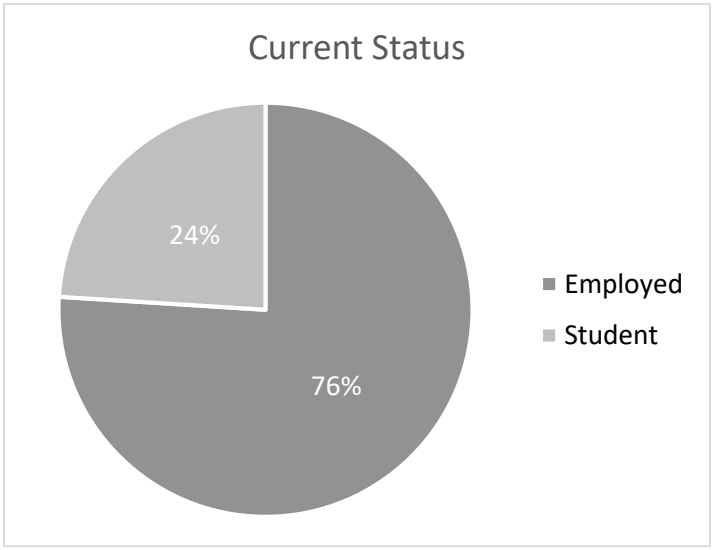

Figure 4.8: Distribution of people with a different current status

From table 4.5 can be concluded that it is arguable whether the representative sample of this research is reflecting the Dutch population. Relatively many students participated in the survey, compared to the high educated Dutch population part. To calculate the population percentage of students, students that are educated at MBO, HBO, and WO level are included (Onderwijsincijfers, 2019). When generalising the results of this research, it should be taken into account that there are relatively many students included in the representative sample.

Current Status	This research		CBS (2019e) Onderwijsincijfers(2019)
	N	%	%
Student	89	24	17
Employed	279	76	83

Table 4.5: Distribution of people with a different current status

Gender

Figure 4.9 shows the distribution of women and man in the representative sample. 'Other' was also an option, but remained unselected.

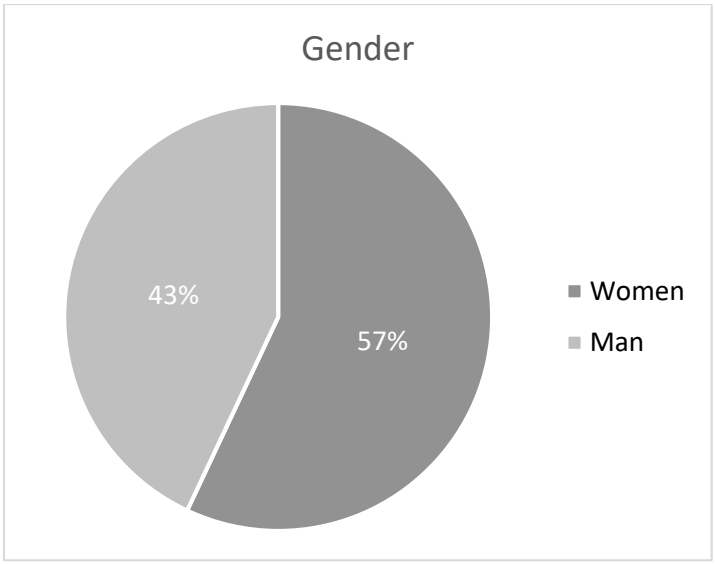

Figure 4.9: Distribution of Gender

From table 4.6 can be concluded that the representative sample is somewhat representative for the Dutch working population. The representative sample and the Dutch high educated working population are both around 50/50. However, the representative sample contains relatively many women.

Gender	This research		CBS (2019e)
	N	%	%
Women	188	57	49
Man	140	43	51

Table 4.6: Distribution of Gender

Generations

In table 4.10, the distribution of Generations is visualised. There were only two Generation-Z samples in the data set, wherefore these are combined with the Millennial group.

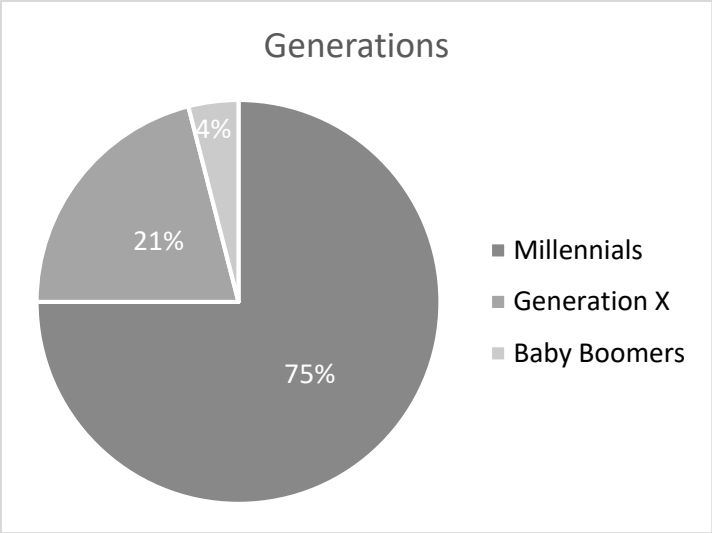

Figure 4.10: Distribution of Generation

In table 4.7 is shown which birth years the generations represent. This division is based on Appel-Meulenbroek et al., (2019). As can be seen in the table, the sample is not that representative for the Dutch high educated working population, when taken into account the generations. This is due to the high number of Millennials in the sample and the low number of Baby Boomers in the sample. When generalising the results of this research, this should be taken into account.

Generations	Birth years	This research		CBS (2019e)
		N	%	%
Baby Boomers	1946 – 1964	13	4	19
Generation X	1965 – 1979	68	21	35
Millennials	1980 - 1998	247	75	47

Table 4.7: Distribution of Generations

Years of Work Experience

The question that generated data on Years of Work experience was only asked to employed people. In figure 4.11 is showed that employees with more years of work experience were more likely to participate in the survey.

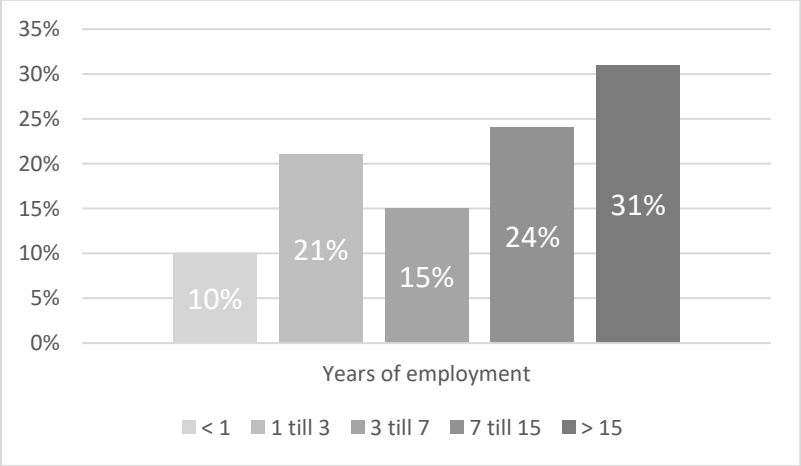

Figure 4.11 Distribution of Years of Experience

4.3.3 CONCLUSIONS

When generalising the representative sample of this thesis to the whole population, it should be taken into account that the representative sample contains relatively:

- Many students;
- Many Millennials and few Baby Boomers.

In appendix III.I, some other socio-demographic characteristics from the representative sample are described. When generalising the representative sample of this thesis to the whole population, it should be taken into account -on the basis of the socio-demographic perspectives described in appendix III.I- that the representative sample contains relatively:

- Many people who work in the real estate sector, pharmacy and biotechnology sector, marketing, media, and communication sector, and architects, engineers and construction sector;
- Many students who are doing a technology based study;
- Many employed people who have a managerial function;
- Many employed people who work fulltime.

5 RESULTS

5 RESULTS

This chapter explains the analysis of the data that is described in paragraph 4.3. The leading sub question of this chapter is: "To what extent do knowledge workers take work environment characteristics into consideration in job choice decision-making?". The first part of this chapter covers the analysis of the integral sample, in which the whole sample of the 368 respondents are analysed as one homogeneous group. The purpose of this first part is to identify significant differences in the degree of influence that different variables have on job choice decision-making. Besides, work environment related preferences of the respondents are analysed. The second part of this chapter explains the analysis of different groups within the sample, in which different heterogeneous groups from different background perspectives are compared. The purpose of this second part of the statistical analysis is to identify significant differences between groups within different (socio-demographic) perspectives on the influence of different variables on their choice for a job, in order to advise companies on attracting their specific employee target group. In addition, differences between groups concerning work environment related preferences are analysed.

5.1 RESULTS: ANALYSIS OF INTEGRAL SAMPLE

SAMPLE AS ONE HOMOGENEOUS GROUP

This chapter explains the analysis of the whole sample of 368 participants as one homogeneous group. The statistical steps in IBM SPSS that are taken for this part of the analysis are visualised in a Decision Tree in figure 2.10, paragraph 2.2.4. The analysis within this chapter follows the sequence of the Value Tree as presented in figure 4.5: in each paragraph, one part of the value tree is discussed. Throughout this chapter comments of the survey respondents are represented as part of the explanation of some results. As these comments are the answer to an open-ended question in the end of the survey, they are perceived as of great value. The question that enabled these comments was: "Based on your own experience, is there anything else you want to mention about the influence of the work environment on job searching?". Many respondents came up with answers that were very specifically focused on a certain variable. As the respondents were not steered in a certain direction by asking this question, and came up with these certain topics by themselves at the end of the survey, the answers they provided are conceived of great importance for the explanation of some results.

5.1.1 GENERAL EMPLOYEE ATTRACTION

The 'General Employee Attraction' part of the value tree is the part that compares the work environment with the selected General Employee Attraction factors: the image of an organisation, rewards, social climate, development opportunities and working hours (figure 5.1). The participants of the survey were asked to divide 100 points over these six variables by asking them: "How much influence do the following factors have on your choice for a new job?". When comparing the allocated points of the work environment variable to the allocated points of other variables, conclusions can be drawn about the extent knowledge workers take work environment characteristics into consideration in job choice decision-making.

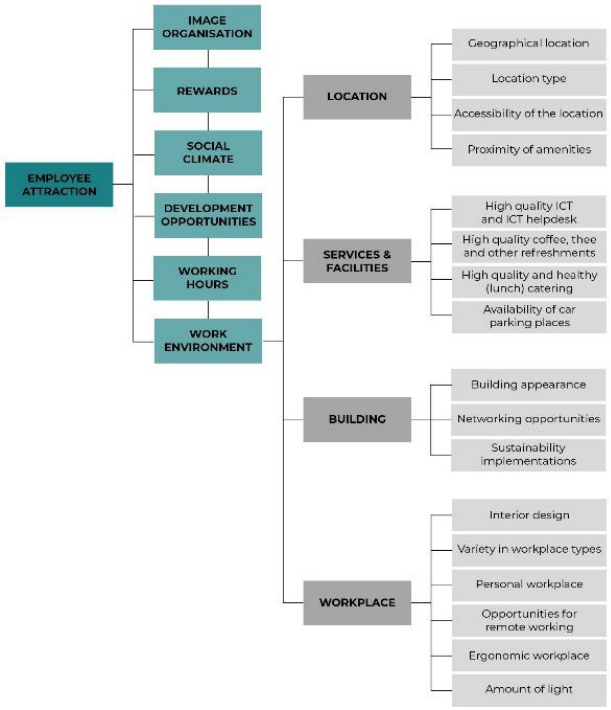

Figure 5.1: Employee Attraction variables within the Value Tree

As the respondents could divide 100 points over the six variables to indicate the degree of influence that the variables have, all six variables would have a mean of 16 ⅔ in the case that the points would have been divided equally by all respondents. However, as can be seen in figure 5.2 is that not the case.

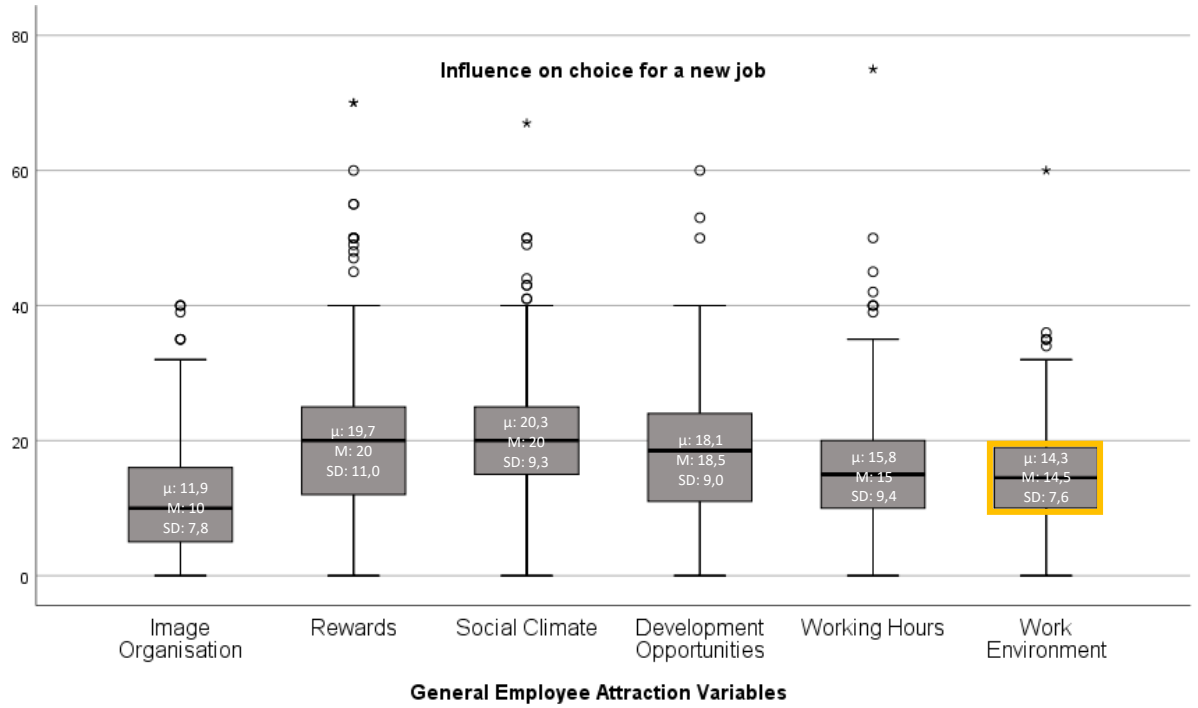

Figure 5.2: General Employee Attraction variables: means, medians, and standard deviations.

Descriptive Data

In figure 5.2 and in appendix III.II, the descriptive information on the six General Employee Attraction variables can be found. The mean and median, complemented by the standard deviation, give an indication of the degree of influence that the general employee attraction variables have on employee attraction. When comparing the means (μ) and medians (M) of the different variables, it becomes clear that the respondents allocated most points to *Social Climate* (μ = 20,3, M = 20) and second most to *Rewards* (μ = 19,7, median = 20). When comparing the means and medians of the other variables, their rank order is as follows: *Development Opportunities* (μ = 18,1, M= 18,5), *Working Hours* (μ = 15,8, M = 15), *Work Environment* (μ = 14,3, M = 14,5), and *Image Organisation* (μ = 11,9, M = 10).

When comparing the standard deviation (SD) of the General Employee Attraction variables, becomes clear that the data on *Rewards* (Std. Dev. = 11,0), *Working Hours* (Std. Dev. = 9,4) and *Social Climate* (Std. Dev. = 9,3) have a relative large standard deviation and therefore have quite spread data. In addition, the distribution of data for the *Rewards* and *Working Hours* variables is highly positively skewed, which means that in both cases significantly more values are lower than the mean, than higher than the mean. The values of skewness can be found in the descriptive table of appendix III.II, complemented by the histograms in which the skewness in can be recognised.
When analysing the standard deviations, it is remarkable that respondents have very varied opinions on the two variables with the highest mean and median: *Social Climate* and *Rewards*. Moreover, the standard deviations indicate that respondents have most unified opinions about the influence that the two variables with the lowest means and medians have: *Work Environment* (Std. Dev = 7,6) and *Image Organisation* (Std. Dev = 7,8). Moreover, the respondents have the most similar opinion about the degree of influence of the variable that has the main focus within this thesis, *Work Environment*, compared to the other General Employee Attraction variables.

In the descriptive statistics (appendix III.II) can be seen that all variables of the General Employee Attraction list have a positive kurtosis. In addition, it can be concluded that the data on *Rewards, Working Hours*, and *Work Environment* is more leptokurtic than the other General Employee Attraction variables. This means that these variables have many scores in the tails of the histogram and therefore have relatively many extreme values.

Significant differences in overall variable list

In order to indicate whether there are significant differences in the degree of influence of the variables within the whole list of General Employee Attraction variables, a Repeated Measures ANOVA is performed. In the decision tree of figure 2.10 in paragraph 2.2.4 is explained how the statistical analysis is performed. In the first part of the Repeated Measures ANOVA, Mauchly's Test of sphericity indicated violation of sphericity: X^2 (14) = 104,097, p = 0,000. Besides, as the Greenhouse-Geisser epsilon is > 0,75, the Huynh-Feldt correction is needed. The Huynh-Feldt statistic indicates that the six aspects of employee attraction are not rated equally: F(4,543, 1667,384) = 39,324, p = 0,000. This means that there are significant differences in the influence that the General Employee Attraction variables have on job choice decision-making and thus on employee attraction.

Significant differences between specific variables

As significant differences between the variables are found, a paired samples T-Test is performed to examine the significant differences between the specific General Employee Attraction variables. The results of this test enable to conclude which General Employee Attraction variables have significantly more influence on employee attraction than others. In the paired samples T-Test, each variable is compared to its successor in the rank order derived from their means:

- Mean difference between *Social Climate* and *Rewards* 0,56$_{(t=368)}$ p > 0.05, so are **quite similar**.
- Mean difference between *Rewards* and *Development Opportunities* 1,62 $_{(t=368)}$ p > 0.05, so are **quite similar**.
- Mean difference between *Development Opportunities* and *Working Hours* 2,32 $_{(t=368)}$ p < 0.05, so **differ significantly**.
- Mean difference between *Working Hours* and *Work Environment* 1,43 $_{(t=368)}$ p < 0.05, so **differ significantly**.
- Mean difference between *Work Environment* and *Organisational Image* 2,43 $_{(t=368)}$ p < 0.05, so **differ significantly**.

As the variable *Rewards* does not differ significantly from *Social Climate* and *Development Opportunities*, but *Social Climate* and *Development Opportunities* differ significantly, the final rank order of General Employee Attraction variables according to their influence on job choice is as follows:

1. Social Climate, Rewards
2. Rewards, Development Opportunities
3. Working Hours
4. Work Environment
5. Organisational Image

That *Social Climate* appears to be very influential on the choice for a new job, does not come as a big surprise, when comparing this result to the literature review. As can be seen in the 'Relations' part within figure 3.3, *Social Climate* related topics are often discussed. In Human Resource Management literature discussed topics, associated with *Social Climate* are: relations with bosses/ managers/ superiors, relations with colleagues, diversity/ inclusion, employee treatment/ involvement/ respect, social climate/ work culture/ work environment, and social activities (figure 3.3). Next to the fact that this topic is often discussed in literature, several literature resources rank this variable very high in their research. In the research of Hiltrop et al (1999), *Social Climate* was the most mentioned attribute (out of 11 attributes) when students had to indicate which attributes are the most important considerations in

their decision to accept or reject a job offer. In addition, Center for People and Buildings emphasises in their report 'The Future of Work in 2025' that companies will focus on social cohesion to attract employees (De Been, Bruyne, Pullen, Gerritse & Thoolen, 2016). They state that, despite the individualisation of society, employees require social contacts and the desire to 'be part of something'. Their declaration is that people are looking for social cohesion because work locations are nowadays less obvious and therefore relations with colleagues more detached. In addition, they argue that employees want to 'feel at home' within a team and within an organisation and that employees are seeking for a social component in their office that goes beyond professional scheduled meetings (De Been, et al., 2016). This is in accordance with a statement of one of the survey participants: "*People make the work the most: a worse workplace with nice work and nice people is a great job*." Another survey respondent has a similar comment: "*The type of work and colleagues are most important in a work environment. If the work and colleagues are fun, then every work environment is good*."

However, what could be perceived as surprising is that *Rewards* is not valued as (significantly) most influential factor on the choice for a new job as this variable is present in all discussed literature on employee attraction. In Chambers' 'War for Talent' Chairman of HR consulting firm Sibson says: "Highly competitive compensation – particularly long-term wealth accumulation – is an essential ticket to the game of attracting and retaining top talent" (Chambers et al., 1998, p. 52). This is in accordance with the statement of one of the survey participants: "*As salary increases, the influence of the work environment decreases.*" However, in the Delphi research of Center for People and Buildings, the expert panel predicts that the coming 10 years *Rewards* will not be of great importance when attracting and retaining employees: when ranking to importance, *Rewards* is placed on the ninth place out of eleven factors (De Been, et al., 2016). In addition, that *Rewards* are not perceived as most influential could be declared by the number of millennials and students that participated in this survey. In paragraph 5.2.1, this will be further explained.

Development Opportunities, the variable that got a shared second place with *Rewards* is the highest valued factor by the expert panel within the Delphi study of Center for People and Buildings when examining the most important factors to attract and retain talent the coming 10 years (De Been, et al., 2016). Also within the research of Hiltrop et al. (1999), *Development Opportunities* appeared of great importance. They state that one of the most effective practices in attracting and retaining talented people is to create opportunities for training and development. In addition, the research of CIPD (2017) states that *Development Opportunities* are -equal to *Rewards*- the most important factors in attracting talent, right after organisational values.

Work Environment in relation to General Employee Attraction variables

A crucial part in answering the leading sub question of this chapter -"To what extent do knowledge workers take work environment characteristics into consideration in job choice decision-making?"- is analysing the influence of *Work Environment* on employee attraction in relation to the other General Employee Attraction variables. As discussed in the previous section, the *Work Environment* variable received the second-last place in the General Employee Attraction rank order ($\mu = 14{,}3$, $M = 14{,}5$). This might insinuate that the *Work Environment* is not that influential on employee attraction. However, when taking into account that the Work Environment is barely discussed in literature on employee attraction (chapter 3.1), this second-last place in the rank order, with a mean that does not differ that much from

the other -often discussed in literature- General Employee Attraction variables, is rather high. Moreover, the means and medians of the *Work Environment* variable compared to the -highest valued- *Social Climate* variable are not highly spread: μ-difference = 6 and M-difference = 5,5 on a 100-point scale. This indicates that the influence of the *Work Environment* on employee attraction is not that deviating from the influence of the most influential variable.

The survey respondents have diverse opinions on the influence of the *Work Environment* on their choice for a new job, in which the place in the rank order can be recognised and declared. Some of them see the *Work Environment* as a subordinate factor. One respondent said: "*Work Environment gets a really low place in my opinion. It is primarily about the vision, mission and knowledge level of a company and the atmosphere/ culture of the people who work there. I have worked in various places. For example, I have worked at places where everything was 'neat and tidy', but concerning the work culture did everyone work for themselves. That did not make the job any nicer*." Another respondent stated: "*In first instance it is about the content of my work and the culture within an organisation, collaboration with colleagues. The work environment is secondary to me*." Some other respondents came up with very similar statements. Another provided a more nuanced quote: "*The nature of the work is much more important than the work environment, but there must also be a clear balance and coherence between the two.*"

Some other respondents believe that the *Work Environment* is an important factor in a decision for a new job, but not a decisive one. One of them said: "*A job has to correspond with what I like and I should learn a lot, and start every day with a lot of joy. Although the work environment reinforces this, it is not (yet) decisive*." Another respondent stated: "*The work environment contributes to the choice for a new job, but is not necessarily the reason to choose a certain job."* Another respondent came up with the following sentence: "*The work environment plays an important role, but less compared to other aspects*."

There were also some respondents who value the influence of the *Work Environment* really high and think it could be a decisive factor in their choice for a new job. One example is a respondent who said: "*A nice work environment is a nice ancillary element with a suitable job and can therefore be decisive when choosing between two identical jobs*." Another respondent provided a similar comment: "*The work environment only plays a role for me if I have several jobs to choose from that are exactly comparable in terms of salary, travel time and (intellectual) challenges/ role*." Another respondent stated: "*For me, the work environment has a lot of influence on looking for a job. It should stimulate me to work with a nice atmosphere*."

A few respondents emphasised that the *Work Environment* plays a role in the way they feel about an organisation and indirectly on their choice for a new job. One of them said: "*Especially the appearance of the workplace says a lot about the feeling I have about the company*." One respondent elaborated more on what the work environment says about the employees: "*The work environment often tells something about the company. Certainly at smaller companies, the workplace is the result of choices that your (future) colleagues have made. Those choices reflect what they find important*." Another respondent stated: "*The work environment plays a role in choosing a new job in the sense that the work environment says something about the way of working of the company and the extent a company values its employees*." Especially that there are people who assume that the work environment reflects the employees of the company and the extent that companies value their employees is an interesting new finding.
This corresponds with the story of another respondent, for who the work environment was a decisive factor in the decision to not choose for a certain job: "*I once rejected a nice job at [censored company] because*

the building in Amsterdam was so small and tight that the employees were sitting there like laying hens without a 'Beter Life' quality mark. It showed so little respect for the employees that I didn't want to work there."

More of the respondents experienced that the work environment was a decisive factor in not choosing for a certain job: "*I once applied for a job somewhere and I dropped out, among other things, because the atmosphere at the workplace. The cellular offices felt cramped. The atmosphere/ the interior was old-fashioned instead of fresh and open. I didn't see myself working there*." One of the respondents indicated that the work environment was the decisive factor for choosing for the company where this respondent currently works:: "*In the end I choose for the company because of the pleasant atmosphere on the work floor*."

In order to generate more information on the influence of the *Work Environment* on employee attraction in relation to the General Employee Attraction variables, more questions in the survey were focused om this subject.

As the underlying goal of this thesis is to provide insights to companies to be used as part of their strategies on enhancing their competitive advantage within the war for talent (chapter 1.3 and chapter 1.7), companies will also be advised on how to use their financial resources strategically to attract their employee target group. A direct financial asset that companies can use strategically to attract employees is *salary*, as part of variable *Rewards*. Moreover, *salary* was often mentioned in the first question of the structured interviews, and the graduation mentors and real estate consultants from the internship company all informally formulated the hypothesis that *Rewards*, mainly salary, would be most influential on employee attraction*. Hence, some of the survey questions are focused on the relation between the *Work Environment* and *Rewards*.

* N.B. It should be noticed that the analysis of the survey results proved that this informally formulated hypothesis is rejected since *Social Climate* received slightly more points than *Rewards* (not significantly).

To compare the influence of the *Work Environment* on employee attraction in relation to *Rewards*, the survey participants were asked to divide 100 points between these two variables by the following question: "Just focusing on 'rewards' and 'work environment', how much **influence** do the following factors have on your choice for a new job?". In figure 5.3 is visualised that *Rewards* received on average more points ($\mu = 57$) than *Work Environment* ($\mu = 43$). However, when considering that *Work Environment* barely plays a role in literature on employee attraction, *Work Environment* received a noticeable high amount of points compared to *Rewards*, which is widespread considered as one of the most influential factors on employee attraction (chapter 3.1).

When comparing the mean differences between the previous discussed question and this question, it is observed that on average *Work Environment* received 27% (mean difference between *Rewards* and *Work Environment* divided by *Rewards*) fewer points than *Rewards*, when assessing all six variables, and *Work Environment* received 25% (mean difference between *Rewards* and *Work Environment* divided by *Rewards*) fewer points than *Rewards*, when assessing only these two variables. Therefore can be concluded that *Rewards* has a comparable higher degree of influence than *Work Environment* in the case that six employee attraction variables are assessed as well as in the case that only these two variables are assessed.

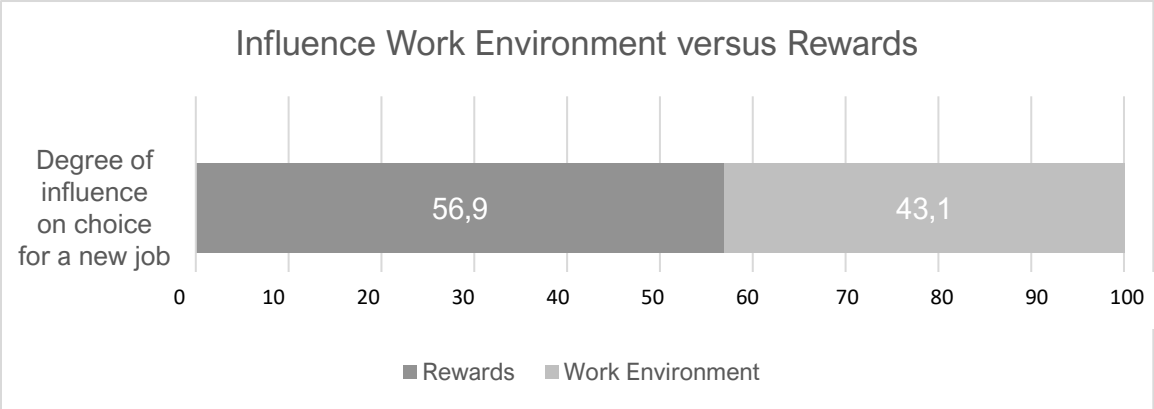

Figure 5.3: Influence Work Environment versus Rewards

In order to be able to provide insights to companies from a strategic financial perspective in another way, the survey participants were asked what maximum percentage of their (future) salary they would give up in exchange for their *ideal* work environment. From the analysis of the results appears that 74% of the respondents are willing to give up a certain percentage of their salary. More specifically, they are willing to give up 7,1% of their (future) salary in exchange for their 'ideal Work Environment' (figure 5.4). Although the definition of 'ideal work environment' is different for each individual, the combination of all most influential and most preferred factors discussed in this thesis could be used as an indication of their 'ideal work environment'. In chapter 5.2 is focused on different demographic perspectives, which provides the possibility to define the *ideal work environment* for more specific groups.

From the 7,1% of (future) salary that the respondents are willing to give up in exchange for their *ideal work environment* can be concluded that on average 7,1% of the respondents' salary should go to investments in the *Work Environment*, as long as it goes to the *Work Environment* related aspects that correspond with these respondents' perceived most influential and preferred *Work Environment* aspects. In paragraph 5.1.7 will be elaborated on these most influential and preferred aspects. In addition, in chapter 5.2 will be elaborated on the different demographic perspectives in relation to the % of salary the respondents would give up in exchange for their ideal work environment.

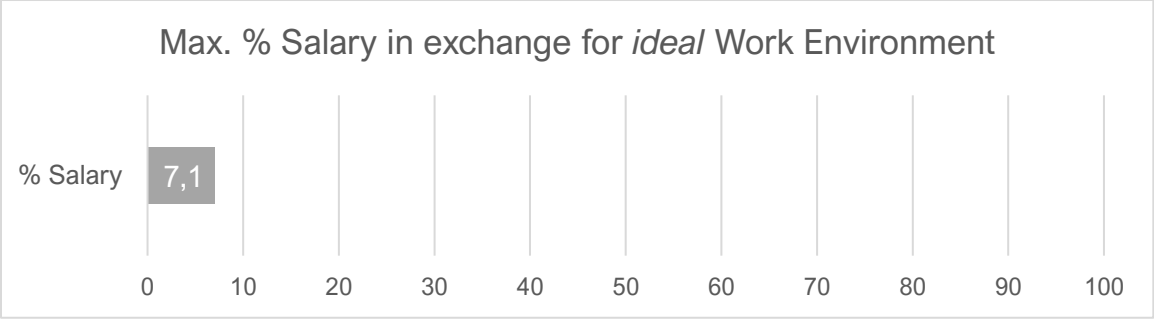

Figure 5.4: Maximum % Salary the respondents would give up in exchange for their ideal Work Environment.

The last question of the survey that is about the influence of the *Work Environment* (variables) focusses solely on the *Work Environment* itself and is formulated as follows: "How much influence does the work environment* have on your choice for a new job? *concerns all characteristics of the work environment that are

mentioned within this survey.". The respondents allocated the outstanding amount of 52 points on average to the degree of influence the *Work Environment* has on their choice for a new job. Also the median is 52. In figure 5.5 can be seen that the respondents provided very varied answers to this question, with answers varying from 0 to 100. This is also indicated by the high standard deviation of 24,8. Besides, the data is platykurtic: the values are widespread distributed around the mean. The mean value of 52 is a much higher degree than in the question in which the influence of *Work Environment* was compared to the other General Employee Attraction Variables (μ = 14,3), and than in the question in which the influence of the *Work Environment* was compared to *Rewards* (μ = 43,1). This higher degree of influence could be explained by different reasons. Firstly, there is solely asked about the *Work Environment* without comparing this variable to other variables: in the other two questions, 100 points had to be divided over multiple variables. The fact that in this question there is no emphasise on other influential factor(s) could explain the higher perceived influence of the *Work Environment*. Another possible explanation is that this questions is asked in the end of the survey, wherefore respondents are guided through an extensive set of variables concerning the *Work Environment* prior answering this question. Therefore, it could be a possibility that the respondents realise what the actual influence of the Work Environment is on their choice for a new job, while being confronted with all aspects that are included in the *Work Environment*. Besides, a combination of these two options would be a possible explanation for the high degree of points as well.

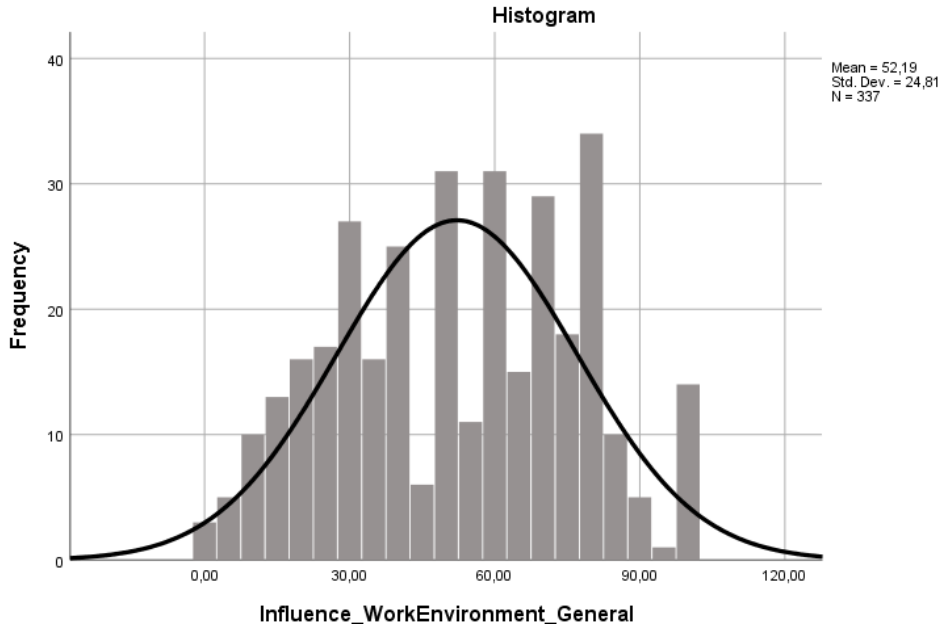

Figure 5.5: Histogram of the degree of influence the Work Environment has on the respondents' choice for a new job

5.1.2 WORK ENVIRONMENT

The 'Work Environment' variable consists of four sub variables: *Location*, *Services & Facilities*, *Building and Workplace* (figure 5.6). The participants of the survey were asked to divide 100 points over these four variables by asking them: "How much influence do the following factors have on your choice for a new job?". A comparison of the allocated points to these variables provide information on the degree of influence that these four variables have on people's choice for a new job and therefore on employee attraction.

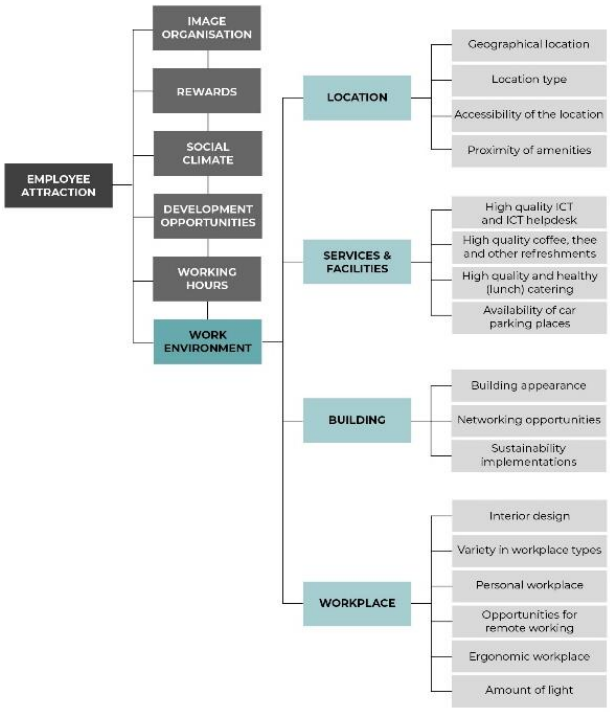

Figure 5.6: Work Environment variables within the Value Tree

When the respondents would have find the four variables equally influential on the choice for a new job, the mean of the allocated points would have been 25 for all four variables. However, in figure 5.7 is shown that there are big differences in the allocated points per variable.

Figure 5.7: Work Environment variables: means, medians, and standard deviations.

Descriptive Data

In figure 5.7 and in appendix III.III, the descriptive information on the four Work Environment variables can be found. The mean and median, supported by the standard deviation, give an indication of the degree of influence that the Work Environment variables have on employee attraction. When comparing the means and medians of the variables becomes clear that *Location* is noticeably perceived as most influential when looking for a new job (μ = 38,2, M = 36). The variable with second most allocated points on average is *Workplace* (μ = 18,9, M = 20). The two variables that got less points are *Services & Facilities* (μ = 14,6, M = 15) and *Building* (μ = 14,6, M = 15).

By comparing the standard deviations of the 'Work Environment Variables', there can be concluded that the respondents are least consolidated in their perceived influence of *Location* as the SD = 15,9. The data on *Workplace* is moderately spread (SD = 11,1) and the data on *Services & Facilities* (SD = 9,4) and *Building* (SD = 9,2) is least spread of these four variables, which means that the respondents are quite undivided in their opinion on the influence of the last two variables.

The four variables do not give an indication of skewed data (appendix III.III). However, when looking at the kurtosis of these variables, it can be concluded that the *Building* variable provides platykurtic data. This indicates there are few extreme values in the data distribution of the points allocated to *Building*, but the frequency of values is widely spread around the mean. The platykurtic distribution of this variable is also visible in the histogram in appendix III.III. The other three variables are all leptokurtic, but no extreme values are observed.

Significant differences in overall variable list

In order to indicate whether there are significant differences in the degree of influence of the variables within the whole list of Work Environment variables, a Repeated Measures ANOVA is executed. In the first part of the Repeated Measures ANOVA, Mauchly's Test of sphericity indicated violation of sphericity: X^2 (5) = 191,415, p = 0,000. Besides, as the Greenhouse-Geisser epsilon is < 0,75, the Greenhouse-Geisser correction is needed. The Greenhouse-Geisser statistic indicates that the four aspects of Work Environment are not rated equally: F(2,172, 777,595) = 215,803, p = 0,000. This means that there are significant differences in the influence that the Work Environment variables have on job choice decision-making and therefore on employee attraction.

<u>Significant differences between specific variables</u>

As significant differences between the variables are found, a paired samples T-Test is performed to examine the significant differences between the specific Work Environment variables. The results of this test enable to conclude which Work Environment variables have significantly more influence on employee attraction than others. In the paired samples T-Test, each variable is compared to its successor in the rank order derived from their means:

- Mean difference between *Location* and *Workplace* $9{,}84_{(t=359)}$ $p < 0.05$, so **differ significantly**.
- Mean difference between *Workplace* and *Services & Facilities* $9{,}43_{(t=359)}$ $p < 0.05$, so **differ significantly**.
- Mean difference between *Services & Facilities* and *Building* $4{,}27_{(t=359)}$ $p < 0.05$, so **differ significantly**.

As the *Location* variable differs significantly from *Workplace*, the *Workplace* variable significantly from *Services & Facilities*, and *Services & Facilities* significantly from *Building*, the rank order of the Work Environment variables according to their influence on job choice is as follows:

1. Location
2. Workplace
3. Services & Facilities
4. Building

It is not surprising that *Location* is valued of such importance, as this variable is the only discussed Work Environment related variable within the discussed literature on Human Resource Management (Chambers, 1998; Uggerslev et al., 2012; Rampl, 2014). Moreover, this variable was the only Work Environment related variable that the interviewees came up with in the first General Employee Attraction question of the structured interviews. This already indicated that people value the *Location* of an office of comparable value as other General Employee Attraction factors. One of the survey respondents stated: "*The city in which the office is located has a lot of influence on my choice."*

Workplace is perceived as second-highest valued variable of the Work Environment variables. An explanation could be the current health-related societal trend and the media who are reporting on the bad influence that sitting the whole day at an office desk has on our health (NOS, 2016; Marseille, 2019). Other media respond to that by for example explaining how the workplace can keep people healthy and happy (Financieel Dagblad, 2018). In addition, survey respondents acknowledge the importance of the workplace on their choice for a new job. One of them says: "*Unconsciously, the workplace plays a role in the atmosphere within a company, and I value that the most.*" Another respondent states: "*When I walk into the building and walk into the workplace, the feeling must be good*." Someone else elaborates more on the actual influence the workplace has on the choice for a new job: "*A good workplace will not necessarily convince me to start working for a company. But if I have to choose between two companies, I would certainly include it in my decision. Besides, a poor workplace would really discourage me to get to know a certain company*."

Services & Facilities and *Building* are significantly valued lower when examining their influence on a new job. One of the survey respondents explained why he values the *Building* variable of low influence: "*You get to know specifically the quality of the building after you start working somewhere. Therefore, it is less important when looking for an employer in my opinion*."

5.1.3 LOCATION

The 'Location' variable consists of four sub variables: *Geographical Location, Location Type, Accessibility, and Proximity of Amenities* (figure 5.8). The participants of the survey were asked to divide 100 points over these four variables by asking them: "How much influence do the following factors have on your choice for a new job?". A comparison of the allocated points to these variables provide information on the degree of influence that these four variables have on people's choice for a new job and therefore on employee attraction.

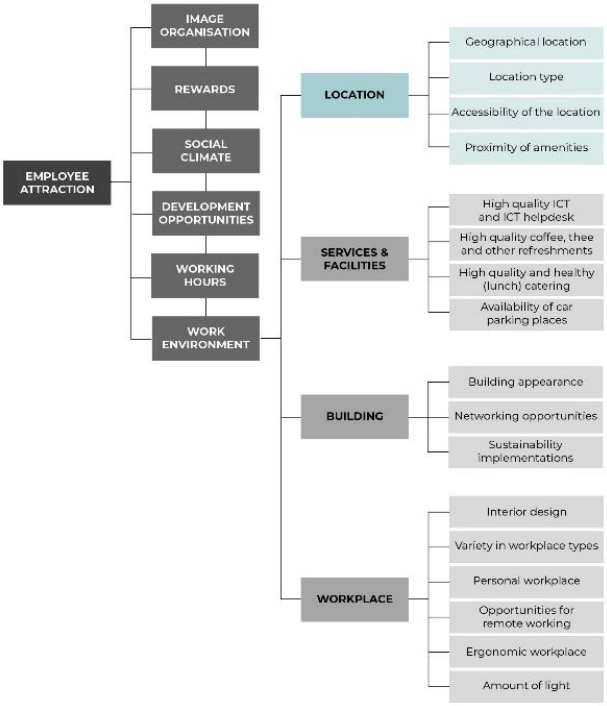

Figure 5.8: Location variables within the Value Tree

When the respondents would have find the four variables equally influential on the choice for a new job, the mean of the allocated points would have been 25 for all four variables. However, in figure 5.9 is shown that there are big differences in the allocated points per variable.

Figure 5.9: Location variables: means, medians, and standard deviations.

Descriptive Data

In figure 5.9 and in appendix III.IV, the descriptive information on the four Location variables can be found. The mean and median, supported by the standard deviation, give an indication of the degree of influence that the Location variables have on employee attraction. When comparing the means and medians of the variables becomes clear that the allocation of points is clearly divided in favour of two variables that have very comparable means and medians: *Geographical Location* ($\mu = 36,8$, $M = 35$) and *Accessibility* ($\mu = 36,7$, $M = 35$). The other two variables each received almost three times fewer points and are very equal in their means and medians: *Proximity of Amenities* ($\mu = 13,4$, $M = 11$) and *Location Type* ($\mu = 13,1$, $M = 11$).

Geographical Location has a high standard deviation (SD = 18,7), wherefore the survey participants are quite divided in their opinion about the influence this variable has on the choice for a new job. The survey participants are more unified in their opinion on the degree of influence that *Location Type* (SD = 11,1) and *Proximity of Amenities* (SD = 11,3) have on their choice for a new job.

When looking at the histograms (appendix III.IV), it becomes clear that an outstanding number of participants allocated zero points to the variables *Location Type* and *Proximity of Amenities*. However, none of the four Location variables indicate skewed data. When looking at kurtosis, the results demonstrate that the variable *Location Type* is platykurtic, while the other three variables are leptokurtic. Nevertheless, the four variables do not reveal any outstanding values of kurtosis.

Significant differences in overall variable list

In order to indicate whether there are significant differences in the degree of influence of the variables within the whole list of Location variables, a Repeated Measures ANOVA is executed. In the first part of the Repeated Measures ANOVA, Mauchly's Test of sphericity indicated violation of sphericity: $X^2(5) = 180,799$, $p = 0,000$. Besides, as the Greenhouse-Geisser epsilon is > 0,75, the Huynh-Feldt correction is needed. The Huynh-Feldt statistic indicates that the four aspects of Location are not rated equally: $F(2,321, 798,569) = 220,288$, $p = 0,000$. This means that there are significant differences in the influence that the Location variables have on job choice decision-making and therefore on employee attraction.

<u>Significant differences between specific variables</u>

As significant differences between the variables are found, a paired samples T-Test is performed to examine the significant differences between the specific Location variables. The results of this test enable to conclude which Location variables have significantly more influence on employee attraction than others. In the paired samples T-Test, each variable is compared to its successor in the rank order derived from their means:

- Mean difference between *Geographical Location* and *Accessibility* $0,05_{(t=345)}$ $p > 0.05$, so are **quite similar**.
- Mean difference between *Accessibility* and *Proximity of Amenities* $23,28_{(t=345)}$ $p < 0.05$, so **differ significantly**.
- Mean difference between *Proximity of Amenities* and *Location Type* $0,36_{(t=345)}$ $p > 0.05$, so are **quite similar**.

As the variable *Geographical Location* does not differ significantly from *Accessibility*, but *Accessibility* and *Proximity of Amenities* do differ significantly, and *Proximity of Amenities* and *Location Type* do not differ significantly, the final rank order of Location variables according to their influence on job choice is as follows:

1. Geographical Location, Accessibility
2. Proximity of Amenities, Location Type

That *Geographical Location* is of great importance is also recognisable in the comments within the survey. One respondent stated: "*Location, location, location. Above all, I don't want to travel to work too long*." Also another respondent emphasised the importance of *Geographical Location*: "*Location is the most important. I will not soon consider moving to [specific country] for a job*."
The other comments that were about *Location* related variables are focused on accessibility, which corresponds with the shared first place in the rank order of the *Location* variables. These comments are: "*It must be easily accessible*.", "*I also think that accessibility is very important*.", and "*I think the location is really important, in particular whether I can get there easily*."

Location Preferences

In the interviews became clear that many interviewees considered *Location* related aspects, mainly *Accessibility*, as one of the most important Work Environment factors. Several interviewees even came up with *Accessibility* in the first open question about General Employee Attraction factors. Therefore some more in-depth questions about *Location* preferences were asked in the survey.
In one of these questions was asked whether the respondent has a specific location or city in which he or she would like to work. It appeared that 52% of the respondents indeed have a preference for a certain city. Of those 52% of the respondents, 75% indicated that they prefer to work in the Randstad, and 37% of these 52% respondents indicated more specifically that they prefer to work in Amsterdam, which is therefore the most popular city to work in. Also Utrecht (14%) and Rotterdam (7%) were often mentioned. However, the preferences for these specific cities is explainable by the cities where the respondents already work. Most participating companies of the survey are located in Amsterdam. In addition, one of the participating companies that delivered many respondents is located in Utrecht, which could declare the high number of respondents who want to work in Utrecht. The most obvious declaration is that these employed respondents have a preference for working in the city where they already work as they might live close to their current work location. Though, when focusing on the students, yet 84% of the studying respondents indicated a preference for working in the Randstad. This percentage implies that not necessarily the current work location causes the preference for working in the Randstad.

The mean analysis of the *Location* variables shows that *Location Type* is not considered that influential on the choice for a new job. However, the survey participants are asked about their *Location Type* preferences. They were asked to indicate to what extent they would like to work at six different work locations (figure 5.10). Most respondents would work preferably in a historical City Center, followed by a Central Business District (CBD) and in a Country House. The location were most people would not like to work "at all" is a Business Park outside the city.

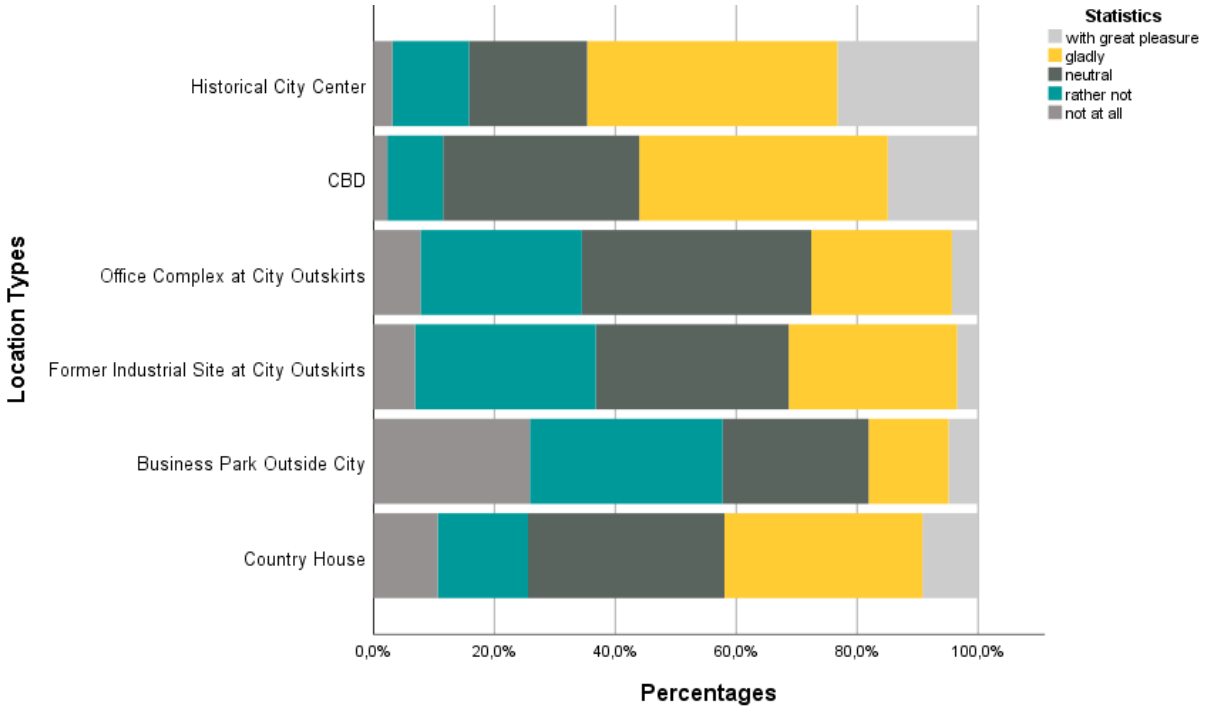

Figure 5.10: Location Type Preferences

To examine whether there are significant differences between the *Location Type* preferences, the likert scale scores were converted to points. Subsequently a Repeated Measures ANOVA was performed followed by a Paired Samples T-Test. From these statistical tests the following can be concluded:

- Mean difference between Historical City Center and CBD 0,118 $_{(t=348)}$ p = 0.088, so are **quite similar**.
- Mean difference between CBD and Country House 0,422 $_{(t=348)}$ p = 0.00, so **differ significantly**.
- Mean difference between Country House and Industrial Location 0,239 $_{(t=348)}$ p = 0.001 so **differ significantly.**
- Mean difference between Industrial Location and Office Complex at outskirts of City 0,014 $_{(t=348)}$ p = 0.811, so are **quite similar**.
- Mean difference between Office Complex at outskirts of City and Business Park 0,503 $_{(t=348)}$ p = 0.000 so **differ significantly.**

Therefore, considering significant differences, the rank order of the *Location Types* according to the respondents' preference is as follows:

1. Historical City Center, CBD
2. Country House
3. Industrial Location, Office complex at Outskirts of City
4. Business Park

The next question within the survey was dedicated to learning the reason for these location type preferences. The participants could select a maximum of three options by asking them the following question: "Why would you want to work on the location you appreciated the highest in the previous question?". When analysing the answers, it is evident that 'Atmosphere of the location', 'Accessibility by train', 'Proximity of amenities', and 'Accessibility by car' are the most common reasons to prefer a

certain location type. That accessibility of the location (by train or car) is often selected is in accordance with the high score *Accessibility* received in the question on *Location* influence.

In figure 5.11, a graphic is displayed that shows the data on the reasoning behind the specific preferences on location types. The respondents who appreciated location type City Center with 'gladly' and 'with great pleasure' selected above average as most important reason for their selection: 'proximity of amenities', 'view' and 'atmosphere'. Likewise, the respondents who appreciated type CBD with 'gladly' and 'with great pleasure' selected above average as most important reason for their selection: 'accessibility by train', 'proximity of amenities', and 'atmosphere'. From the other perspective, most of the respondents who selected 'Atmosphere' above average prefer a Historical City Center as their work location type.

As *Accessibility* is considered as such an important *Work Environment* variable, the respondents are asked two questions about their transport preference. From the first question appeared that 56% of the respondents prefers to travel to work by bicycle, 27% of the respondents prefers traveling to work by car, and 12% of the respondents prefers traveling by public transport (figure 5.12).

When subsequently asking what the maximum number of minutes is that the respondents are willing to travel to work, they indicated that they are, on average, willing to travel a maximum of 27 minutes by bicycle, 47 minutes by car, and 43 minutes by public transport (figure 5.13).

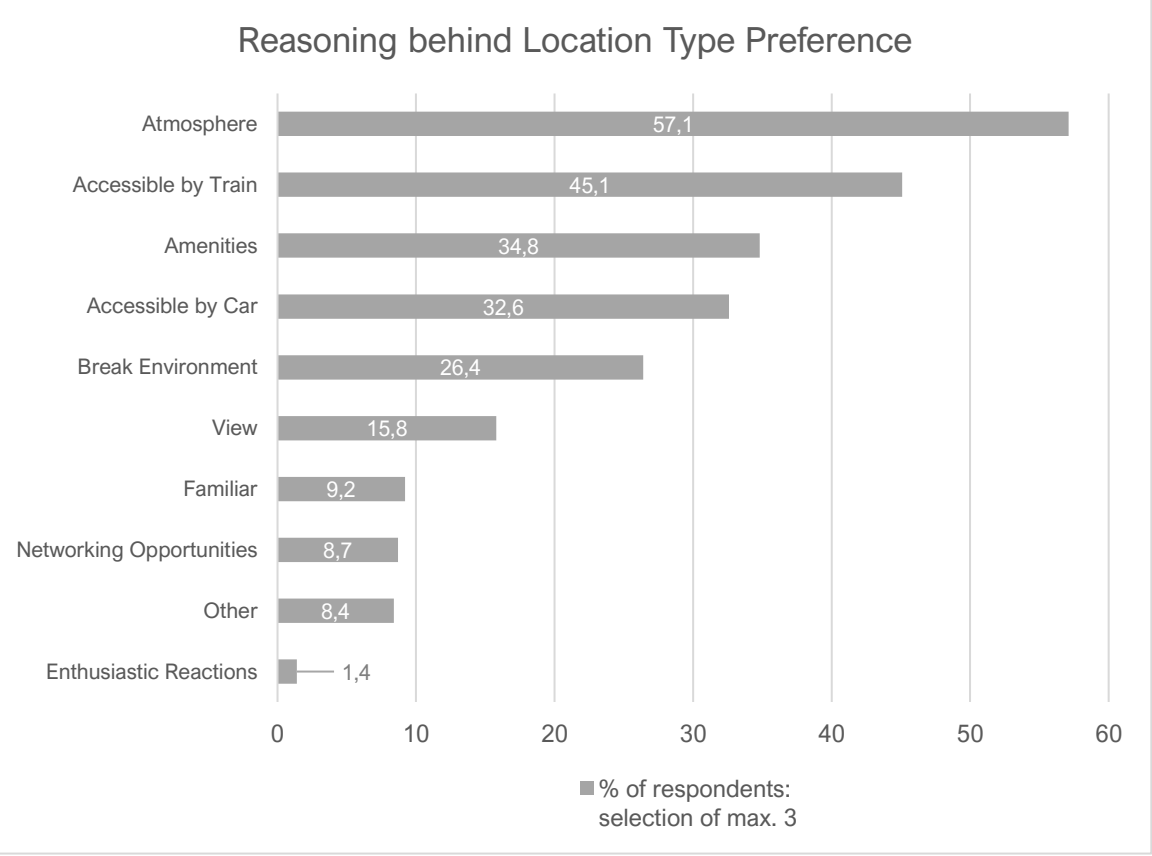

Figure 5.11: Reasoning behind Location Type Preferences

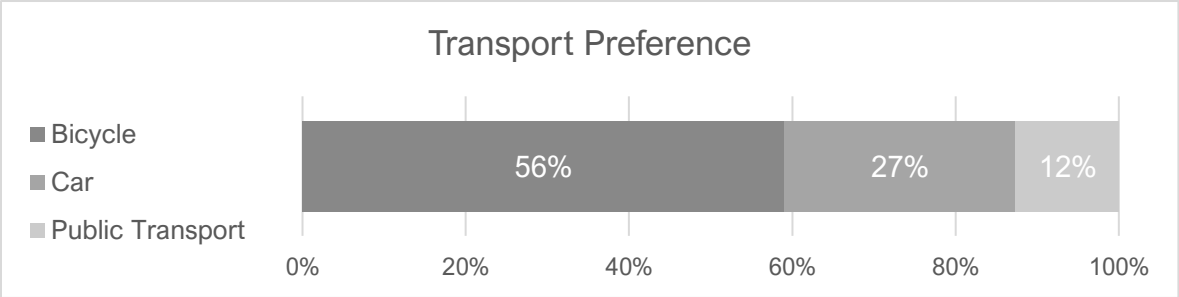

Figure 5.12: Transport Preference

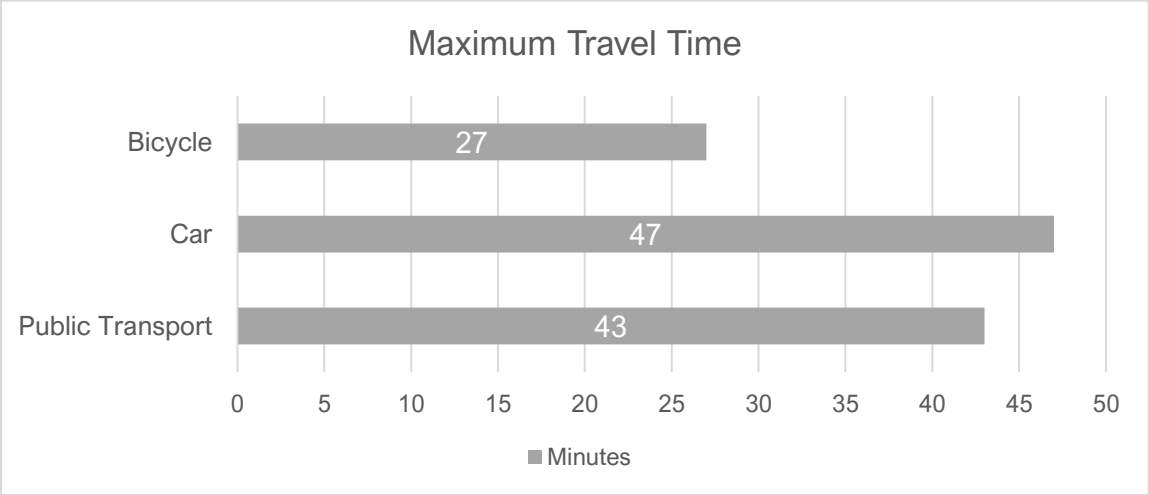

Figure 5.13: Maximum Travel Time

5.1.4 SERVICES & FACILITIES

The 'Services & Facilities' variable consists of four sub variables: *ICT (helpdesk), Coffee, tea and other refreshments, Healthy Catering,* and *Car Parking Places* (figure 5.14). The participants of the survey were asked to divide 100 points over these four variables by asking them: "How much influence do the following factors have on your choice for a new job?". A comparison of the allocated points to these variables provide information on the degree of influence that these four variables have on people's choice for a new job and therefore on employee attraction.

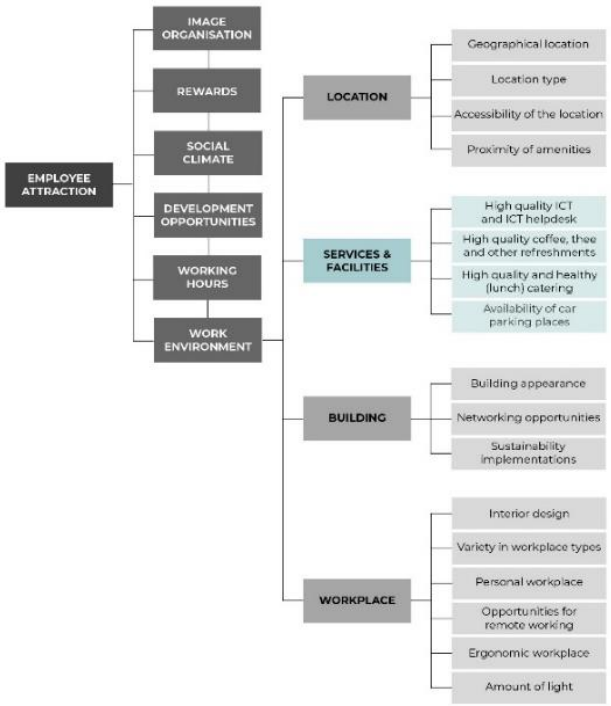

Figure 5.14: Services & Facilities variables within the Value Tree

When the respondents would have find the four variables equally influential on the choice for a new job, the mean of the allocated points would have been 25 for all four variables. However, in figure 5.15 is shown that there are differences in the allocated points per variable.

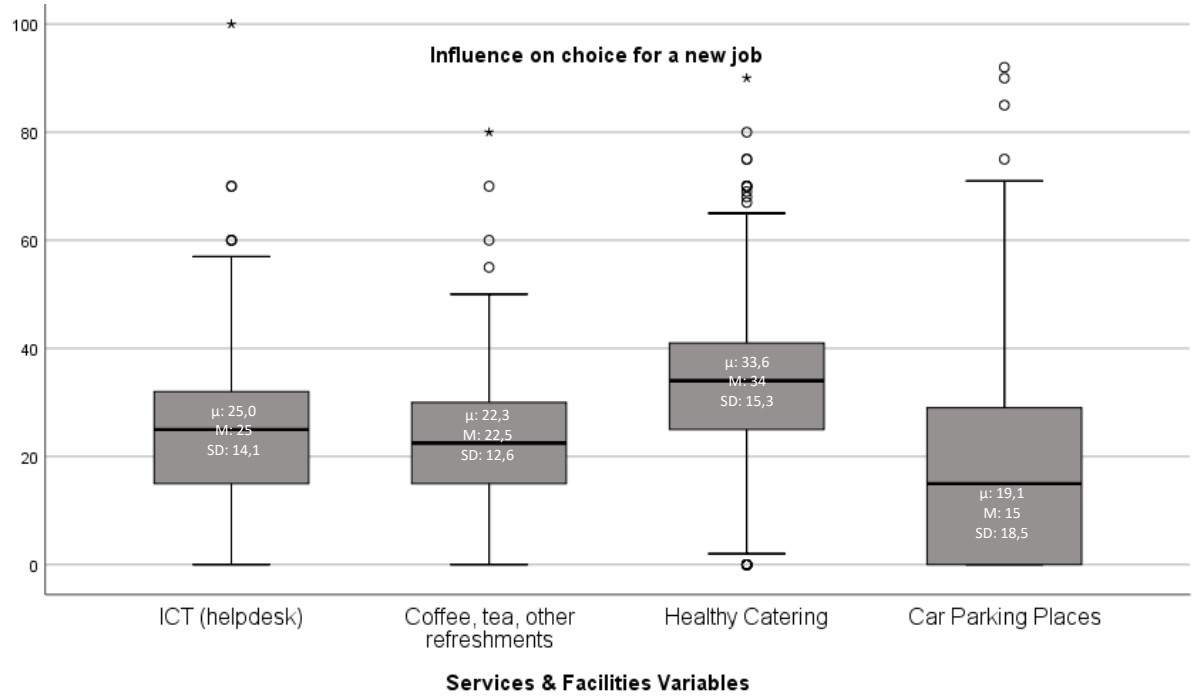

Figure 5.15: Services & Facilities variables: means, medians, and standard deviations

Descriptive Data

In figure 5.15 and in appendix III.V, the descriptive information on the four Services & Facilities variables can be found. The mean and median, supported by the standard deviation, give an indication of the degree of influence that the Services & Facilities variables have on employee attraction. When comparing the means and medians of these variables becomes clear that *Healthy Catering* (μ = 33,6, M = 34) is noticeably perceived as most influential when looking for a new job. The other three variables got on average less points: *ICT (helpdesk)* (μ = 25,0, M = 25), *Coffee, Tea, and other refreshments* (μ = 22,3, M = 22,5), and *Car Parking* (μ = 19,1, M = 15).

The standard deviation of the variable *Car Parking* is very high (SD = 18,5), which indicates that the survey participants have very varied opinions on the influence *Car Parking* has on their choice for a new job. This variance in opinion is in accordance with the information that skewness provides: the data on the *Car Parking* variable is highly positively skewed as is shown in table X.5.1 and the histogram in Figure X.5.2 (appendix III.V). This indicates that significantly more respondents allocated less points to variable *Building* than the mean indicates. This is in accordance with the exceptional big difference between the mean (μ = 19,1) and median (M = 15).
The kurtosis value of variable *ICT (helpdesk)* indicates that this variable is quite leptokurtic: most participants allocated points to this variable that are close to the mean, but that there are also many outliers.

Significant differences in overall variable list

In order to indicate whether there are significant differences in the degree of influence of the variables within the whole list of Services & Facilities variables, a Repeated Measures ANOVA is executed. In the first part of the Repeated Measures ANOVA, Mauchly's Test of sphericity indicated violation of sphericity: X^2 (5) = 86,00, p = 0,000. Besides, as the Greenhouse-Geisser epsilon is > 0,75, the Huynh-Feldt correction is needed. The Huynh-Feldt statistic indicates that the four aspects of Services & Facilities are not rated equally: F(2,577, 847,830) = 41,508, p = 0,000. This means that there are significant differences in the influence that the Services & Facilities variables have on job choice decision-making and therefore on employee attraction.

Significant differences between specific variables

As significant differences between the variables are found, a paired samples T-Test is performed to examine the significant differences between the specific Services & Facilities variables. The results of this test enable to conclude which Services & Facilities variables have significantly more influence on employee attraction than others. In the paired samples T-Test, each variable will be compared to its successor in the rank order derived from their means:

- Mean difference between *Healthy Catering* and *ICT (helpdesk)* $8{,}63_{(t=330)}$ $p < 0.05$, so **differ significantly**.
- Mean difference between *ICT (helpdesk)* and *Coffee, tea and other refreshments* $2{,}72_{(t=330)}$ $p < 0.05$, so **differ significantly**.
- Mean difference between *Coffee, tea and other refreshments* and *Car parking places* $3{,}23_{(t=330)}$ $p < 0.05$, so **differ significantly**.

As the *Healthy Catering* variable differs significantly from *ICT (helpdesk)*, the *ICT (helpdesk)* variable significantly from *Coffee, tea, and other Refreshments*, and *Coffee, tea, and other Refreshments* significantly from *Car Parking*, the rank order of the Services & Facilities variables according to their influence on job choice is as follows:

1. Healthy catering

2. ICT
3. Coffee, tea and other refreshments
4. Car Parking places

The fact that *Healthy Catering* is valued as most important within the Services & Facilities variable list could be declared by the current trend that people are more and more focused on health, which is discussed in a report of ABN AMRO (Menkveld, 2017). In addition, one of the survey respondents stated that the work environment should inspire to healthy behaviour by for example a healthy lunch and sports facilities.

Coffee, tea and other refreshments is in the survey valued lower than expected, as it was perceived as very important within the structural interviews of this thesis.
One of the respondent was very explicit about the influence catering and coffee have: "*I know what it is like to work at an office with low interior quality, catering, and coffee. A reason to start searching for a new job*."

That *Car Parking Places* are valued significantly lower than the other variables, could potentially be explained by the high number of Millennials and students who participated in this survey, as Millennials and students value *Car Parking Places* significantly lower than Generation X and employed people. This will be explained further in paragraph 5.2.4.

5.1.5 BUILDING

The 'Building' variable consists of three sub variables: *Appearance, Networking Opportunities,* and *Sustainability Implementations* (figure 5.16). The participants of the survey were asked to divide 100 points over these three variables by asking them: "How much influence do the following factors have on your choice for a new job?". A comparison of the allocated points to these variables provide information on the degree of influence that these four variables have on people's choice for a new job and therefore on employee attraction.

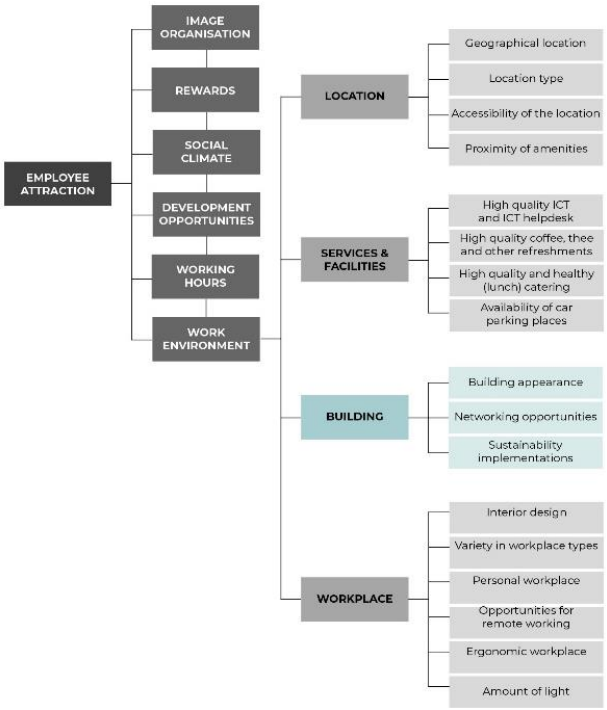

Figure 5.16: Building variables within the Value Tree

When the respondents would have find the three variables equally influential on the choice for a new job, the mean of the allocated points would have been 33 ⅓ for all three variables. However, in figure 5.17 is shown that there are small differences in the allocated points per variable.

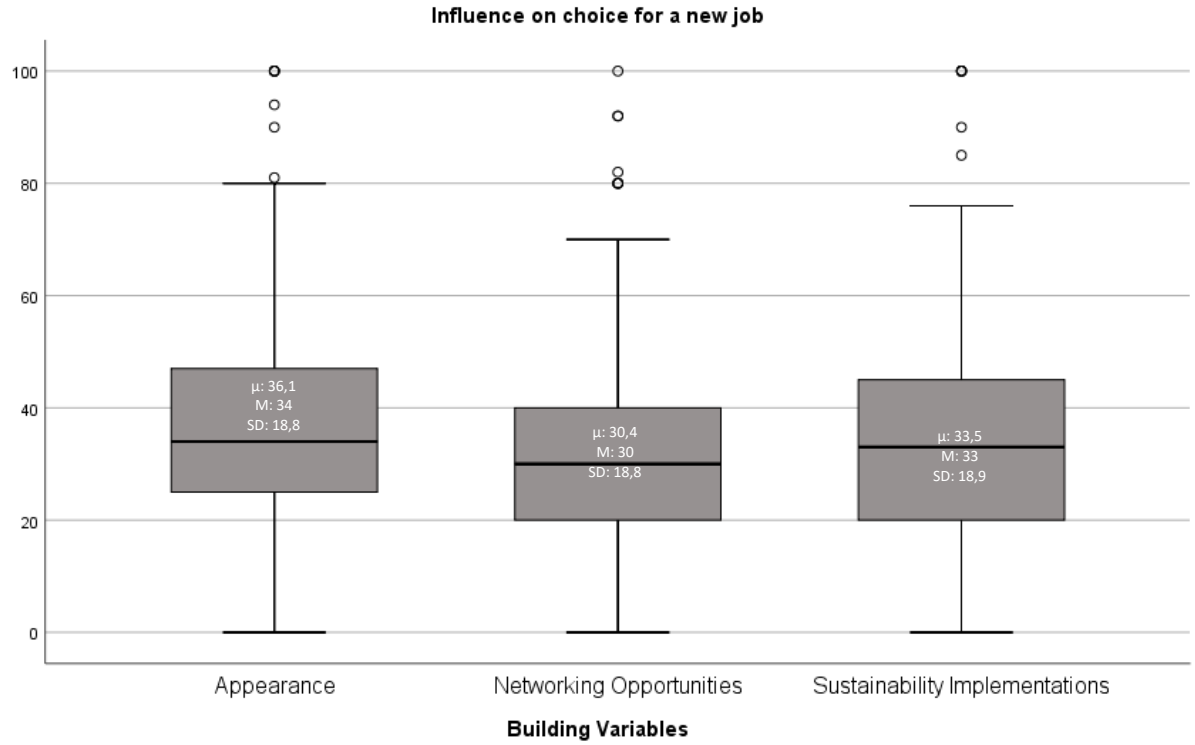

Figure 5.17: Building variables: means, medians, and standard deviations.

Descriptive Data

In figure 5.17 and in appendix III.VI, the descriptive information on the three Building variables can be found. The mean and median, supported by the standard deviation, give an indication of the degree of influence that the Building variables have on employee attraction. The three Building variables have rather comparable means and medians, but could be placed in the following rank order according to their means and medians: *Appearance* ($\mu = 36,1$, $M = 34$), *Sustainability Implementations* ($\mu = 33,5$, $M = 33$), and *Networking Opportunities* ($\mu = 30,4$, $M = 30$). Their standard deviations are really similar and all around 18,8/ 18,9.

The data on the three variables does not indicate any skewness. Neither does the data on these variables show exceptional values on Kurtosis: they are all have moderate leptokurtic values as shown in table X.6.1 (appendix III.VI). Noticeable in the histograms is that variable *Networking Opportunities* received exceptional frequently values of zero.

Significant differences in overall variable list

In order to indicate whether there are significant differences in the degree of influence of the variables within the whole list of Building variables, a Repeated Measures ANOVA is executed. In the first part of the Repeated Measures ANOVA, Mauchly's Test of sphericity did not indicate any violation of sphericity: $X^2(2) = 0,017$, $p = 0,99$. The Sphericity Assumed statistic indicates that the three aspects of Building are not rated equally: $F(2, 596) = 4,657$, $p = 0,010$. This means that there are significant differences in the influence that the Building variables have on job choice decision-making and therefore on employee attraction.

Significant differences between specific variables

As significant differences between the variables are found, a paired samples T-Test is performed to examine the significant differences between the specific Building variables. The results of this test enable to conclude which Building variables have significantly more influence on employee attraction than others. In the paired samples T-Test, each variable will be compared to its successor in the rank order derived from their means:

- Mean difference between *Appearance* and *Sustainability Implementations* $2,60_{(t=299)}$ $p > 0.05$, so are **quite similar**.
- Mean difference between *Sustainability Implementations* and *Networking opportunities* $3,15_{(t=299)}$ $p > 0.05$, so are **quite similar**.

As the variable *Appearance* does not differ significantly from *Sustainability Implementations*, and *Sustainability Implementations* does not differ significantly from *Networking Opportunities*, but *Appearance* and *Networking Opportunities* differ significantly, the final rank order of Location variables according to their influence on job choice is as follows:

1. Appearance, Sustainability Implementations
2. Sustainability Implementations, Networking opportunities

It is remarkable that the different *Building* variables are valued almost equally. As the *Building* variable was significantly valued lowest in the *Work Environment* variable list, a potential explanation of this equally valued sub variables could be that the respondents do not really care about the *Building* variables and therefore do not really pay attention to extensively allocating points to these variables.

A respondent commented on the *Building Appearance* variable: "*The appearance of the building is not that important to me, the interior and surroundings are more important*." However, another respondent values the building appearance of importance: "*A professional appearance of the office building and the interior provokes a positive response. It shows that a company is organised and professional*."

Concerning *Sustainability Implementations*, one of the respondents provided the following comment: "*Sustainable travel: bicycle facilities, shower facilities, changing room, and locker. Space for repairing a flat tire and minor maintenance*."

One of the respondents emphasised the advantage of having an own building after a transition from a shared building: "*A place on its own and a bit more playful and suitable for the type of work. More inspirational. You feel more like one team with a common goal*."

5.1.6 WORKPLACE

The 'Workplace' variable consists of six sub variables: *Interior, Personal Desk, Remote Working, Ergonomic Workplace, Amount of Light*, and *Variety in Workplace Types* (figure 5.18). The participants of the survey were asked to divide 100 points over these three variables by asking them: "How much influence do the following factors have on your choice for a new job?". A comparison of the allocated points to these variables provide information on the degree of influence that these four variables have on people's choice for a new job and therefore on employee attraction.

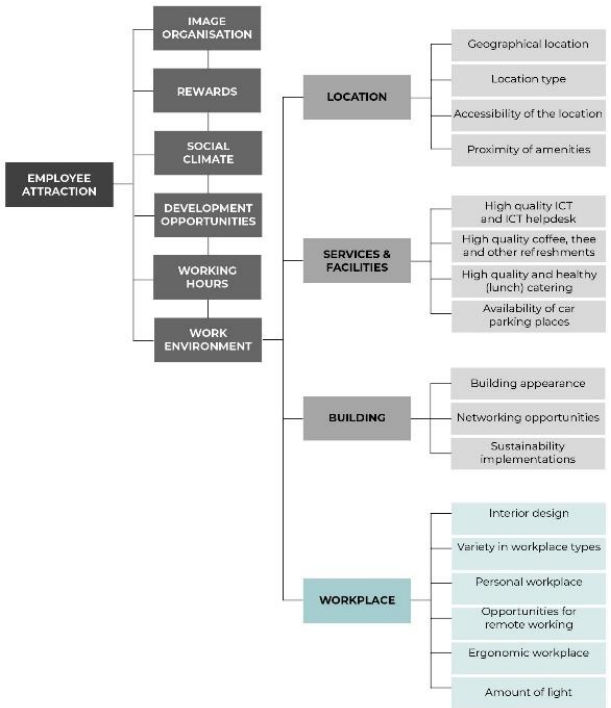

Figure 5.18: Workplace variables within the Value Tree

When the respondents would have find these six variables equally influential on the choice for a new job, the mean of the allocated points would have been 16 ⅔ for all six variables. However, in figure 5.19 is shown that there are differences in the allocated points per variable.

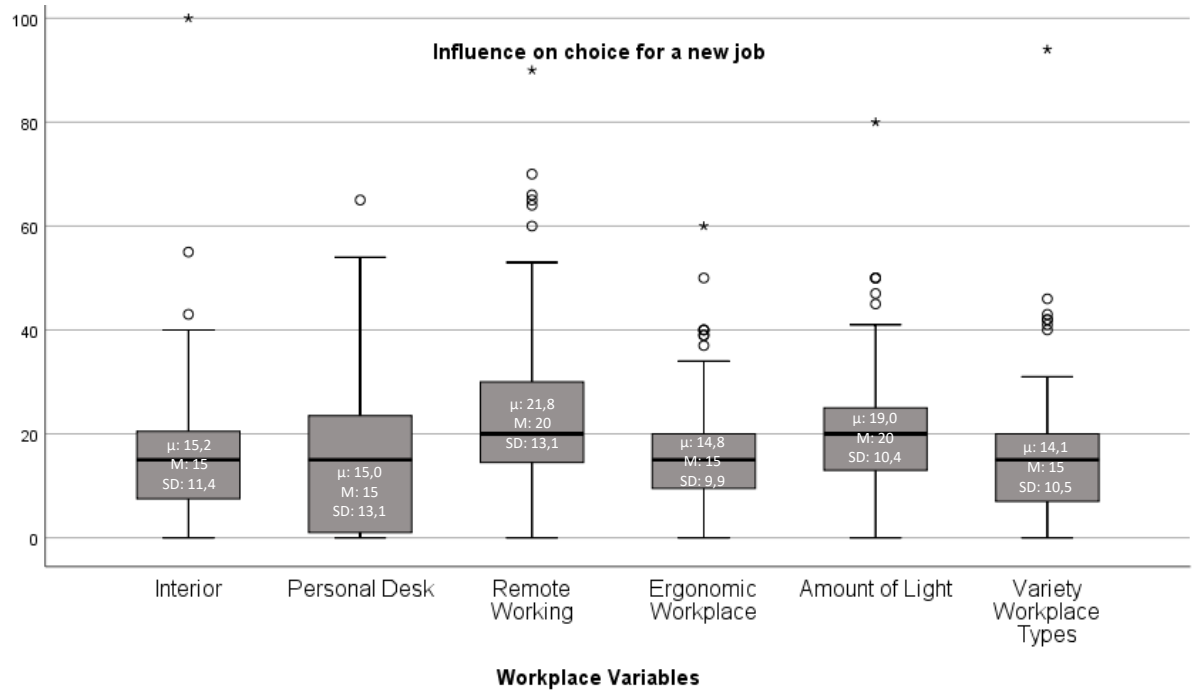

Figure 5.19: Workplace variables: means, medians, and standard deviations.

Descriptive Data

In figure 5.19 and in appendix III.VII, the descriptive information on the six Workplace variables can be found. The mean and median, complemented by the standard deviation, give an indication of the degree of influence that the general employee attraction variables have on employee attraction. When comparing the means (μ) and medians (M) of the different variables, becomes clear that the respondents allocated most points to *Remote Working* (μ = 21,8, M = 20) and second most to *Amount of Light* (μ = 19,0, median = 20). The other four Workplace variables have the same medians (M=15) and very comparable means. When comparing the means, their rank order is as follows: *Interior* (μ = 15,2), *Personal Desk* (μ = 15,0), *Ergonomic Workplace* (μ = 14,8), and *Variety in Workplace Types* (μ = 14,1).

The most variety in the survey participants opinions are observed for the variables *Personal Desk* (SD = 13,1) and *Remote Working* (SD = 13,1). Besides, the participants have the most similar opinion on the influence *Ergonomic Workplace* has on their choice for a new job (SD = 9,9).

In table X.7.I and in the histograms of figure X.7.2. (appendix III.VII) is visible that three of the six variables have highly positive skewed data: *Interior*, *Remote Working*, and *Variety of Workplace Types* all three have more frequent values below the mean than above the mean. In addition, variables *Interior* and *Variety in Workplace Types* are both extremely leptokurtic compared to all the other variables within this thesis, which means for both variables that most values are measured centred closely around mean, but that there are also many extreme values. Variable *Amount of Light* indicates quite leptokurtic data as well, but to a lesser extent.

Significant differences in overall variable list

In order to indicate whether there are significant differences in the degree of influence of the variables within the whole list of Workplace variables, a Repeated Measures ANOVA is executed. In the first part of the Repeated Measures ANOVA, Mauchly's Test of sphericity indicated violation of sphericity: $X^2(14) = 130,559$, $p = 0,000$. Besides, as the Greenhouse-Geisser epsilon is > 0,75, the Huynh-Feldt correction is needed. The Huynh-Feldt statistic indicates that the four aspects of Location are not rated equally: $F(4,410, 1473,106) = 19,605$, $p = 0,000$. This means that there are significant differences in the influence that the Location variables have on job choice decision-making and therefore on employee attraction.

Significant differences between specific variables

As significant differences between the variables are found, a paired samples T-Test is performed to examine the significant differences between the specific Workplace variables. The results of this test enable to conclude which Workplace variables have significantly more influence on employee attraction than others. In the paired samples T-Test, each variable will be compared to its successor in the rank order derived from their means:

- Mean difference between *Remote Working* and *Amount of Light* 2,78 $_{(t=335)}$ $p < 0.05$, so **differ significantly**.
- Mean difference between *Amount of Light* and *Interior* 3,81 $_{(t=335)}$ $p < 0.05$, so **differ significantly**.
- Mean difference between *Interior* and *Personal Desk* 0,17 $_{(t=335)}$ $p > 0.05$, so are **quite similar**.
- Mean difference between *Personal Desk* and *Ergonomics* 0,23 $_{(t=335)}$ $p > 0.05$, so are **quite similar**.
- Mean difference between *Ergonomics* and *Variety in Workplace Types* 0,64 $_{(t=335)}$ $p > 0.05$, so are **quite similar**.

As the *Remote Working* variable differs significantly from *Amount of Light*, and the *Amount of Light* variable significantly from *Interior*, but *Interior* does not differ significantly from *Personal Desk*, and *Personal Desk* does not differ significantly from *Ergonomics*, and *Ergonomics* does not differ significantly from *Variety in Workplace Types,* the final rank order of Workplace variables according to their influence on job choice is as follows:

1. Remote working
2. Light
3. Interior, Personal desk, Ergonomics, Variety in workplace types

Remote Working is significantly higher valued as influential factor on the choice for a new job than the other workplace related variables. An explanation could be the current focus on flexible working within offices as explained in chapter 3.2. The greatest part of the survey respondents is employed (76%) and are therefore often confronted with the flexibilisation of the work environment. In addition, respondents with child(ren) (and partner), which is the greatest part of the respondents (29%), significantly valued *Remote Working* as more important than respondents who live alone, and could therefore cause the high value. That remote working is more influential on the choice for a new job for people with child(ren) (and a partner) could be explained by that parents can spend more time at home with their children while remote working.

Corresponding with the results of the interviews, *Light* is valued of great influence by the respondents. This opinion is also recognised within the survey comments. One of the respondents said: "*Sufficient daylight is very important to me: a light workplace wherefrom some feeling with 'the outside world' is possible, since a person is not designed to sit inside without daylight most of the day*." Another respondent commented: *"Interior and architecture are important (especially daylight), but the final choice is made on the basis of the company and the people."*

The other four values do not differ significantly in their influence on a new job. The respondents provided varied comments about these variables. However, the comments on interior all emphasised its importance. One of the respondents said: *"During my internship I worked in a beautiful office, and I certainly noticed that it had an influence on my state of mind. Even now that I think back to that period, I have positive memories, which certainly has to do with the interior and design of the office."* Another respondent

explains that a professional interior of an office reflects that an organisation is ordered and professional. In addition, most of the respondents who provided a comment on the interior, emphasise that they find an inspirational workplace of big importance.

Concerning the variety of workplace types, one of the respondents explained that different workplace types in a work environment are -in combination with styling- most attractive because it gets the best out of yourself.

Some people provided comments on the *Ergonomics* of the workplace. One of these respondents reflected on his own value rating in a prior question: "*I didn't rate ergonomics as the most important factor, though, I think it might be one of the most important things, but people (including me) just don't realise how important it is until it's 'too late' and they have complaints*."

A few respondents were very critical about flexible desks. One of them stated: "*Nowadays, flexible desks are such a hot item for employers, but an assigned desk is better for mental health of the employees as it is more personal and therefore less distan*t." Another respondent gave a similar answer and criticises employers for forcing other people into flexible desks within an unproductive *'office jungle'* while arranging a personal closed office for themselves.

Workplace Type Preference

In recent literature (paragraph 3.2.4) many contradictory statements are made about the impact of New Ways of Working on employees. Since not having an assigned desk is an important part in most cases of Flexible Working (paragraph 3.2.2), one question of the survey is about this topic. As companies can save up to 30% on their office costs by implementing flexible working (Jensen & Van der Voordt, 2017), this implementation is often executed from a financial point of view, which also appeared to be often the case in practice at internship company JLL. Therefore, the survey participants got presented a dilemma in which they could choose between a 'Flexible Desk & Hight Quality Interior' and 'Assigned Desk & Medium Quality Interior'. In designing this question is assumed that most people have a preference for an assigned desk when no other consequences are involved. This assumption is among other things based on the research of Johnson Controls (2010) in which appeared that 70% of the Millennials prefer to have their own assigned desk and therefore the ability to personalise their workstation, which is more conservative than everyone thought (Appel-Meulenbroek, et al., 2019). However, when companies implement flexible desks, they will save money on square meters office, which could be invested in other work environment related factors. In the dilemma of this question is chosen for the Quality of Interior, because it is a very tangible attribute of the workplace.

When analysing the results of this dilemma, it appeared that 68% of the respondents prefers a 'Flexible Desk & High Quality Interior' above 'Assigned Desk & Medium Quality Interior'. In comparison to the research of Johnson Controls (2010), the opposite outcome appears when the interior quality is added to the question. Therefore would be the advice for all companies with a limited office related budget, based on the opinion of these respondents, to save money by implementing flexible desks and to invest the saved money in the interior quality, rather than not saving money by sticking to assigned desks and therefore not being able in investing in the interior quality.

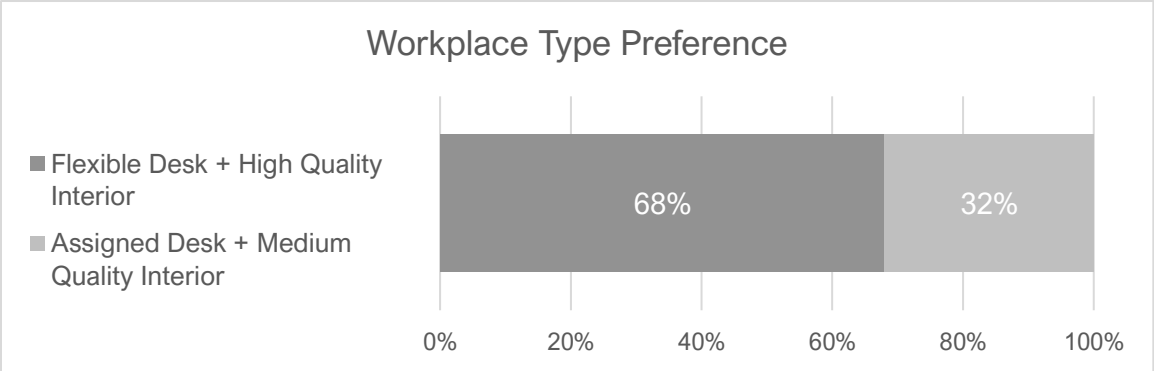

Figure 5.20 Workplace Type Preference

5.1.7 CONCLUSION

To enable a comparison of the values of all different sub variables, the means of these sub variables are plotted in a value tree and multiplied by the means of the main variables (figure 5.21).

In the visualisation of the value tree, the mean values, medians and standard deviations are shown (figure 5.21). The values that are significantly the highest value of its variable category are marked with a yellow round. In addition, also the calculated means are presented. At the four work environment related variables, *Location, Services & Facilities, Building,* and *Workplace* the calculated mean is added. This calculated mean is the mean of work environment (14) multiplied by the mean of the variable. Likewise, at the sub variables the calculated mean is presented as well. Here is made a distinction in excluding and including the value of the work environment factor (14) in the calculation. This distinction is made to present the extent of the influence per sub variable when 1) taking into account the relative value of work environment against other employee attraction variables (in white), and 2) only focusing on the work environment related aspects (in light yellow). An explanation of these two calculation types for the variable values can be found in figure 5.22.

When the relative influence of the work environment against the other employee attraction variables is taken into account, the sub variables seem to have a minor influence on employee attraction in general. Only *geographical location* and *accessibility of location* get more than 2 points on a 100-scale. However, there should be noted that *Work Environment* gets a relatively high value within the General Employee Attraction factors, as it is ranked at the second-lowest place and is highly comparable with the means of the other factors: it is comparably influential as the other General Employee Attraction variables.
In addition, it appears that the calculated means are strongly dependent on the number of presented General Employee Attraction variables. When solely asking the respondents about the influence of the work environment (without presenting other variables), they valued the work environment very high with an average score of 52 degree of influence on a 100-point scale. Therefore the values of the sub variables are also shown without taking into account the relative value of work environment against other General Employee Attraction variables in order to ease evaluating these sub questions. Another reason to provide the mean values that are not multiplied by the work environment value, is to provide an indication of the influence of the work environment factors, when all other General Employee Attraction factors are considered equal for the companies that a potential employee can choose from. In other words, if a potential employee has to choose between two different jobs and this potential employee considers for both companies the image of the organisations, the rewards, the social climates,

the development opportunities, and the working hours to meet his/ her preferences equally, the influence of the different work environment factors can be found (white rounds in figure 5.21).

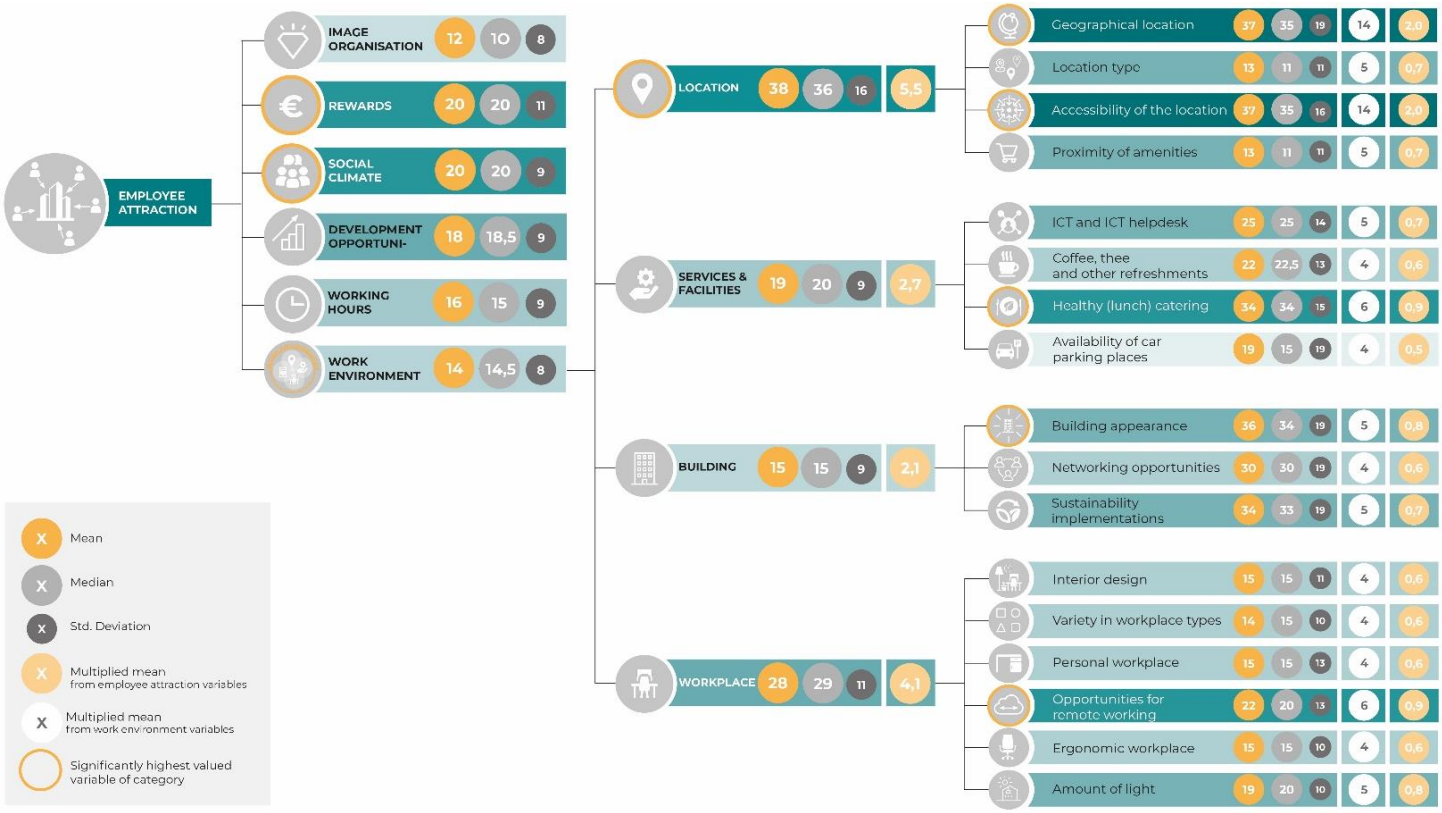

Figure 5.21: Research results in Value Tree

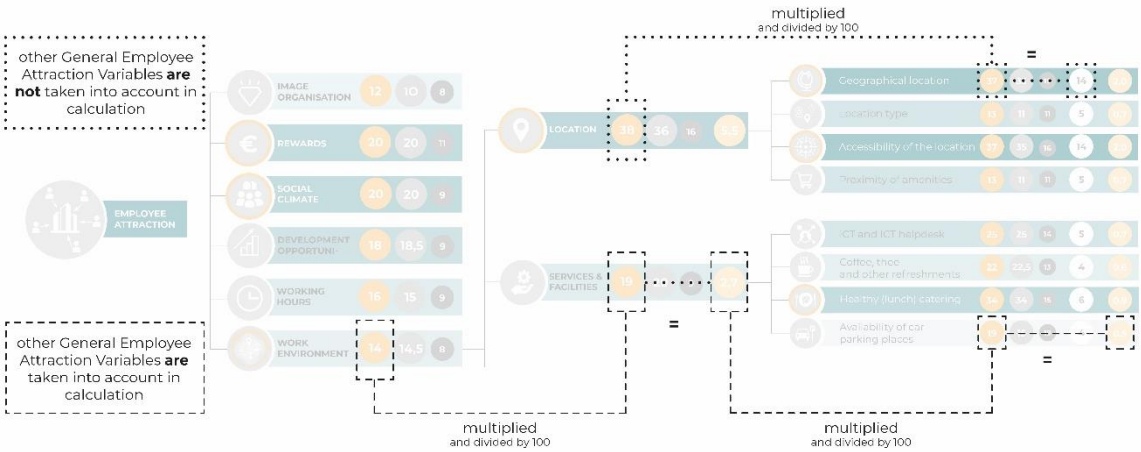

Figure 5.22: Research results in Value Tree - Calculation Example

When evaluating the calculated means, the work environment variables can be placed in a rank order as presented in figure 5.23. As main variable *Location* got significantly the highest value, it is logical that some *Location* variables are on the top of the rank order: *Geographical Location* and *Accessibility of the Location*.

It could have been a possibility that the values in categories that consist of more variables -e.g. *Workplace* has six variables, while *Building* has only three variables- would have been relatively lower because the respondents had to divide the 100 points over more variables. However, it was explicitly explained that the respondents could allocate factors with zero points. Many respondents used that opportunity. In addition, whenever a respondent allocated zero points to a certain main variable (*Location, Services & Facilities, Building,* or *Workplace*), the following sub variables corresponding with this main variable were not presented. Therefore can be assumed that the calculated means in figure 5.21 and figure 5.23 provide a representative impression of the respondents' opinions.

Figure 5.23: Work Environment variables in rank order

5.2 RESULTS: ANALYSIS OF DIFFERENT GROUPS

DIVISION OF THE SAMPLE IN HETEROGENEOUS GROUPS

This chapter elaborates on the statistical analysis of the different heterogeneous groups within different perspectives of respondents that participated in the survey. The purpose of this second part of the statistical analysis is to identify significant differences between groups within different (socio-demographic) perspectives on the influence of different variables on their choice for a job, in order to advise companies on attracting their specific employee target group. The statistical steps in IBM SPSS that are taken for this part of the analysis are visualised in a Decision Tree in figure 2.11, paragraph 2.2.4. In appendix IV.I, an overview of all heterogeneous results is shown.

The analysis within this chapter follows the sequence of the Value Tree as presented in figure 4.5: in each paragraph, one part of the Value Tree is discussed. The examined groups represent the following perspectives (as reported in paragraph 4.3.1 and 4.3.2): current situation, gender, generation, household composition, educational level, years of work experience, job level, working time, desk type. The first five perspectives are socio-demographic perspectives and the last four perspectives concern work related background information of the employed part of the representative sample.

This chapter demonstrates the heterogeneous results of the different groups by using a scheme in which the results are visualised. The schemes show two different types of results: 1) per variable, significant differences between groups of different perspectives (horizontal), and 2) per group, the most influential variables for each variable category (vertical). An overview of all these result schemes combined can be found in appendix IV.II. In addition, all mean values of the degree of influence per variable per group, on which the results within this chapter are based, can be found in appendix IV.III. A legend of the repeatedly used scheme design can be found in figure 5.24.

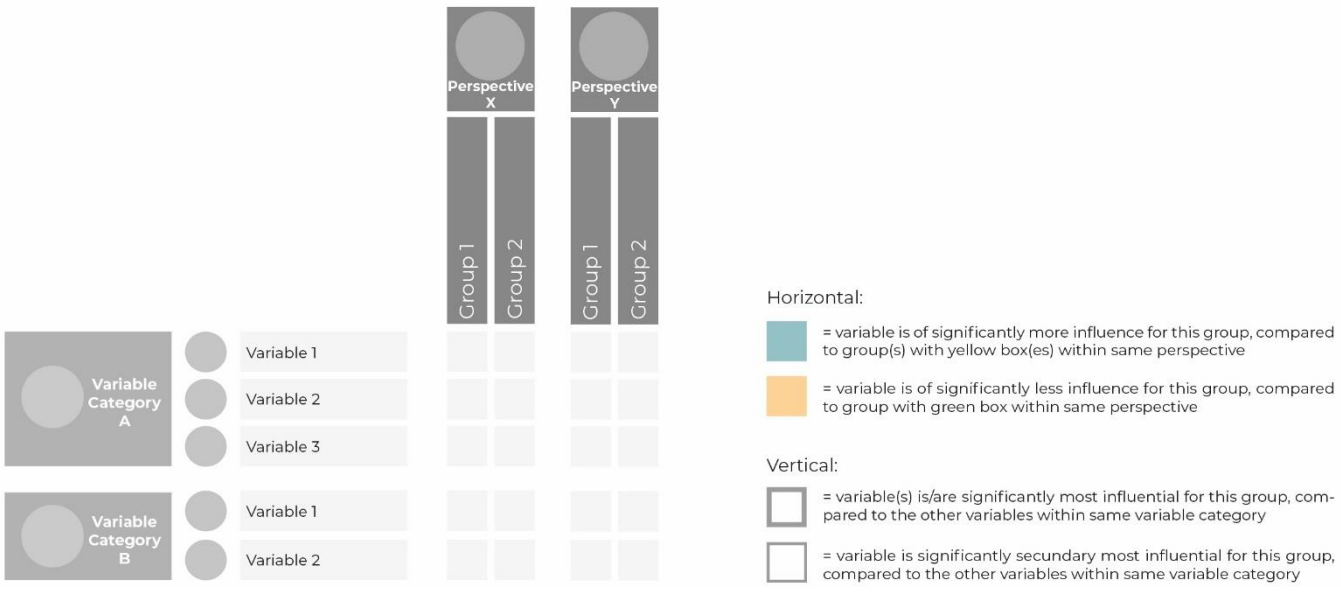

Figure 5.24: Legend of Heterogeneous Result Scheme

5.2.1 GENERAL EMPLOYEE ATTRACTION

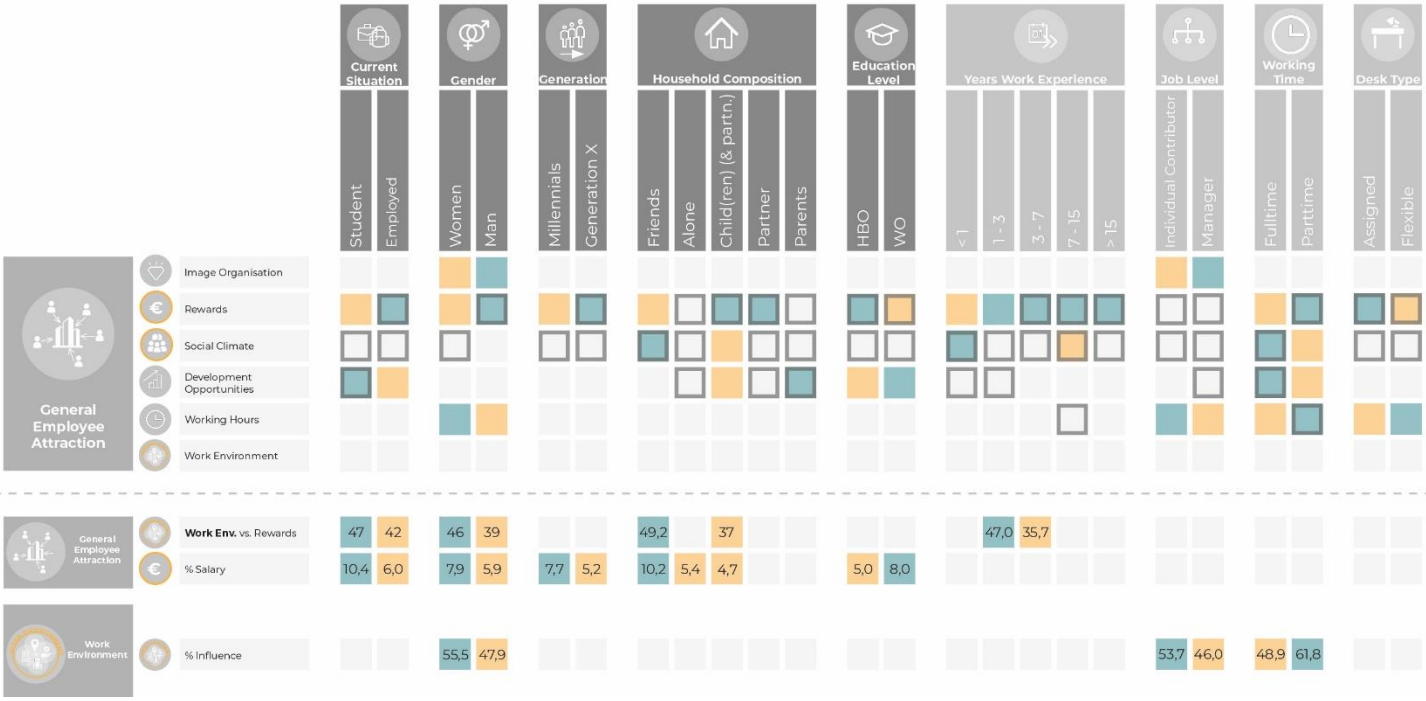

Figure 5.25: General Employee Attraction related significant differences between groups of different perspectives

Significant Differences Identified

The six aspects of General Employee Attraction are not rated equally by:

- Students and employed people (**Current Status**) as indicated by the Huynh-Feldt statistic: F(4,578, 1675,478) = 3,025, p = 0,013.
- Women and men (**Gender**) as indicated by the Huynh-Feldt statistic: F(4,552, 1456,555) = 6,745, p = 0,000.
- People within different **Generations** as indicated by the Huynh-Feldt statistic: F(4,535, 1419,482) = 2,948, p = 0,015.
- People within different **Household compositions** as indicated by the Huynh-Feldt statistic: F(18, 635, 1458,353) = 2,719, p = 0,000.
- People with different **Education levels** as indicated by the Huynh-Feldt statistic: F(4,583, 1402,264) = 4,678, p = 0,000.
- People with different **Years of Work Experience** as indicated by the Huynh-Feldt statistic: F(18,627, 1103,633) = 2,135, p = 0,003.
- People with different **Job levels** as indicated by the Huynh-Feldt statistic: F(4,512, 1082,832) = 4,129, p = 0,002.
- Fulltime and parttime employed people (**Working Time**) as indicated by the Huynh-Feldt statistic: F(4,585, 1100,327) = 8,089, p = 0,000.
- People with an assigned desk and people with a flexible desk (**Desk Type**) as indicated by the Huynh-Feldt statistic: F(4,461, 1052,841) = 2,636, p = 0,027.

ORGANISATIONAL IMAGE

Organisational Image is valued higher by men than by women, and higher by managers than by individual contributors (appendix IV.IV). In this thesis, 'individual contributor' stands for all employees who do not have a managerial function. That managers value the *Organisational Image* of more influence on their choice for a new job, could be declared by the role that comes with being a manager. Compared to individual contributors, managers often have a more external role in which they have more contact with people from other organisations. In this external role, they as a manager stand for the company they work for, and thereby for the *Organisational Image* as well.

REWARDS

As *Rewards* are valued of more influence on a job choice by employed people (over students), by Generation X (over Millennials), and by employed people that are employed for more than three years (over people who work for less than a year), it can be assumed that the influence of *Rewards* increases as people get employed, get older, and work longer. An explanation could be that as people get older, they get more expenses (because of children, buying a house etc.) and therefore need more money to maintain themselves. This is in accordance with the outcome that people living with child(ren) (and partner) or with a partner value *Rewards* significantly more influential than people living with friends, who are mainly students and starters.

That men value *Rewards* of more influence on their choice for a new job, could be explained by the conservative view on the division of the male and female role within families that is embedded in the global society. From a traditional point of view, it is considered as a masculine characteristic for men to provide financial stability to their families. Although this conservative role is changing, men do still indicate that they have difficulties with accepting that the female within the family earns a higher salary (Syrda, 2018). Research even shows that straight couples in which the woman has a higher salary than the man, are less satisfied with their relationship than when the man earns a higher salary (Blom, Kraaykamp, Verbakel, 2017).

From the analysis appears that people with an HBO educational level value *Rewards* significantly higher than people with an WO educational level. This could be declared by that people with the highest form of Dutch education (WO) are in many cases more ensured of a higher salary than people from lower educational levels. That people with an HBO educational level have less insurance of a high salary, could explain why they value this factor more influential: a high salary is less obvious.

Parttime employed people value *Rewards* significantly higher than fulltime employed people (appendix IV.IV). An explanation could be that normally parttime working people earn -absolutely seen- less salary than fulltime working people. This could increase the need for a higher salary in order to earn enough salary to be financially stable.

In addition, people with an assigned desk value the influence of *Rewards* significantly higher than people with a flexible desk.

SOCIAL CLIMATE

It is interesting that Thompson (2011) states that there is a big difference between Millennials and other generations in prioritising social values within the work environment, while the results of this research

indicate that not generations, but the number of years of work experience provide different values for the influence of S*ocial Climate*.

People living with friends, who are mostly starters and students, value *Social Climate* more influential than people living with child(ren) (and partner). An explanation could be that people living with child(ren) (and partner) have in general less time to attend e.g. social activities as they are concerned with their child(ren). Another explanation could be that people with child(ren) and partner might be in general more settled -also in terms of having friends- than the students and starters who live with their friends. For example, it might be that starters move to another place for their first job and might not know that many people at this new place, wherefore they might look for social activity at their new workplace.

Fulltime employed people value *Social Climate* of more influence than parttime employed people (appendix IV.IV), which could be explained by the higher amount of hours that fulltime people spend within this social climate.

DEVELOPMENT OPPORTUNITIES

That development opportunities are significantly more important for students than for employed people seems logical, as they still have many years in the work field to develop themselves. However, because of that reason it is noticeable that there is no significant difference of the influence of development opportunities on the choice for a job between different years of work experience.

Noticeable is that people with WO educational backgrounds value *Development Opportunities* of more influence on their choice for a job than people with HBO educational backgrounds. In some cases, an explanation might be that people who value *Development Opportunities* very high from a young age, pushed themselves to be accepted at WO education.

From the analysis also appeared that fulltime working people value *Development Opportunities* higher than parttime working people. An explanation could be that people who value *Development Opportunities* very high, are mostly working fulltime, as working parttime often comes with some restrictions in the *Development Opportunities* within organisations (Sociaal en Cultureel Planbureau, 2018).

In addition, people living with parents value *Development Opportunities* significantly more influential than people living with childr(en) (and partner).

WORKING HOURS

Women value *Working Hours* of significantly high influence on their choice for a new job than men. According to Reilly, Sirgy & Gorman (2012), one of the most important factors within a work-life balance is family responsibilities, and more specifically assistance with children. Since in society women often have a bigger role in raising children, or feel more responsible, this could be an explanation for the higher degree of influence women give to *Working Hours.*
Individual Contributors value *Working Hours* significantly higher than managers. An explanation could be that managers got their function because they value W*orking Hours* not that high and might have made a lot of overtime to get to that position.

Parttime people value *Working Hours* significantly higher than fulltime working people, which seems logical as they took action to work less hours than the standardised norm.

In addition, people with a flexible desk value the influence of *Working Hours* significantly higher than people with an assigned desk.

WORK ENVIRONMENT

Concerning the variable *Work Environment*, no significant mean differences are found between the examined groups of the different perspectives. This indicates that the representative sample within this research has a similar opinion about the influence that the *Work Environment* has on their choice for a new job. Therefore can be concluded the *Work Environment* has a similar influence on employee attraction for each tested group.

Although some students indicated that they assume that the degree of influence of the work environment might increase when getting employed, this is not reflected in the results of the data.

REWARDS vs. WORK ENVIRONMENT

In comparison to *Rewards,* the *Work Environment* is valued of significantly more influence on a job choice by students (over employed people), by people living with friends (over people living with child(ren) (and partner)), and by people with 1 to 3 years of work experience (over people with 3 to 7 years of work experience). Therefore can be assumed that when people get employed, get children, and get more years of work experience, their focus on the *Work Environment* moves to a focus on *Rewards*. An explanation could be that as people get older, they get more expenses (because of children, buying a house etc.) and therefore need more money to maintain themselves.

In addition, women significantly valued the *Work Environment* of more influence, compared to *Rewards* than men.

% OF SALARY WILLING TO GIVE UP IN EXCHANGE FOR *IDEAL* WORK ENVIRONMENT

The percentage of salary that people are willing to give up in exchange for their *ideal* work environment is significantly higher for students (over employed people), for Millennials (over Generation X), for people living with friends (over people living alone or living with child(ren) (and partner)). Therefore can be assumed that the percentage of income people are willing to give up in exchange for their *ideal* work environment decreases as people get employed, get older, and get children. An explanation could be that as people get older, they get more expenses (because of children, buying a house etc.) and therefore need more money to maintain themselves.

In addition, women are willing to give up a higher percentage of their salary than men, which could be explained by the focus of men concerning *Rewards* (compared to women).

Furthermore, people with a WO education level are willing to give up a higher percentage of their salary than people who are HBO educated. This could be explained by the fact that HBO educated people, on average, receive a lower salary than WO educated people (De Mooij, Geerdinck, Oostrom, Van Weert,

2012). Therefore, HBO educated people have less salary to give up in exchange for their *ideal* work environment.

% INFLUENCE OF THE WORK ENVIRONMENT

When asking the survey respondents, at the end of the survey, explicitly about the influence of the work environment, without comparing it to other variables, some significant differences were found between groups of the different examined perspectives. Women significantly value the influence of the *Work Environment* more influential on their choice for a new job than men. In addition, people who work parttime value the *Work Environment* of more influential than people who work fulltime. Furthermore, individual contributors value the *Work Environment* of more influence than managers.

5.2.2 WORK ENVIRONMENT

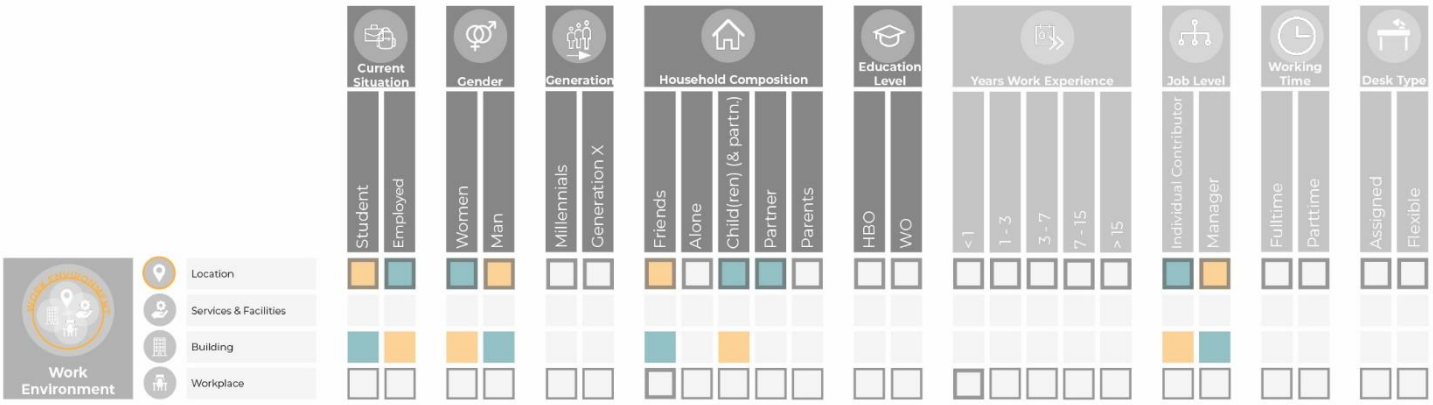

Figure 5.26: Work Environment related significant differences between groups of different perspectives

Significant Differences Identified

The four aspects of Work Environments are not rated equally by:

- Students and employed people (**Current Status**) as indicated by the Greenhouse-Geisser statistic: F(2,195, 783,640) = 10.731, p = 0,000.
- Women and men (**Gender**) as indicated by the Greenhouse-Geisser statistic: F(2,191, 714,413) = 4,696, p = 0,008.
- People within different **Household Compositions** as indicated by the Greenhouse-Geisser statistic: F(8,794, 707,908) = 2,678, p = 0,005.
- People with different **Job Levels** as indicated by the Greenhouse-Geisser statistic: F(2,098, 503,506) = 4,544, p = 0,010.
- Fulltime and parttime employed people (**Working Time**) as indicated by the Huynh-Feldt statistic: F(4,459, 1061,215) = 3,419, p = 0,006.

LOCATION

The difference between students and employed people might be explained by that employed people are already settled at a place that is based on their work location, while students might be prepared for moving somewhere for their first 'real job'.

That women value *Location* significantly more influential than men might be explained by the still conservative manners of the Dutch society in which still often the women has more responsibility for raising children, and therefore might prefer a work location close to their house. That the influence of *Location* could be linked to children is in accordance with the outcome that people living with child(ren) (and partner) or with a partner value *Location* significantly more influential than people living with friends, who are mainly students and starters.

In addition, individual contributors value *Location* significantly higher than managers. An explanation could be that managers receive a higher salary than non-managers and therefore might be willing to compromise to a larger extent, such as on the travel time to their work location.

SERVICES & FACILITIES

Concerning the variable *Services & Facilities*, no significant mean differences are found between the examined groups of the different perspectives. This indicates that the representative sample within this research has a similar opinion about the influence that the *Services & Facilities* has on their choice for a new job. Therefore can be concluded the *Services & Facilities* has a similar influence on employee attraction for each tested group. However, when focusing on the specific sub variables of main variable *Services & Facilities*, significant mean differences between groups of the different perspectives are found.

BUILDING

The significant difference between students and employed people concerning the influence of the building, might be explained by the sample of this research that is not completely representative for the population group (4.3.2). Most of the students who participated in the survey are doing an architecture or real estate study, wherefore can be assumed that they are more focused on 'buildings' than general people do.

Also man value the influence of the building higher than women, people living with friends higher than people living with child(ren) (and partner), and managers higher than individual contributors.

WORKPLACE

Concerning the variable *Workplace*, no significant mean differences are found between the examined groups of the different perspectives. This indicates that the representative sample within this research has a similar opinion about the influence that the *Workplace* has on their choice for a new job. Therefore can be concluded the *Workplace* has a similar influence on employee attraction for each tested group. However, when focusing on the specific sub variables of main variable *Workplace*, significant mean differences between groups of the different perspectives are found.

5.2.3 LOCATION

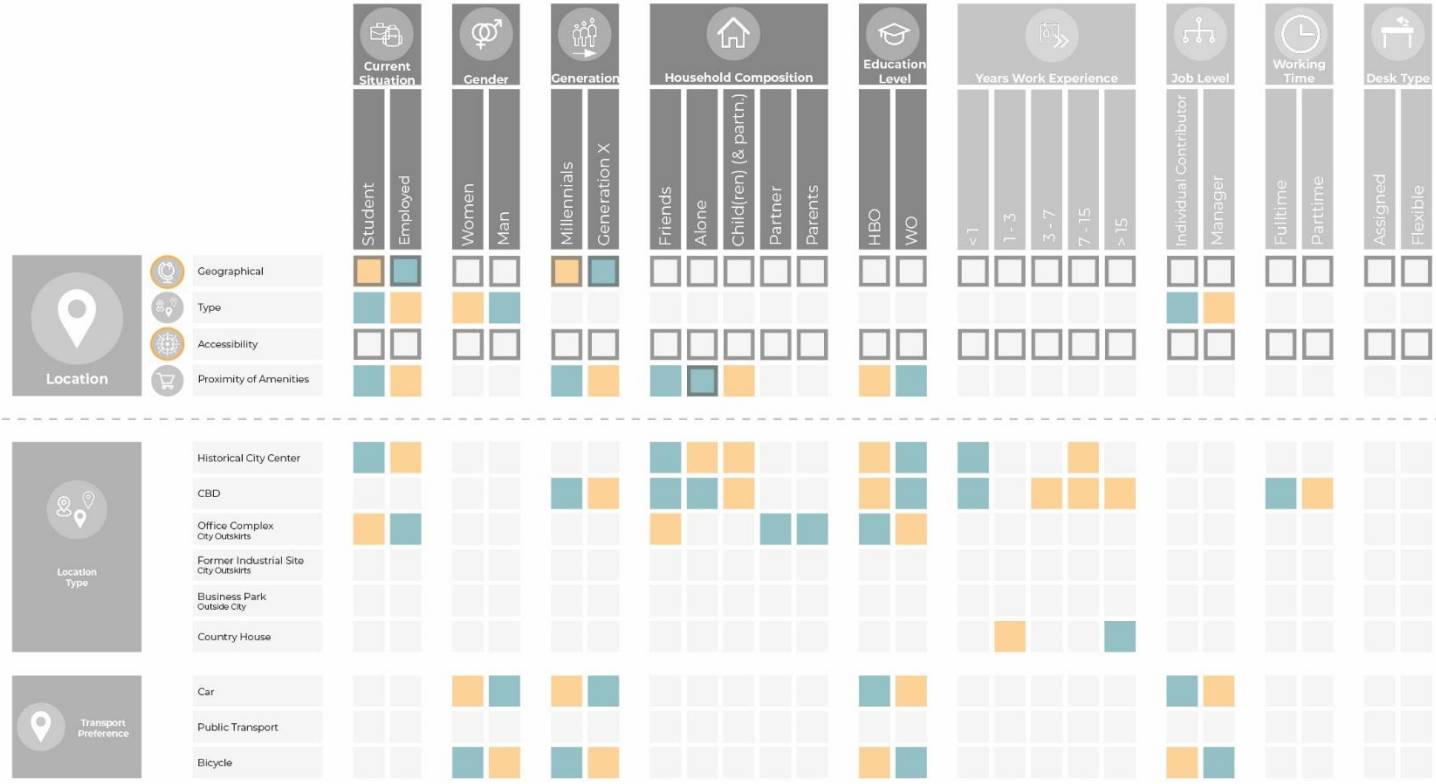

Figure 5.27: Location related significant differences between groups of different perspectives

Significant Differences Identified

The four aspects of Location are not rated equally by:

- Students and employed people (**Current Status**) as indicated by the Huynh-Feldt statistic: F(2,326, 797,761) = 8,561, p = 0,000.
- People within different **Generations** as indicated by the Huynh-Feldt statistic: F(2,361, 734,219) = 4,122, p = 0,012.
- People within different household compositions as indicated by the Huynh-Feldt statistic: F(9,239, 736,807) = 2,074, p = 0,028.

The four aspects of Location are rated equally by:

- Women and men (**Gender**) as indicated by the Huynh-Feldt statistic: F(2,301, 743,211) = 2,415, p = 0,082. However, as p = 0,082 is close to 0,05 a tendency to a significant mean difference is determined. Therefore, an Independent Samples Test is executed.
- People with different **Education Levels** as indicated by the Huynh-Feldt statistic: F(2,312, 692,813) = 1,052, p = 0,357. However, when executing an Independent T-Test, a significant mean difference is found.
- People with different **Job Levels** as indicated by the Greenhouse-Geisser statistic: F(2,119, 506,524) = 1,241, p = 0,291. However, when executing an Independent T-Test, a significant mean difference is found.

GEOGRAPHICAL LOCATION

The difference between students and employed people concerning the *Geographical Location* might be explained, as discussed in paragraph 5.2.2, by that employed people are already settled at the place that is based on their work location, while students might be prepared for moving somewhere for their first 'real job'. When focusing on Millennials and Generation X, these results can be explained by that all people who are Generation X are within the employed group.

LOCATION TYPE

From the statistical analysis appears that students value the influence of *Location Type* significantly higher than employed people. These results might indicate that students value the location with a certain ambiance of more influence, while employed people might focus more on the practical aspects of a location.

In addition, men value *Location Type* of significantly more influence than women, and individual contributors value this variable of significantly more influence than managers.

LOCATION TYPE PREFERENCE

Concerning *Location Type* preferences, there are many significant differences in opinions between groups of different perspectives (appendix IV.IV). Which stands out is that many people, from a career path perspective, firstly prefer a historical city centre, but later start preferring a Cental Business District over a historical city centre. In addition, people with more than 15 years of work experience significantly prefer more often a Country House compared to people who just started working.

ACCESSIBILITY

Concerning the variable *Accessibility*, no significant mean differences are found between the examined groups of the different perspectives. This indicates that the representative sample within this research has a similar opinion about the influence that the *Accessibility* has on their choice for a new job. Therefore can be concluded the *Accessibility* has a similar influence on employee attraction for each tested group.

TRANSPORTATION PREFERENCE

In addition, a statistically significant association between Generations and transport preference was observed, χ^2 (2) = 10,168, p = 0.006. In which Millennials prefer transport by bicycle significantly more than generation X, and in which Generation X prefers transport by car significantly more than Millennials. This is in accordance with the observation that Generation X values car parking places significantly higher than Millennials (5.2.4).
Besides, a statistically significant association between Education Level and transport preference was observed, χ^2 (2) = 10,603, p = 0.005, in which HBO educated people significantly more often prefer traveling by car than WO educated people. Furthermore, a statistically significant association between Job Level and transport preference was observed, χ^2 (2) = 6,757, p = 0.034, in which managers significantly more often prefer traveling by car than individual contributors.

PROXIMITY OF AMENITIES

Students and Millennials, the younger (and partly overlapping) groups within this research, value from both perspectives the *Proximity of Amenities* higher than Employed people and Generation X. This difference is explained by Thompson (2011), who states that Millennials do take workplace amenities into consideration in choosing an employer, because they grew up around companies that provide many amenities wherefore these 'luxuries' were normalised.

People living with friends and people living alone value *Proximity of Amenities* significantly more influential than people living with child(ren) (and partner). An explanation is that people living with friends or living alone are more likely to be a student or millennial, wherefore the previous declaration applies.

From the statistical analysis also appeared that people with a WO educational level value *Proximity of Amenities* significantly higher than people with an HBO educational level.

5.2.4 SERVICES & FACILITIES

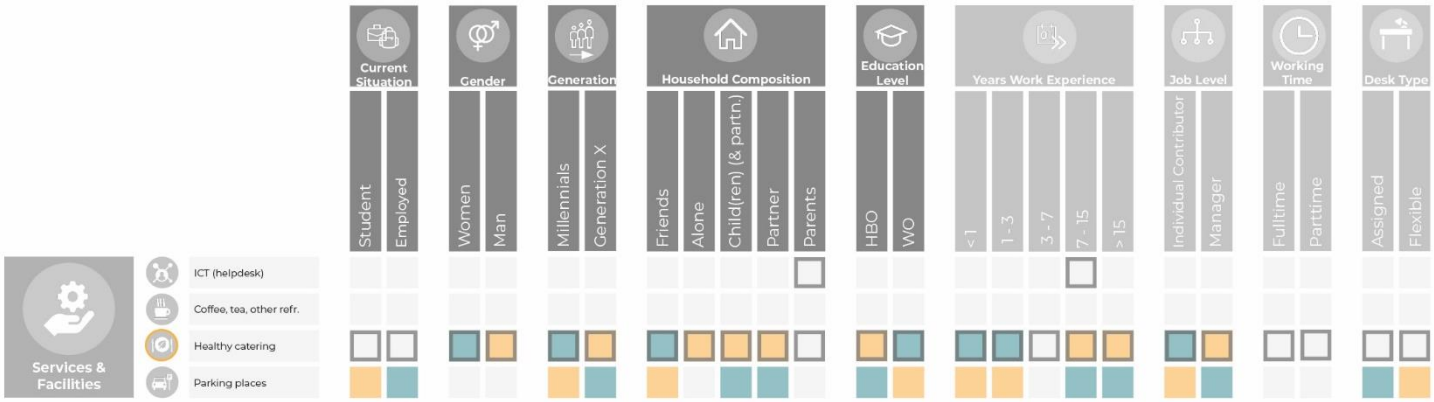

Figure 5.28: Services & Facilities related significant differences between groups of different perspectives

Significant Differences Identified

The four aspects of services & facilities are not rated equally by:

- Students and employed people (**Current Status**) as indicated by the Huynh-Feldt statistic: F(2,607, 855,194) = 4,502, p = 0,006.
- People within different **Generations** as indicated by the Huynh-Feldt statistic: F(2,689, 806,830) = 5,581, p = 0,001.
- People within different **Household Compositions** as indicated by the Huynh-Feldt statistic: F(10,643, 819,498) = 4,148, p = 0,000.
- People with different **Education Levels** as indicated by the Huynh-Feldt statistic: F(2,652, 774,457) = 8,111, p = 0,000.
- People with different **Years of Work Experience** as indicated by the Huynh-Feldt statistic: F(10,913, 613,856) = 4,097, p = 0,000.
- People with different **Job Levels** as indicated by the Huynh-Feldt statistic: F(2,609, 594,930) = 3,342, p = 0,024.

The four aspects of services & facilities are rated equally by

- Women and men (**Gender**) as indicated by the Huynh-Feldt statistic: F(2,611, 814,502) = 2,565, p = 0,062.
  However, as p = 0,062 is close to 0,05 a tendency to a significant mean difference is determined. Therefore, an Independent Samples Test is executed.
- People with an assigned desk and people with a flexible desk (**Desk Type**) as indicated by the Huynh-Feldt statistic: F(2,612, 585,083) = 2,287, p = 0,087.
  However, as p = 0,087 is close to 0,05 a tendency to a significant mean difference is determined. Therefore, an Independent Samples Test will be executed.

ICT (HELPDESK)

Concerning the variable *ICT (helpdesk)*, no significant mean differences are found between the examined groups of the different perspectives. This indicates that the representative sample within this research has a similar opinion about the influence that the *ICT (helpdesk)* has on their choice for a new job. Therefore can be concluded the *ICT (helpdesk)* has a similar influence on employee attraction for each tested group.

COFFEE, TEA, OTHER REFRESHMENTS

Concerning the variable *Coffee, Tea and other Refreshments*, no significant mean differences are found between the examined groups of the different perspectives. This indicates that the representative sample within this research has a similar opinion about the influence that the *Coffee, Tea and other Refreshments* has on their choice for a new job. Therefore can be concluded the *Coffee, Tea and other Refreshments* has a similar influence on employee attraction for each tested group.

HEALTHY CATERING

That Millennials and people who have a few years of work experience value *Healthy Catering* higher than other groups, could be explained by the same statement of Thompson as in the previous paragraph: Millennials (overlapping with the people with a few years of work experience), normalise 'luxurious' workplace services, because they grew up in a time in which companies started implementing such services (Thompson, 2011).

In addition, people living with friends value *Healthy Catering* of significant more influence than people living alone, living with child(ren) (and partner), and with partner. This could be explained by the observation that people living with friends are the youngest group among the mentioned Household Composition groups, wherefore the theory of Thompson (2011) could be applied the most to this specific group.

Women value *Healthy Catering* of significantly more influence on their choice for a new job than men. This is in accordance with the a research about gender differences in food beliefs, practices and preferences of Beardsworth, Bryman, Keil, Goode, Haslam, & Lancashire (2002). In their research, they conclude that women "exhibit a more 'virtuous' pattern of eating and food choice than do men"(p. 488). In the sense that women are more aware of, and willing to act in terms of, "certain ethical and nutritional principles which are increasingly positively valued in contemporary Western culture." (p.488).

Furthermore, people with WO educational levels value *Healthy Catering* significantly more influential than HBO educational levels. Moreover, individual contributors value this variable significantly more influential than managers.

CAR PARKING PLACES

That employed people and people who are working for more than 7 years value C*ar Parking Places* of significant more influence on their choice for a job, could be explained by that the students and people who have fewer years of work experience studied in a period in which sustainability became a major societal topic. The students and people with less work experience might be influenced by this environmental issue by their universities.

The observation that people living with friends value *Car Parking Places* of significantly less influence than people living with child(ren) (and partner) and with partner is in accordance with the previous explanation, as the people living friends in this sample are often students.

Managers value *Car Parking Places* of significantly more influence than individual contributors. This is in accordance with the previously used theory that managers have a more external role. They might have more external meetings, wherefore transportation is needed. In addition, a car could express a certain status.

Furthermore, people with HBO educational levels value *Car Parking Places* of significant more influence than WO educated people. Besides, people with an assigned desk value this variable of significant more influence than people with a flexible desk.

5.2.5 BUILDING

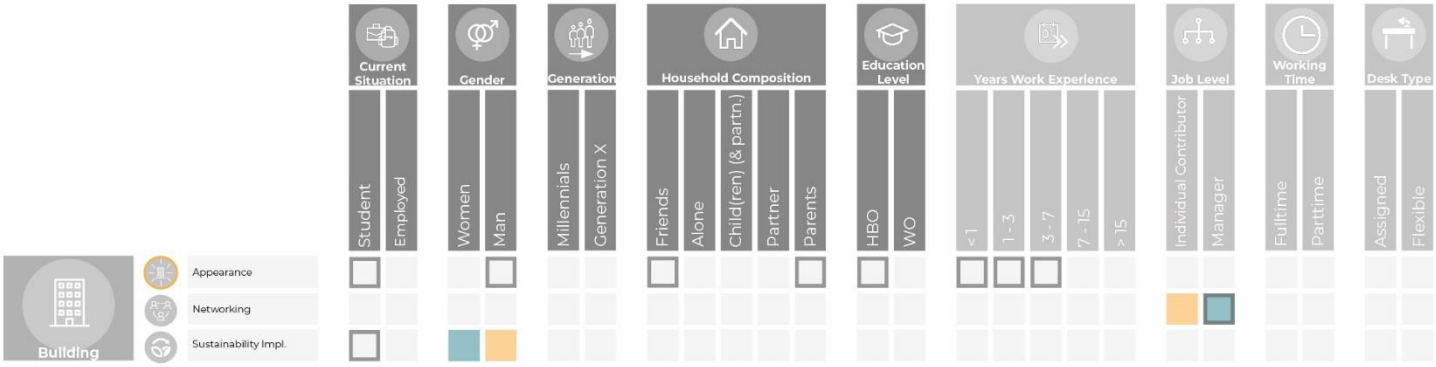

Figure 5.29: Building related significant differences between groups of different perspectives

Significant Differences Identified

The three aspects of building are not rated equally by:

- Women and men (**Gender**) as indicated by the Sphericity Assumed statistic: F(4,376, 1417,686) = 2,689, p = 0,026.

The three aspects of building are rated equally by:

- People with different **Job Levels** as indicated by the Sphericity Assumed statistic: F(2, 400) = 2,552, p = 0,079. However, as p = 0,079 is close to 0,05 a tendency to a significant mean difference is determined. Therefore, an Independent Samples Test will be executed.

BUILDING APPEARANCE

Concerning the variable *Building Appearance*, no significant mean differences are found between the examined groups of the different perspectives. This indicates that the representative sample within this research has a similar opinion about the influence that the *Building Appearance* has on their choice for a new job. Therefore can be concluded the *Building Appearance* has a similar influence on employee attraction for each tested group.

NETWORKING OPPORTUNITIES

That managers value *Networking Opportunities* of significantly more influence than individual contributors, can be explained by the more external role they fulfil.

SUSTAINABILITY IMPLEMENTATIONS

Women value *Sustainability Implementations* of significantly more influence than man. This is in accordance with a study from Boonstoppel & Van Elfrinkhof (2014), in which, on the basis of 133.000 respondents, is stated that women more often express sustainable behaviour, and more specifically more environmental sustainable behaviour as well.

5.2.6 WORKPLACE

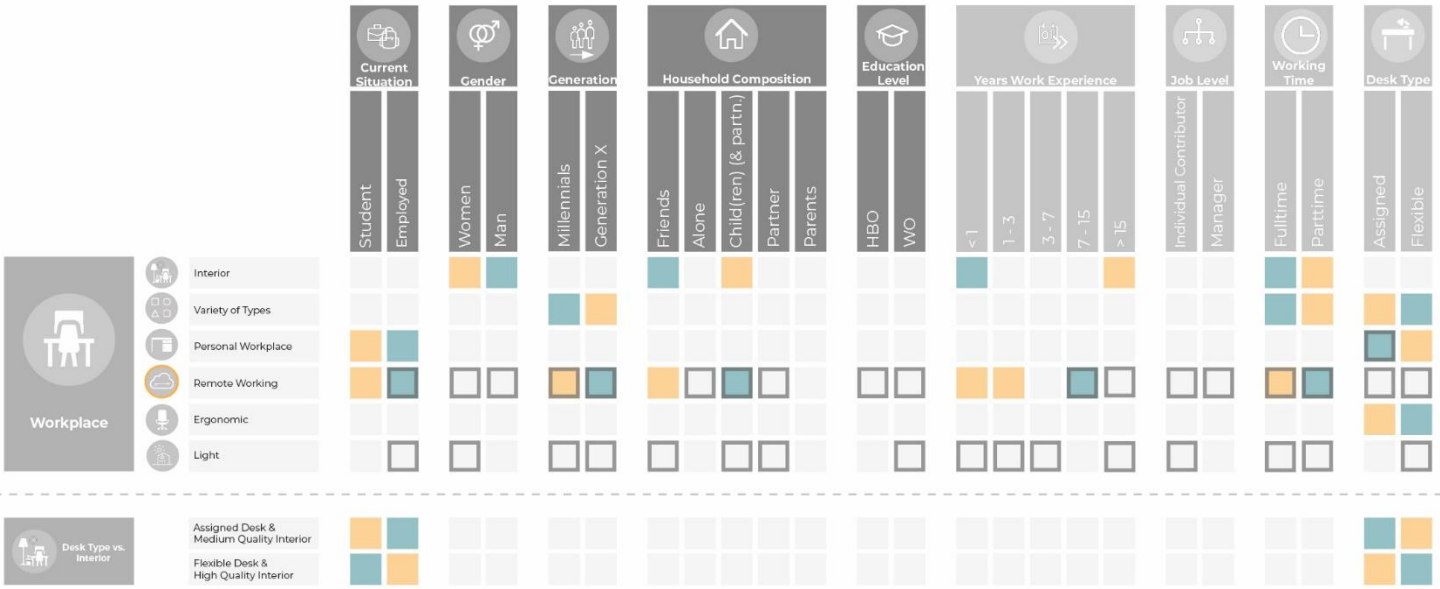

Figure 5.30: Workplace related significant differences between groups of different perspectives

Significant Differences Identified

The six aspects of workplace are not rated equally by:

- Students and employed people (**Current Status**) as indicated by the Huynh-Feldt statistic: F(4,460, 1485,168) = 4,042, p = 0,002.
- Women and men (**Gender**) as indicated by the Huynh-Feldt statistic: F(4,376, 1417,686) = 2,689, p = 0,026.
- People within different **Generations** as indicated by the Huynh-Feldt statistic: F(4,424, 1380,153) = 2,664, p = 0,026.
- People within different **Household Compositions** as indicated by the Huynh-Feldt statistic: F(18,130, 1450,396) = 4,332, p = 0,00.
- People with different **Years of Work Experience** as indicated by the Huynh-Feldt statistic: F(18,137, 1025,942) = 2,192, p = 0,003.
- People with an assigned desk and people with a flexible desk (**Desk Type**) as indicated by the Huynh-Feldt statistic: F(4,483, 1048,953) = 7,278, p = 0,000.

INTERIOR

The observation that fulltime employed people value the I*nterior* of significantly more influence than parttime employed people, could be explained by that they spend more time in this interior.

In addition, men value *Interior* of significantly more influence on their choice for a job than women. Furthermore, people living with friends value this variable of significantly more influence than people living with child(ren) (and partner). Moreover, people with less than one year of work experience value *Interior* of significantly more influence than people with more than 15 years of work experience.

VARIETY IN WORKPLACE TYPES

Millennials value the influence of *Variety in Workplace Types* of significantly more influence on their choice for a new job than Generation X. This might be explained by the theory of Thomposon: Millennials are grown up with companies that provide more 'luxurious' work environments (Thompson, 2011). Providing many varied workplace types at an office could be assumed as a 'luxurious'.

Fulltime working people value *Variety of Workplace Types* of more influence than parttime working people. This seems logical, considering that fulltime working people spend more hours in the office and parttime working people already have more variety in their daily surroundings.

In addition, people with flexible desks value *Variety in Workplace Types* of more influence than people with an assigned desk, which is convenient considering that people with an assigned desk might not use other workplaces – if applicable- because they have their own desk.

PERSONAL DESK & DESK PREFERENCES

A statistically significant association between students and employed people and desk type preference was observed, χ^2 (2) = 4,499, p = 0.034. Significantly more students (77%) prefer a flexible desk with a high quality interior above an assigned desks with medium quality interior than employed people do (64%), difference = 13%.

A statistically significant association between Current Desk Type and desk type preference was observed, χ^2 (2) = 50,345, p = 0.000. Significantly more people with a flexible desk (72%) prefer a flexible desk with a high quality interior above an assigned desks with medium quality interior than people with an assigned desk do (31%), difference = 41%.

Noticeable is that although the majority of the employed people prefer a flexible desk (with high quality interior) over an assigned desk (with medium quality interior), significantly more students prefer the flexible desk option. From the analysis appears that employed people who value this topic above average influential, extreme significantly more often prefer an assigned desk over a flexible desk.
This in combination with that employed people significantly value this topic of more influence on their choice for a job than students do, gives the indication that people who have experience within the work environment are more aware of the disadvantages of flexible desk than students are, wherefore this topic is of significant more influence on their choice for a new job.

REMOTE WORKING

As Remote Working is valued of more influence on a job choice by employed people (over students), by generation X (over Millennials), and by people with more than 7 years of work experience, there can be concluded that the influence of *Remote Working* increases as people get employed, get older, and work longer. An explanation could be that as people get older, they might get children wherefore working from home gets more important.

This theory is in accordance with the observation that people living with friends value *Remote Working* significant less influential on their choice for a new job than people living with child(ren) (and partner).

However, people living with friends also value this variable significant less important than people living with a partner and than people living alone.

In addition, parttime working people value *Remote Working* of significantly more influence than fulltime working people. This could be explained by the observation that people with children within this research more often work parttime than people living in other household compositions.

ERGONOMIC WORKPLACE

People working with flexible desks value an ergonomic workplace of significant more influence on their choice for a new job than people with an assigned desk. This seems logical, as people with an own desk have their own furniture. When working with flexible desks at a workplace, the furniture should be adjustable for every employee in order to offer every employee a workplace that matches his or her preferences.

AMOUNT OF LIGHT

Concerning the variable *Amount of Light*, no significant mean differences are found between the examined groups of the different perspectives. This indicates that the representative sample within this research has a similar opinion about the influence that the *Amount of Light* has on their choice for a new job. Therefore can be concluded the *Amount of Light* has a similar influence on employee attraction for each tested group.

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6 SYNTHESIS

6.1 Synthesis

6 SYNTHESIS

The intention of the last part of this research, the synthesis, is to enable the generated knowledge to be applied in practice (figure 6.1). In this section, sub question four is answered: "How can companies apply knowledge on work environments to enhance competitive advantage within the war for talent?". Employee profiles are created to simplify and visualise the generated information from the statistical analysis of the heterogeneous data, as described in chapter 5.2. Therefore, these employee profiles serve as a medium that eases the application of the generated knowledge in practice when providing advice to companies on enhancing their competitive advantage within the war for talent. In this chapter, the created employee profiles are presented, including a short explanation of the choice for these specific profiles. The last part of this chapter presents The Work Environment Career Path, in which is shown how employee perceptions on the influence of work environments develop throughout a career path.

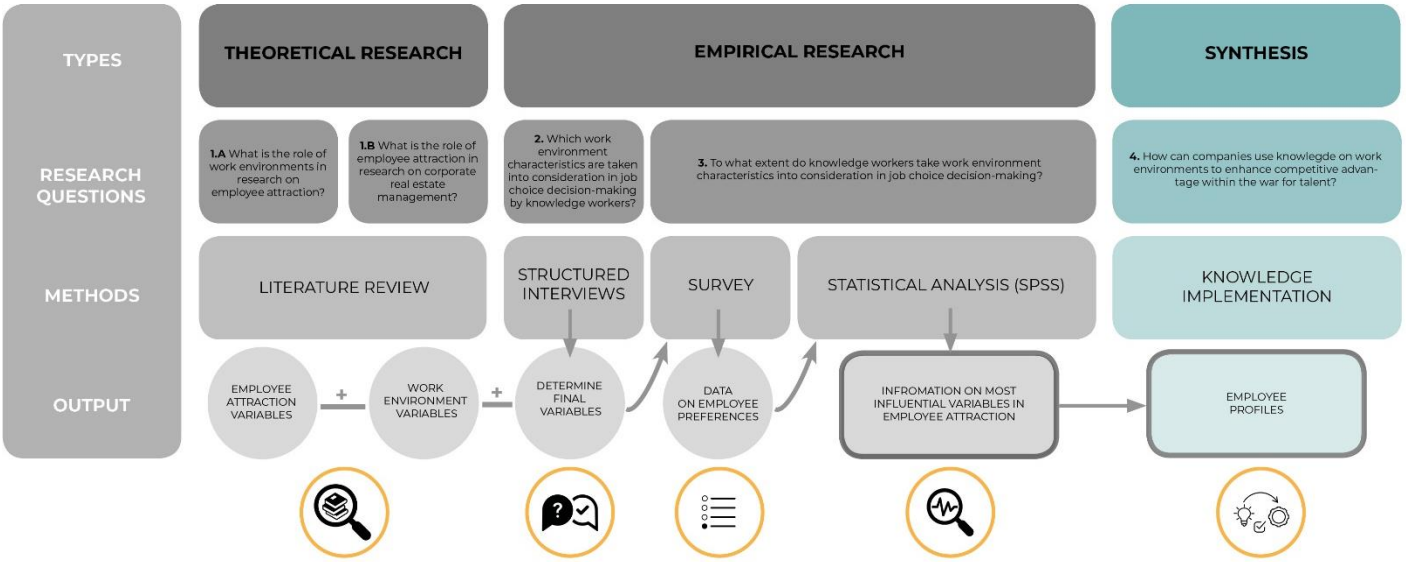

Figure 6.1: Synthesis within the Research Framework

As explained in paragraph 3.1.4 of the literature review, the process of recruiting employees comes with setting up a profile of the employee looked for in order to be able to tailor the recruitment practices to this specific target group (Hiltrop, 1999; Armstrong, 2014): the required education level, qualifications and experience of the desired employees should be specified (Chambers et al, 1998; Armstrong, 2014), but also the desired type of person with regard to the extent they are likely to fit the culture, values and norms of the organisation (Armstrong, 2006). In addition, graduation organisation JLL emphasised their use of employee profiles to explain different types of employees to their clients. They recommended creating employee profiles as a useful way of applying the generated knowledge in practice.

This profile is created as a reference profile and shows the results of the representative sample of the research as a whole: the homogeneous data as explained in chapter 5.1 (figure 6.2). Therefore, this profile shows the results of the complete target group of this research: (future) knowledge workers.

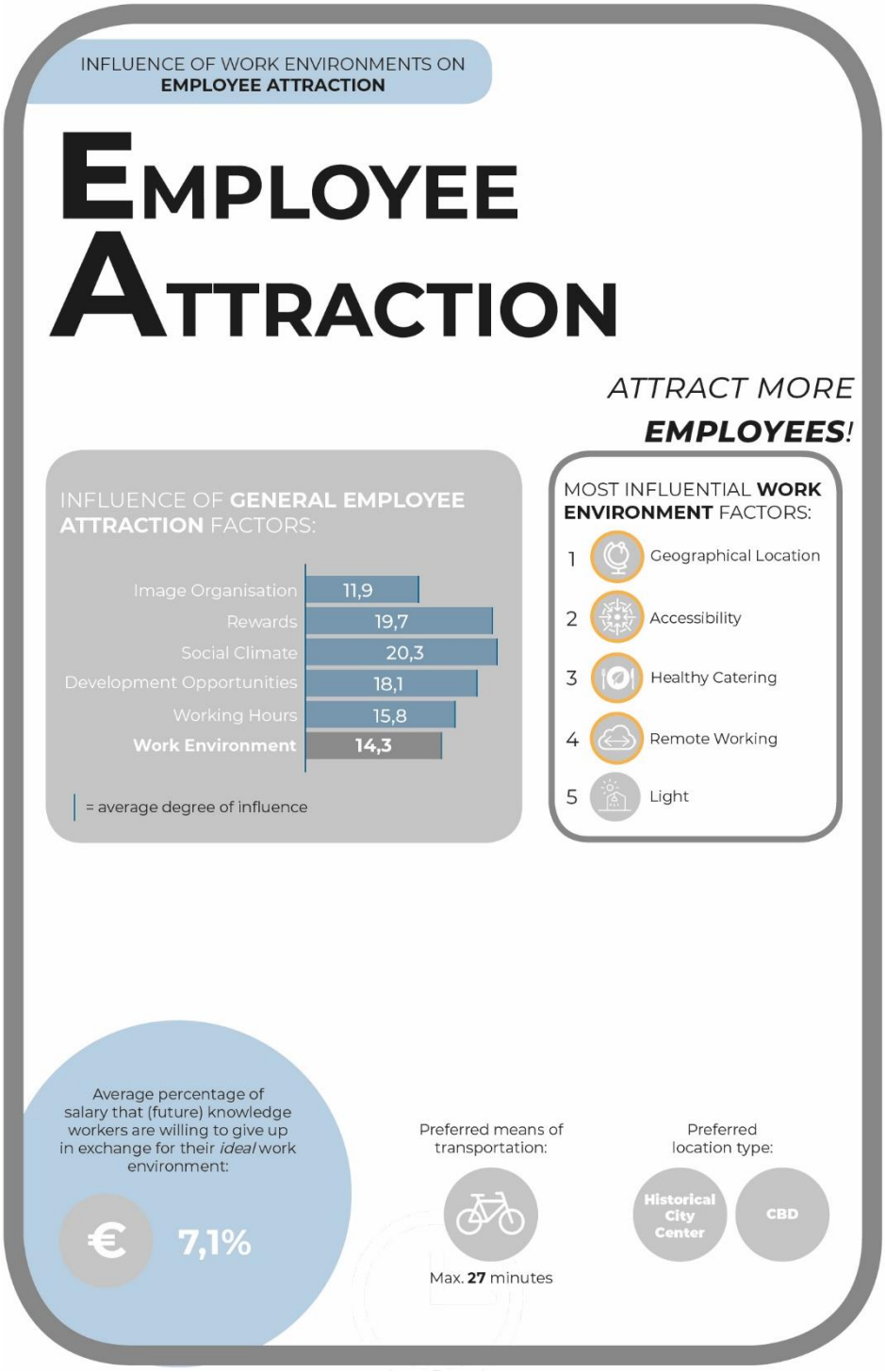

Figure 6.2: (Future) Knowledge Worker Profile

This profile shows the results concerning the statistical data analysis of the students who participated in the online survey (figure 6.3). The profile is a simplification of the information that is discussed in chapter 5.2. The Student Profile is created, because students who are in the final phase of their studies are an often targeted potential employee group by companies who are looking for young new employees.

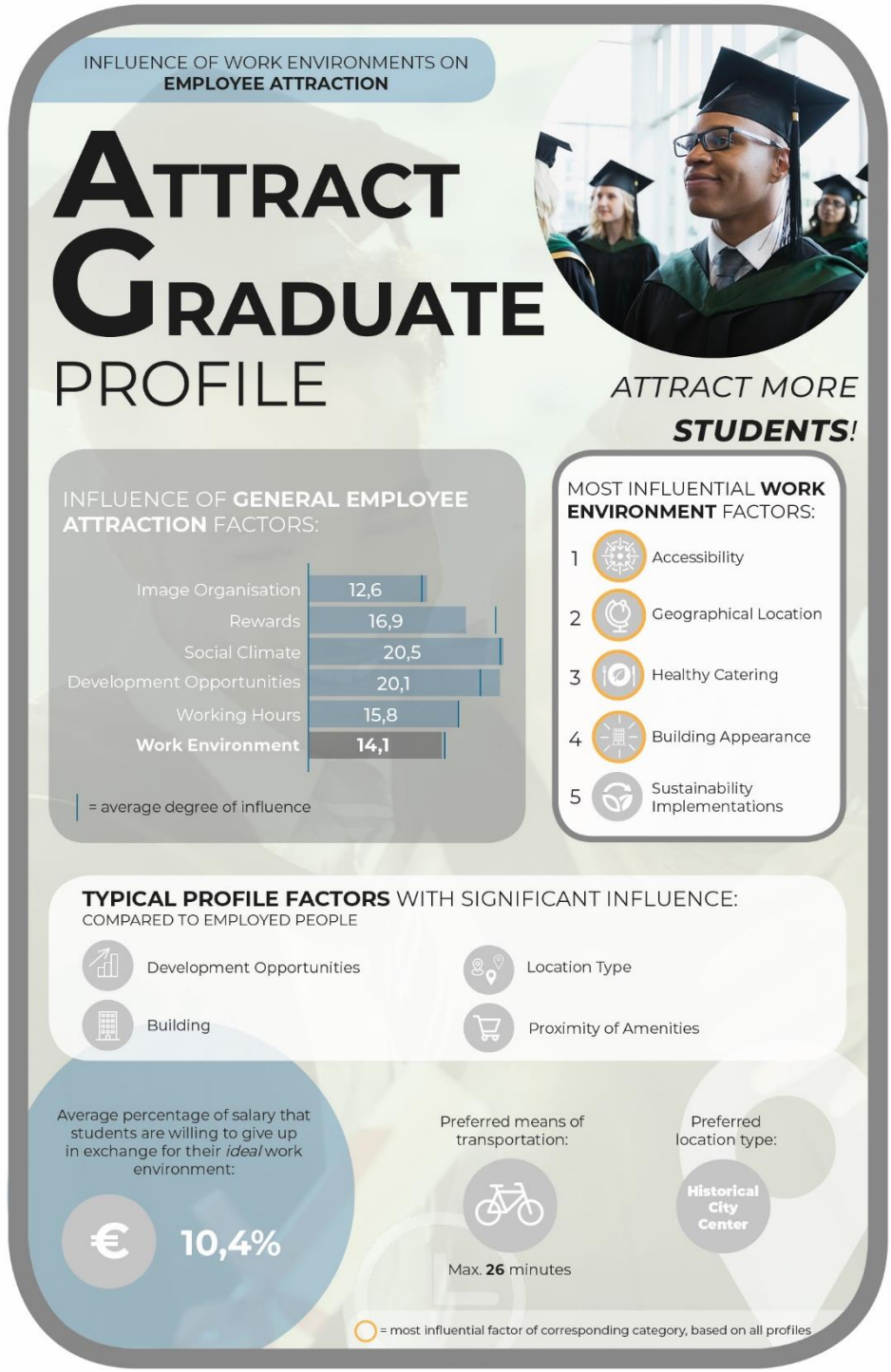

Figure 6.3: Student Profile

This profile shows the results concerning the statistical data analysis of the employees who have been working for less than three years that participated in the online survey (figure 6.4). The profile is a simplification of the information that is discussed in chapter 5.2. This profile is created to cover the stages of years of work experience. Companies that are looking for a job applicant to fulfil a certain job that requires innovative knowledge obtained from education, but also some work experience, can use this employee profile.

This profile is a combination of the groups '0 to 1 year of work experience' and '1 to 3 years of work experience', within the Years of Work Experience perspective, that are distinguished in chapter 5.2.

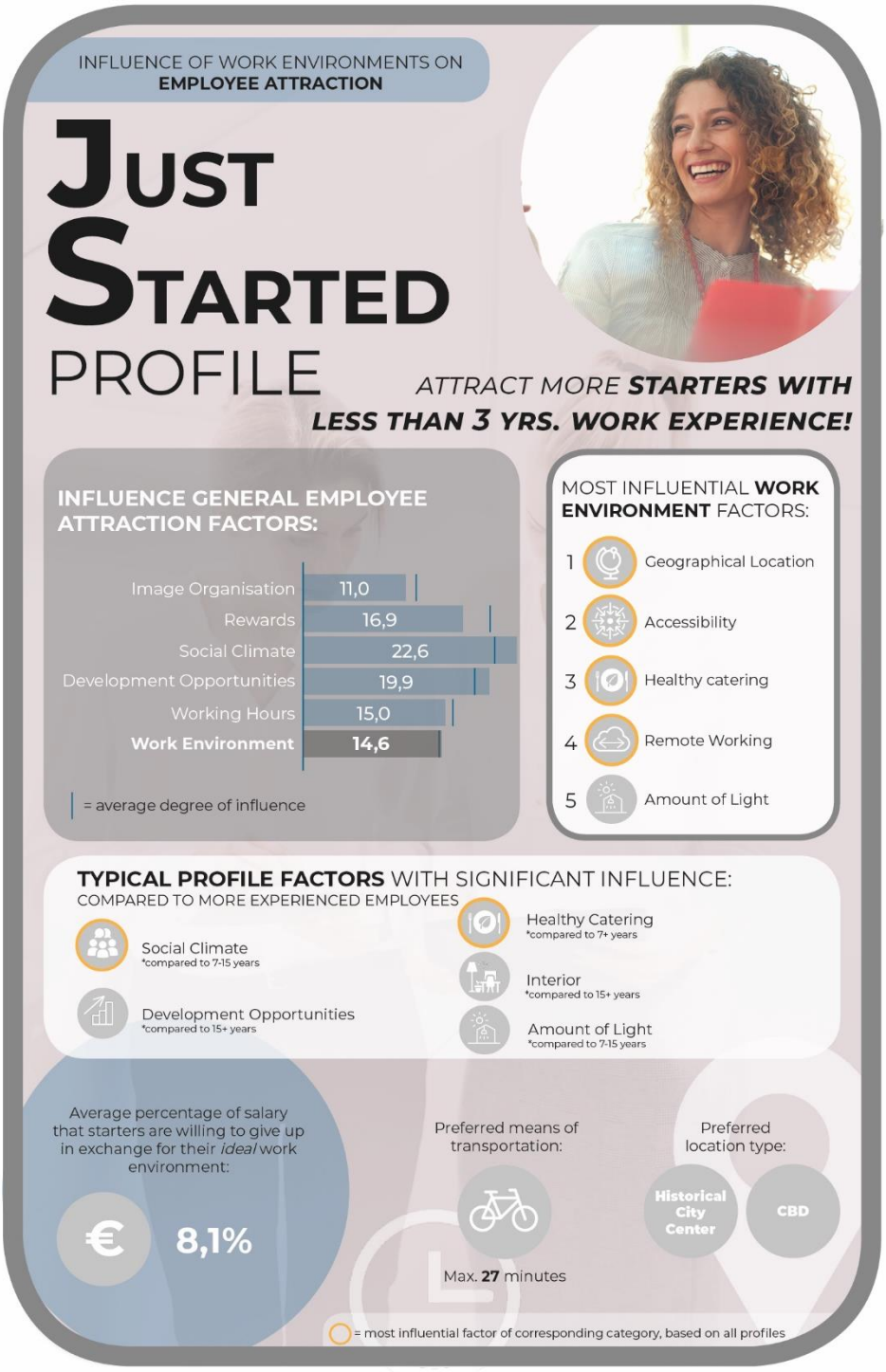

Figure 6.4: Starter Profile

This profile shows the results concerning the statistical data analysis of the employees who have been working between three and 15 years that participated in the online survey (figure 6.5). The profile is a simplification of the information that is discussed in chapter 5.2. This profile is created to cover the stages of years of work experience.

This profile is a combination of the groups '3 to 7 years of work experience' and '7 to 15 years of work experience', within the Years of Work Experience perspective, that are distinguished in chapter 5.2.

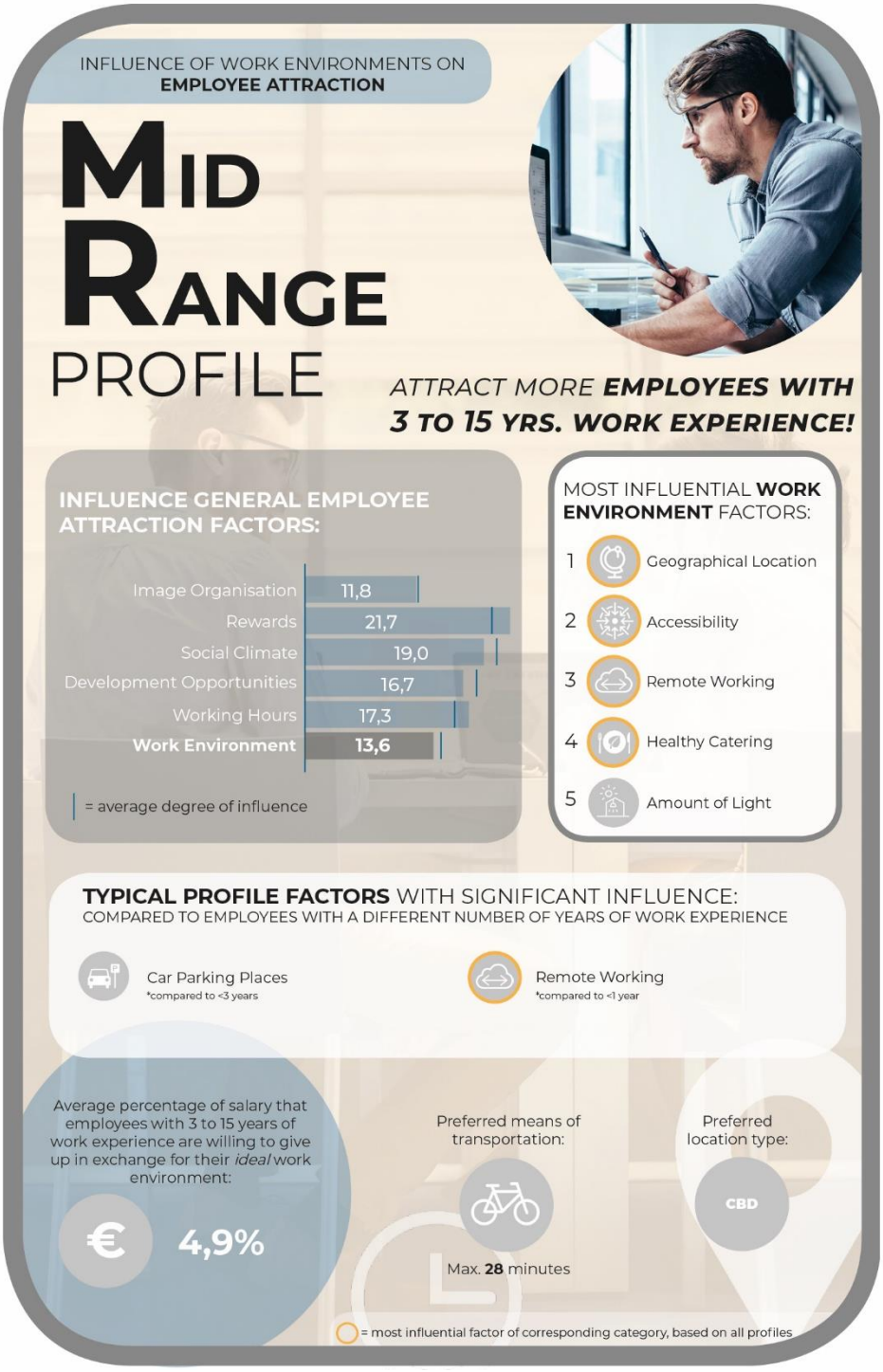

Figure 6.5: Mid Range Profile.

This profile shows the results concerning the statistical data analysis of the employees who have been working for more than 15 years that participated in the online survey (figure 6.6). The profile is a simplification of the information that is discussed in chapter 5.2. This profile is created to cover the stages of years of work experience. Companies that are looking for a job applicant to fulfil a certain job that requires a lot of work experience, can use this employee profile.

Figure 6.6: Experienced Professional Profile

This profile shows the results concerning the statistical data analysis of the people with a managerial function that participated in the online survey (figure 6.7). The profile is a simplification of the information that is discussed in chapter 5.2. Companies that are looking for a job applicant to fulfil a managerial job, can use this employee profile.

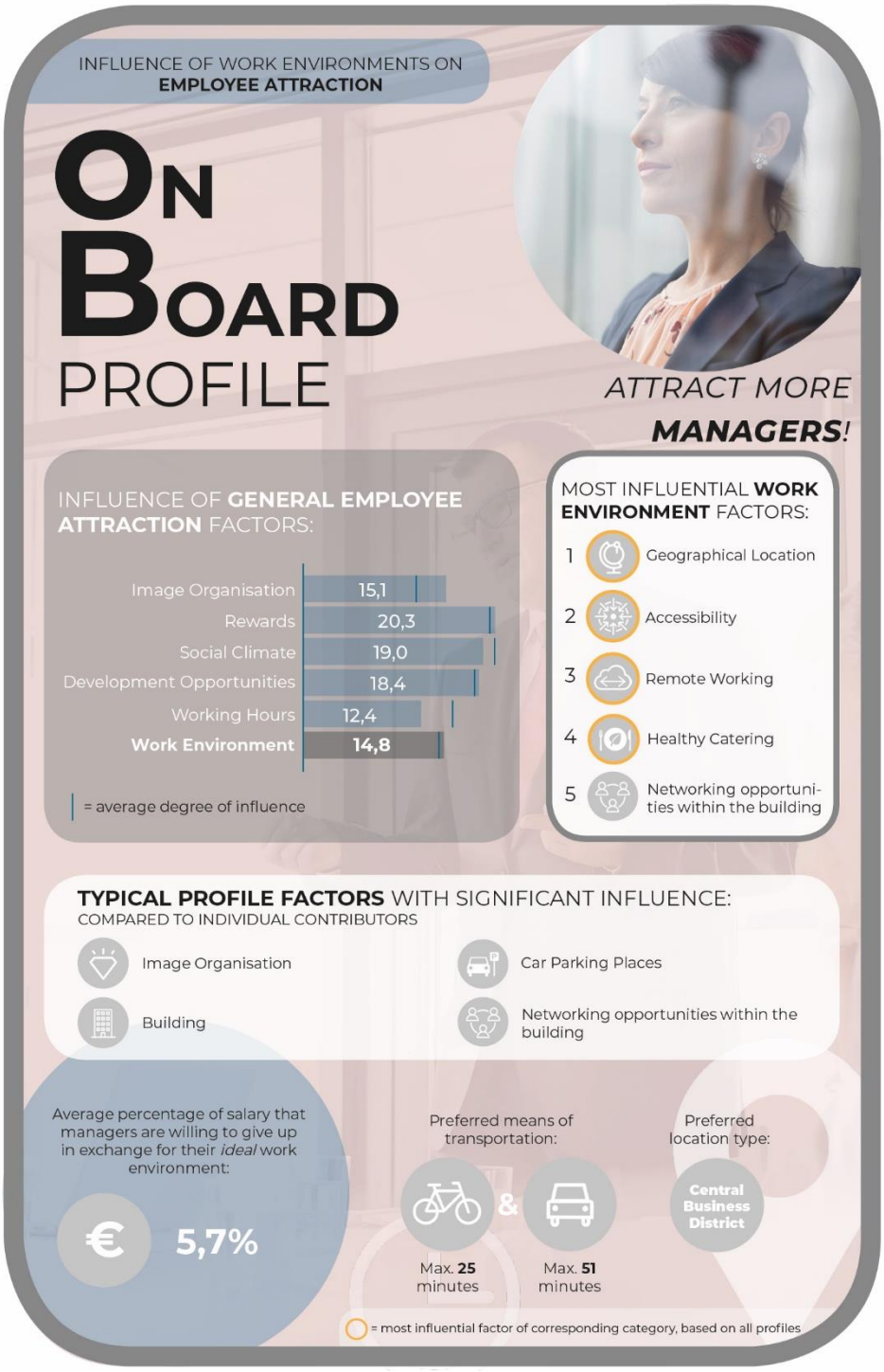

Figure 6.7: Manager Profile

This profile shows the results concerning the statistical data analysis of the university educated people who participated in the online survey (figure 6.8). The profile is a simplification of the information that is discussed in chapter 5.2. Companies that are looking for a job applicant to fulfil a certain job that requires a knowledge and skills derived at a university, can use this employee profile.

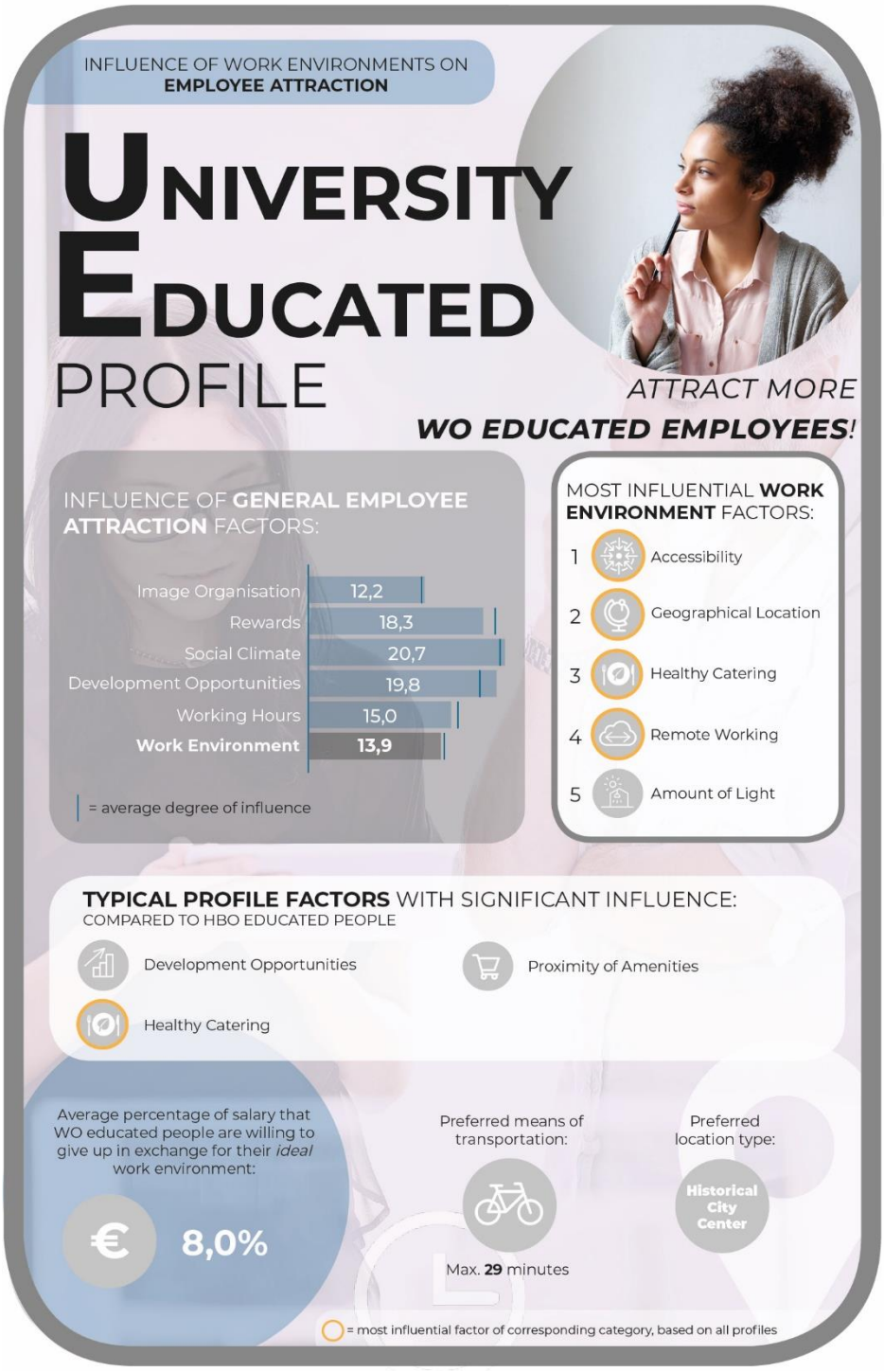

Figure 6.8: University Educated Profile

This profile shows the results concerning the statistical data analysis of the applied science educated people who participated in the online survey (figure 6.9). The profile is a simplification of the information that is discussed in chapter 5.2. Companies that are looking for a job applicant to fulfil a certain job that requires a knowledge and skills derived in applied science, can use this employee profile.

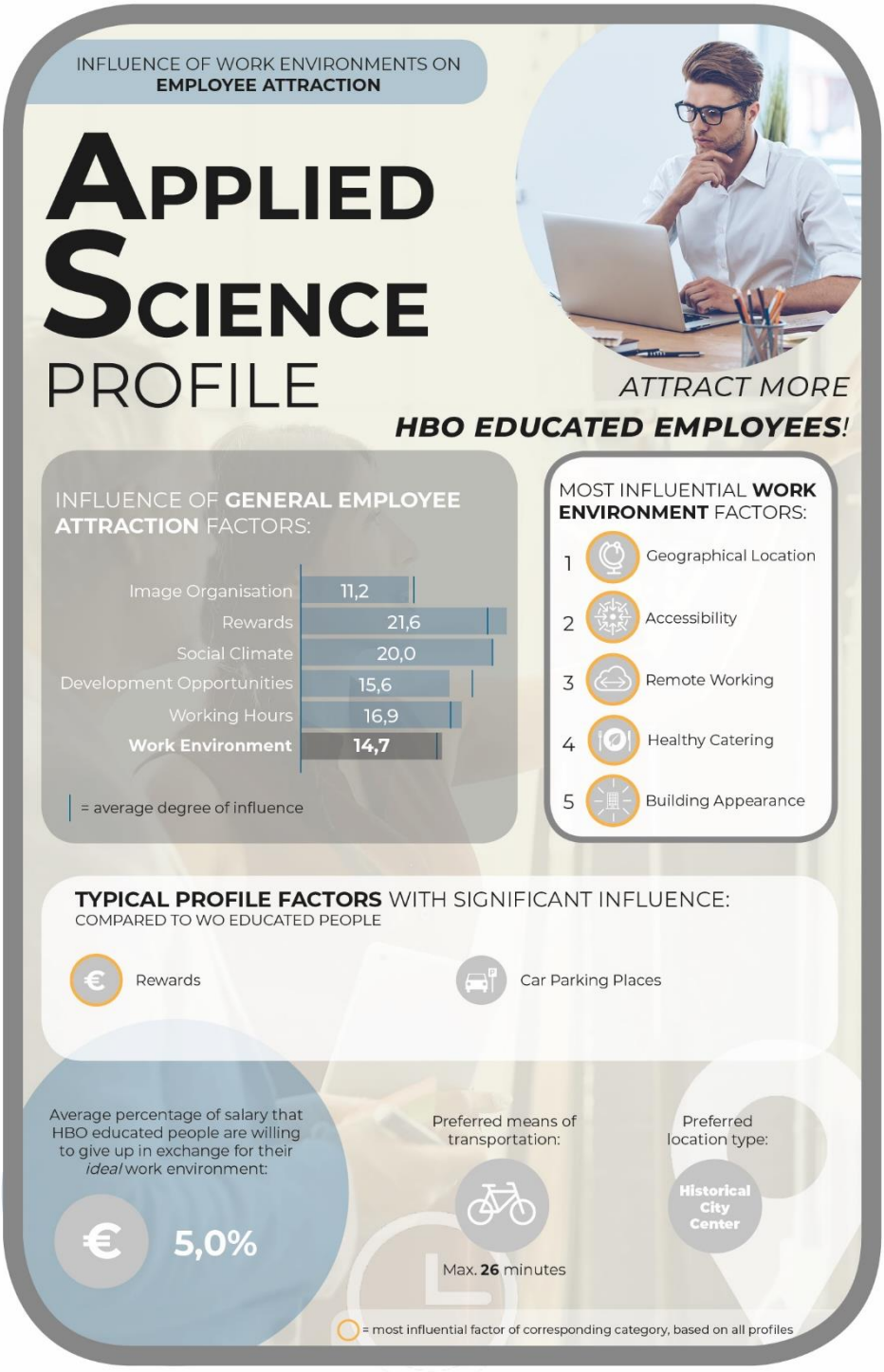

Figure 6.9: Applied Science Profile

This profile shows the results concerning the statistical data analysis of the Millennials who participated in the online survey (figure 6.10). The profile is a simplification of the information that is discussed in chapter 5.2. This might be a wanted employee profile by companies, as Millennials in the workplace are a current often discussed topic in the media and in scientific research (Appel-Meulenbroek, 2019; Thompson, 2011). Companies that want to attract more Millennials to their company, can use this employee profile.

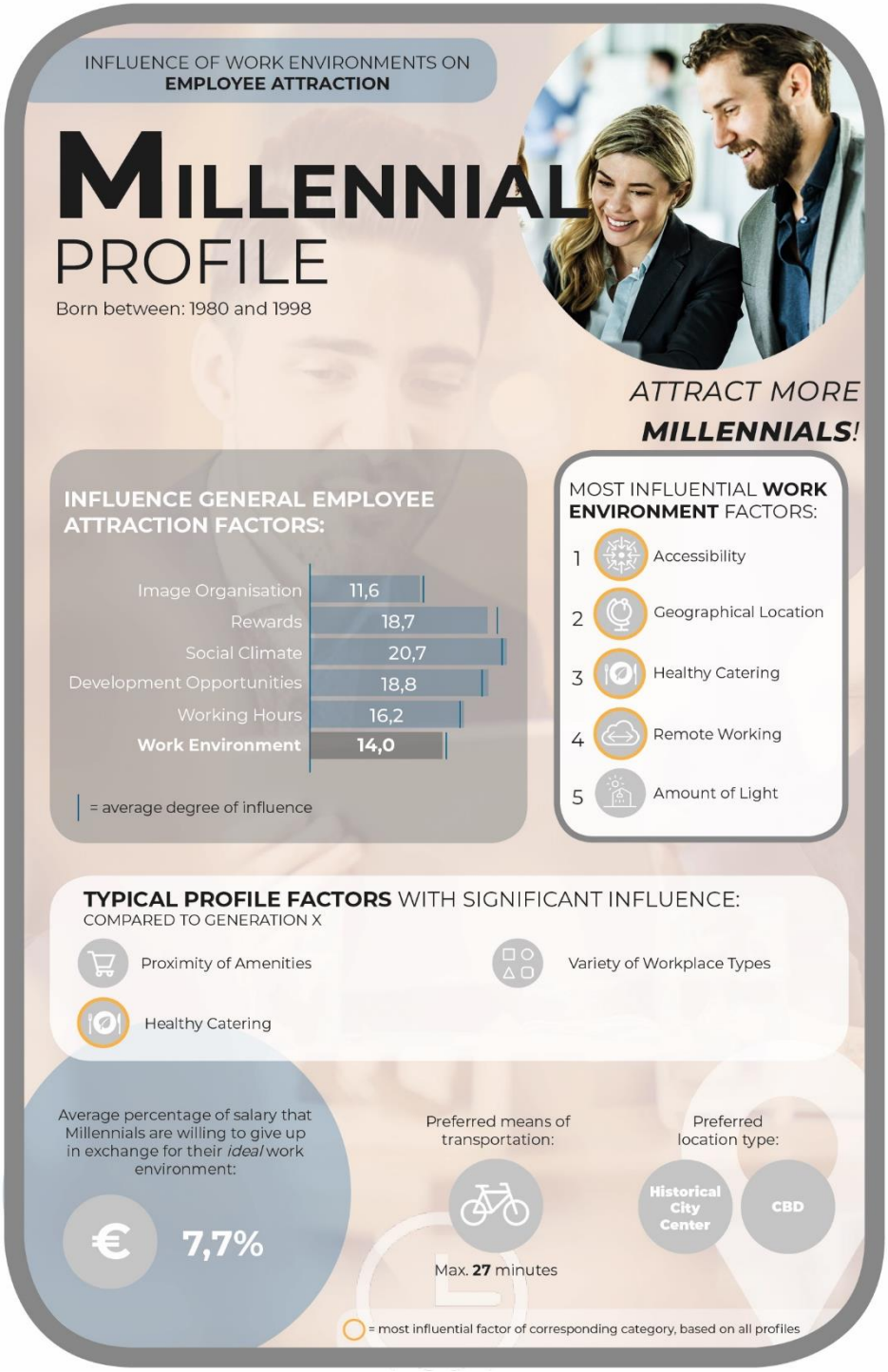

Figure 6.10: Millennial Profile

This profile shows the results concerning the statistical data analysis of the women who participated in the online survey (figure 6.11). The profile is a simplification of the information that is discussed in chapter 5.2. The Dutch government decided to implement a women's quota, which implies that listed companies will be obliged to have 30% women in their supervisory boards. Therefore, the attraction of more women to the workforce are a current often discussed topic in the media.

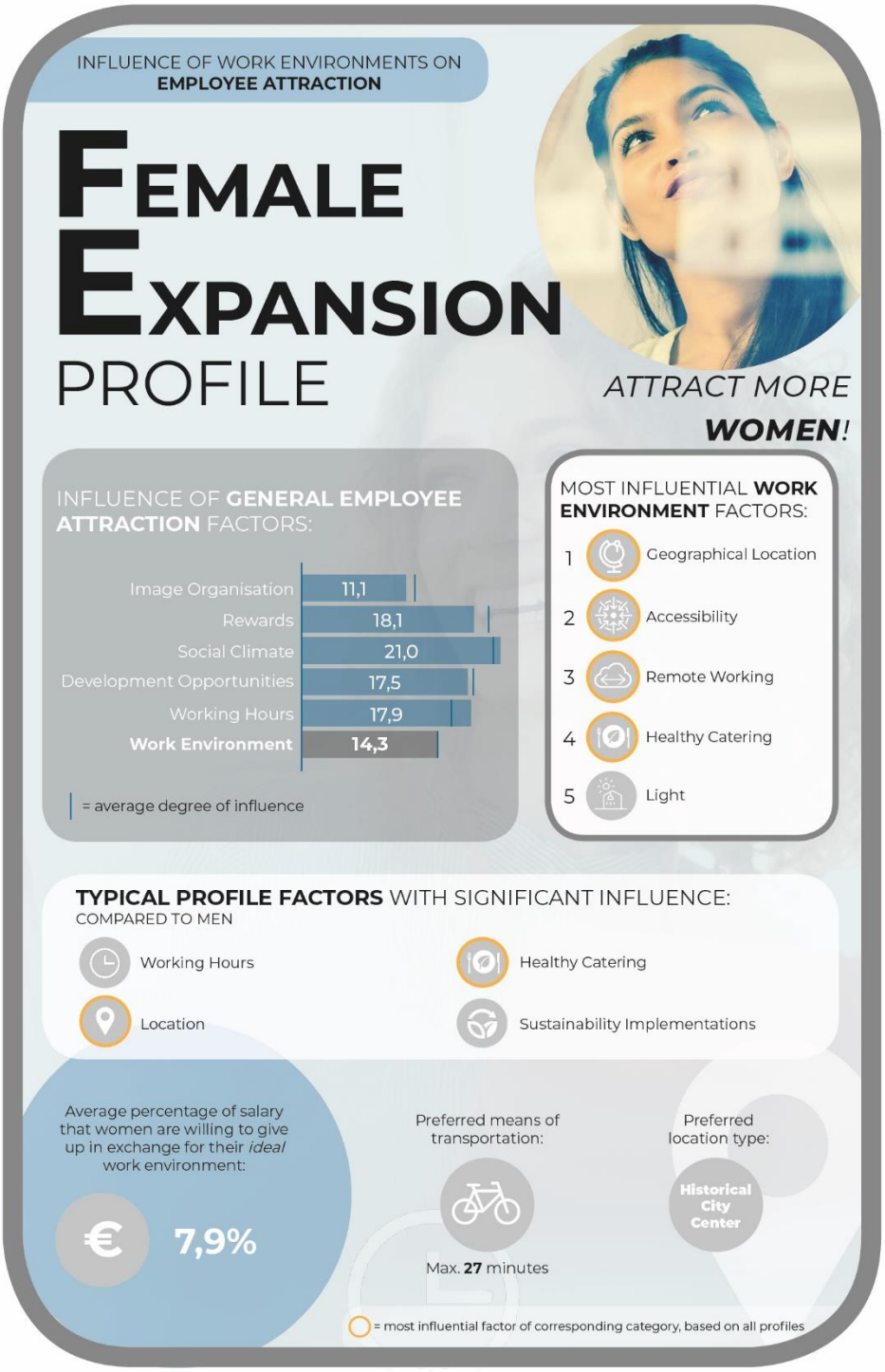

Figure 6.11: Female Expansion Profile

The profiles that are concerned with the career path of (future) knowledge workers are combined into one scheme in which is shown how employee perceptions on the influence of work environments develop throughout the amount of years working (figure 6.12). Other profiles are not included within this scheme, as only the selected profiles are experienced by all knowledge workers. For example, not all knowledge workers will become a manager.

What mainly stands out is the development of the influence of the General Employee Attraction factors. It seems that the high influence of *Social Climate* and *Development Opportunities* are exchanged for the high influence of *Rewards* throughout the years that people are working. Another observation is that the influence of *Working Hours* gets a peak in a stage that many people get children.

While students are willing to give up quite some salary, 10,4%, in exchange for their *ideal* work environment, this percentage of salary decreases during their career to 4,6%, when they have more than 15 years of work experience. This is in accordance with the increasing influence of *Rewards* throughout a career path.

Remarkable is that the influence of the *Work Environment* remains stable within all stages of knowledge workers' career paths, wherefore the outcome of this research is similarly interesting for people within all different career stages.

These results also show that three sub factors remain of stable influence on employee attraction throughout the work years: *Geographical Location, Accessibility,* and *Healthy Catering*.

Furthermore, whereas *Building Appearance* and *Sustainability Implementations* are significantly more influential for students, people who are already working value *Remote Working* and *Amount of Light* significantly more influential.

It is important to notice that this scheme is not a reflection of an actual career path, because the results are not based on people who are examined multiple times throughout their career. This scheme is based on current situations and transposed to a career path by linking the results of successive profiles. Therefore might be that the results are shaped by time dependent circumstances.

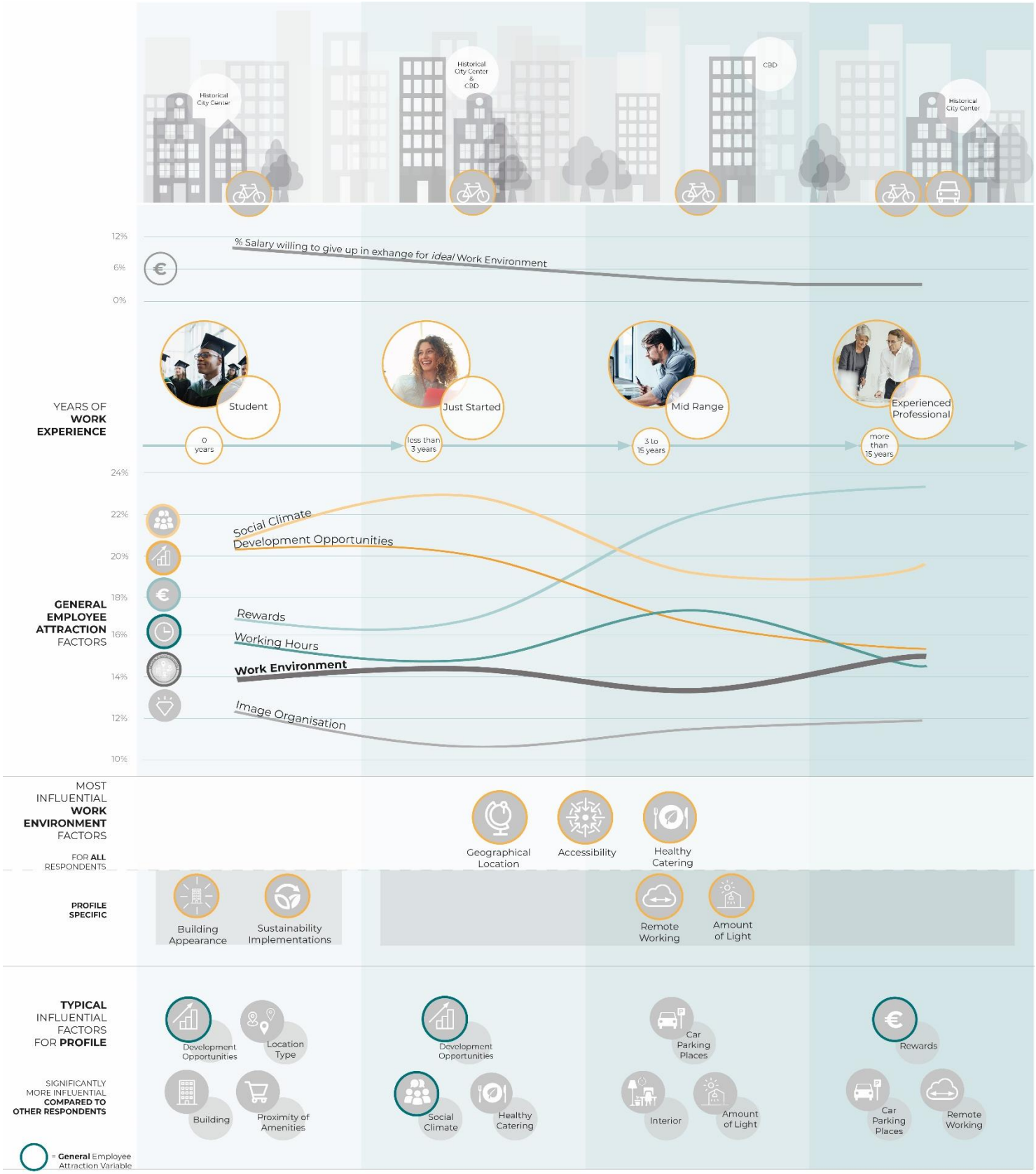

Figure 6.12: The Work Environment Career Path: the influence of the Work Environment throughout a career path.

7 CONCLUSIONS

7.1 Conclusions

7 CONCLUSIONS

This chapter provides the final conclusions of the research. The answer of the first sub question will be based on the literature review of the theoretical research. The other sub questions will be answered based on empirical research. Therefore, the second sub question will be answered by the output of the structured interviews and the third sub question will be answered by the output of the statistical analysis of the survey. At last, the fourth sub question is answered by the creation of the employee profiles. The answers of these sub questions will provide the basis for answering the main research question of this thesis.

The main goal of this research is to identify the influence of work environments on employee attraction in order to provide insights to companies to be used as part of their strategies on enhancing their competitive advantage within the war for talent. The more knowledge is derived about the influence of different work environments characteristics on employee attraction, the more work environment related investments will be made effectively. Effective investments that will actually lead to attracting the most suitable employees to a company can eventually lead to an increase of the company value. In addition, the scientific gap that is determined between literature on employee attraction within Human Resource Management and literature on work environment preferences within Corporate Real Estate Management is partially filled by this research. To achieve the research goal, five objectives have been composed at the start of this research (chapter 1.3). These five objectives have all been met by answering their corresponding sub questions. The conclusions that are drawn from these answers are discussed in this chapter.

1. What is the current knowledge on employee attraction by work environments?

Information on 'employee attraction by work environments' should be searched for in two different literature segments, as the link between 'employee attraction' and 'work environment' is barely made in literature, which is therefore the gap this thesis is aiming to fill. In order to seek for a link between the two different concepts, the first sub question consists of two parts. To generate knowledge on the role that work environments play in employee attraction, information is derived from Human Resource Management literature. In addition, to generate knowledge on the role that employee attraction plays in literature on work environments, information is derived from literature within Corporate Real Estate Management.

a. What is the role of work environments in research on employee attraction?

Employee attraction is part of the *recruitment* section within Human Resource Management, which can be defined as "[…] those practices and activities carried on by the organization with the primary purpose of identifying and attracting potential employees" (Barber, 1998, p. 5). Many methods can be used to attract the most suitable employees to a company, such as advertisements, employment agencies, and campus visits. Strategically using the work environment in terms of a means of advertisement is not a topic within the discussed literature. In their recruitment strategies, companies are focused on their *employer brand*: "a set of attributes and qualities – often intangible – that make an organization distinctive, promise a particular kind of employment experience and appeal to people who will thrive and perform their best in its culture." (Walker & Higgins, 2007, p.3). In the process of attracting employees, a positive employer brand can contribute in becoming an 'employer of choice' (Armstrong, 2006). However, in literature on *employer brand*, the role of the work environment as potential 'attribute' or 'quality' can barely be detected within the discussed literature. Nonetheless, Rampl (2014) includes *Location* in her 'Employer of choice' research. More specifically, the core of a company's employer brand is its *employer value proposition*: "what an organization offers that prospective or existing employees would value and which would help to persuade them to join or remain with the business" (Zeuch, 2016; Armstrong, 2014, p. 211). Work environment related aspects could be one of these 'value propositions'. However, after an extended literature review, it appeared that work environment related aspects are barely mentioned as a *value proposition* to become an *employer of choice*. Only attraction factor *Location* was found in some literature on employee attraction (Chambers, 1998; Uggerslev et al., 2012; Rampl, 2014), and some *workplace* related aspects such as 'nice seating', 'personal office', 'good view' were mentioned (Wong et al., 2017). Nontheless, the CIPD report on 'Resource and Talent Planning' explicitly included the 'Physical workplace'.

Therefore, it can be concluded that work environments barely play a role in literature on employee attraction within Human Resource Management, and in cases that work environment related aspects are mentioned, it is mainly focused on the location.

b. What is the role of employee attraction in research on corporate real estate management?

Scientific research on the influence of the work environment on employee attraction is very limited.
Most studies that are focused on the relation between people and the work environment examine the consequences and impact of specific work environment characteristics on employee behaviour, satisfaction, productivity and well-being (Giuliani & Scoplliti, 2009; Rothe, 2011). In contradiction to a lot of research that is focused on *satisfaction*, the research of Rothe et al. is most comparable to the topic of this thesis, as it focuses on *preferences*, which is tightly linked to *attraction* (Rothe, et al., 2011).

In addition, Appel-Meulenbroek (2007) acknowledges the influence that office buildings have on visitors and the (first) impression visitors may have of a work environment. Other researchers add that individuals are partly judged by their environment, wherefore the first impression of a work environment might influence the impression of an organisation positively or negatively (Slangen-de Kort, 2001; Wyon, 2004). The 'visitor' these researchers are discussing, could be a job applicant.

Therefore might these theories be applied to theories on employee attraction. In addition, the Real Property Policy team of the Government in Canada wrote a review on 'using the work environment to attract and retain talent' and concluded that the work environment is not and will not be "[…] the sole factor upon which people base their employment decisions." (Earle, 2003, p. 256). On the other hand, they conclude that the work environment affects quality of life, which influences all people's major decisions (Earle, 2003). The only found research that is specifically focused on the impact of the physical workplace on people's decision to accept a job, was the research of American Society of Interior Designers (ASID). In their results, the work environment appeared of great influence on employee attraction. However, this research is not completely adequate for Corporate Real Estate Management as it is conducted from an Interior Design perspective.

As *preferences* are tightly linked to *attraction*, a literature review is conducted to find work environment related factors that are most preferred by employees. Those factors can be divided into four main categories (based on Rothe, 2011): *Location, Services & Facilities, Building, Workplace*. The factors that appeared of importance when examining employee preferences are included within the empirical part of this thesis.

Therefore, it can be concluded that employee attraction barely plays a role in literature on work environments within Corporate Real Estate Management and that the most comparable scientific research is focused on *preferences* instead of the *influence of work environment on employee attraction*.

2. Which work environment characteristics are taken into consideration in job choice decision-making by knowledge workers?

This sub question is answered by the output of the literature review combined with the output of the structured interviews. As there was not found an extensive pool of literature on *work environment preferences* with variables that could potentially *attract* employees, structured interviews are held with ten different people from different perspectives to examine the found variables from literature. The interviews provide insights into the extent variables are considered as influential on employee attraction with the purpose to 1) evaluate the variables that are discussed in literature, and 2) add potential new variables.

The application of the results of the open-ended questions and the select & rank question of the interviews to the variables that were discussed in the literature review, provided insights in the characteristics that are taken into consideration in job choice decision-making by knowledge workers.

After reordering the outcome, the following can be concluded: the work environment characteristics that are taken into consideration in job choice decision-making by knowledge workers are

- Within the *Location* category: geographical location, location type, accessibility of location, and proximity of amenities;
- Within the *Services & Facilities* category: high quality ICT (helpdesk), high quality coffee, tea, and other refreshments, high quality and healthy (lunch) catering, and availability of car parking places;

- Within the *Building* category: building appearance, networking opportunities, and sustainability implementations;
- Within the *Workplace* category: interior design, variety in workplace types, personal workplace, opportunities for remote working, ergonomic workplace, and amount of light.

3. To what extent do knowledge workers take work environment characteristics into consideration in job choice decision-making?

This sub question is answered by a statistical analysis of the survey results. A survey was distributed online among knowledge workers and students who will become knowledge workers, after which the results were analysed in IBM SPSS. The statistical analysis is mainly focused on determining variables that have significantly most influence on employee attraction. The first part analyses the whole sample of 368 respondents as one homogeneous group. The second part of the analysis is focused on the heterogeneous data and compares groups of different (socio-demographic) perspectives in order to enable advising companies on attracting their specific employee target group.

To determine the extent to which knowledge workers take work environment characteristics into consideration in job choice decision-making, the influence of the *work environment* should be compared to *general employee attraction* variables. These selected *general employee attraction* variables are: organisational image, rewards, social climate, development opportunities and working hours. When the survey participants was asked to divide 100 points over these variables, it appeared that *work environment* got on average the second lowest number of points with an average of 14,5 points and a median of 14 points. The two variables that almost equally got on average the highest number of points are *Social Climate* (mean and median are both 20) and *Rewards* (mean and median are both 20).

This second-highest place might insinuate that the *Work Environment* is not that influential on employee attraction. However, when taking into account that the Work Environment is barely discussed in literature on Employee Attraction within literature on Human Resource Management (chapter 3.2), this place in the rank order with a mean that does not differ that much from the other variables, could be considered as rather high and previously overlooked.

Moreover, when the survey participants are asked about the influence of the *Work Environment* on their choice for a new job in the end of the questionnaire, with no other variables included in this question, they allocated the influence of the work environment with 52 points on average. This extremely higher number of points might be explained by that 1) points did not have not to be divided over multiple variables, and 2) the participants were confronted throughout the survey with all different aspects that are associated with the *work environment*, wherefore they might realise its actual influence on their job choices.

Therefore can be concluded that the *work environment* certainly has a substantial influence on employee attraction. However, the extent of influence it actually has is ambiguous since the survey respondents value the *work environment* significant differently in different questions.

When evaluating the extent to which the *work environment* variables are taken into account in job choice decision making, it appeared that *Location* is significantly valued as most influential. This is in accordance with the findings of the literature review, in which became clear that *Location* was the only specific mentioned work environment related factor in literature on employee attraction in Human Resource Management. The main variable that is valued second highest, and is significantly valued higher than the residual variables, is the *Workplace* variable. An explanation could be the current societal health trend in combination with the media who are emphasising the bad influence of sitting behind a desk on a daily basis.

When zooming in on the sub variables, the allocated values of the main variables are taken into account. It appears that Location variables *Geographical location* and *Accessibility of the Location* extremely stand out in the amount of allocated points, both with an average of 14,0 points (without multiplying by the value of work environment within the General Employee Attraction list). These variables are followed by *High quality and healthy (lunch) catering* (μ = 6,4), *opportunities for remote working* (μ = 6,2), *amount of light* = 5,4), and *building appearance* (μ = 5,3).

Relatively seen are these amounts of points quite low when plotting them on a 100-point scale. However, the amount of points might be comparable with sub variables that are concerned with the other General Employee Attraction factors. Moreover, it might be effective to invest in the work environment when focussing on other aspects of the results. From a financial point of few, the respondents value the *Work Environment* (μ = 43) not extremely lower than *Rewards* (μ = 57), such as salary, when asking them to divide 100 points over these two factors. In addition, when taking into account that the respondents are on average willing to give up 7,1% of their (future) salary in exchange for their *ideal* work environment, it might be financially seen effective to invest in the *work environment* related factors that influence their choice for a certain job the most.

4. How can companies use knowledge on work environments to enhance competitive advantage within the war for talent?

In the literature on Human Resource Management is recommended to specify a profile of the specific employee target group in order to tailor the recruitment practices to this group and attract the most suitable employees (Armstrong, 2014; Chambers et al, 1998; Hiltrop, 1999). Moreover, graduation organisation JLL emphasised their use of employee profiles to explain different types of employees to their clients. They recommended creating employee profiles as a useful way of applying the generated knowledge in practice. Hence, the statistical analysis of the data on the heterogeneous groups from different perspectives is used to create employee profiles. These employee profiles present the results of the heterogeneous data in a simplified and visualised way in order to make it usable for companies.

The created profiles cover the following groups of potential employees: students, starters, mid ranged employees, experienced professionals, managers, university educated, applied science educated, Millennials, and women. In addition, a reference profile is created that represents the results of the representative sample of the research as a whole: the homogeneous data.

The profiles that are concerned with the career path of (future) knowledge workers are combined into one scheme (figure 6.12), in which is shown how employee perceptions on the influence of work environments develop throughout the years of employment.

What mainly stands out is the development of the influence of the General Employee Attraction factors. It seems that the high influence of *Social Climate* and *Development Opportunities* are exchanged for the high influence of *Rewards* throughout the years that people are working. Another observation is that the influence of *Working Hours* gets a peak in a stage that many people get children.

While students are willing to give up quite some salary, 10,4%, in exchange for their *ideal* work environment, this percentage of salary decreases during their career to 4,6%, in a stage wherein they have more than 15 years of work experience. This is in accordance with the increasing influence of *Rewards* throughout a career path.

Remarkable is that the influence of the *Work Environment* remains stable within all stages of knowledge workers' career paths, wherefore the outcome of this research is similarly interesting for people within all different career stages.

These results also show that three sub factors remain of stable influence on employee attraction throughout the work years: *Geographical Location, Accessibility,* and *Healthy Catering*. Furthermore, whereas *Building Appearance* and *Sustainability Implementations* are significantly more influential for students, people who are already working value *Remote Working* and *Amount of Light* significantly more influential.

When companies consult the created employee profile(s) that is (/are) in accordance with their desired employee target group(s) and take into account the corresponding information in their work environment related adjustments, these companies can enhance their competitive advantage within the war for talent.

RESEARCH QUESTION

What is the influence of work environments on attracting employees to enhance competitive advantage within the war for talent?

Companies are 'fighting' for the most suitable employees within 'the war for talent' and are prioritising employee attraction within their overall business strategies. As there is assumed that work environments –consisting of a wide range of characteristics on location, service & facilities, building, and workplace level– have a positive influence on employee attraction, companies make investments in their work environments in an attempt to attract their employee target group. However, it has not been proven that work environments have an actual influence on employee attraction, wherefore is unknown whether these investments are effective. Therefore, in order to provide insights to companies to be used as part of their strategies on enhancing their competitive advantage within the war for talent, the goal of this research is to identify the influence of work environments on employee attraction.

There are many factors that have an influence on people's decision for a certain job at a certain employer. This thesis focuses on five of these General Employee Attraction factors that are perceived as most influential on employee attraction: the image of the organisation, rewards, social climate, development opportunities, and working hours. The influence of the *work environment* is tested against these general attraction factors. From the statistical analysis appeared that the *work environment* has a comparable influence on employee attraction as the other five factors. When rank ordered, *Social Climate* followed by *Rewards*, appeared most influential on employee attraction, and Work Environment received the second lowest place, just above *Image of the Organisation*. This second-highest place might insinuate that the *Work Environment* is not that influential on employee attraction. However, when taking into account that the Work Environment is barely discussed in literature on Employee Attraction within literature on Human Resource Management (chapter 3.2), this place in the rank order with a mean that does not differ that much from the other variables, could be considered as rather high and previously overlooked.

It is exceptional that there is in the analysis of the heterogeneous data not a single significant difference found between different groups within the tested (socio-demographic) perspectives concerning the influence that the *work environment* has within this list of General Employee Attraction factors. Therefore can be concluded that all survey respondents have a comparable opinion on the degree of influence that the *work environment* has on their choice for a new job.

When asking the survey participants about the influence of the *work environment*, without including other factors, the degree of influence was valued much higher than when testing its influence against the General Employee Attraction factors. However, the respondents valued the influence of *work environments* very diverse in this question with values varying from 0 to 100.

When zooming in to the main categories that the work environment consists of, *Location, Services & Facilities, Building,* and *Workplace*, it can be concluded that *Location* has significantly most influence on knowledge workers' choice for a certain job. The variable *Location* was significantly higher valued by employed people (over students), by women (over man), by people living with child(ren) (and partner) or partner (over people living with friends), and by individual contributors (over managers). Besides, *Workplace* has significantly more influence than the other two variables, *Services & Facilities* and *Building*.

By examining the influence of the sub variables, it became clear that *Geographical Location* and A*ccessibility of the Location* were extreme significantly higher valued than any other sub variable. *Geographical Location* is significantly valued of higher influence by employed people (over students) and by Generation X (over Millennials). In contrast, the degree of influence of A*ccessibility* is not valued significantly different among groups within any tested (socio-demographic) perspective. However, when examining the transport preference appears that Millennials significantly more often prefer going to their work by bicycle (compared to Generation X), while Generation X significantly more often prefers going by car (compared to Millennials). Sub variable *High Quality and Healthy (lunch) Catering* appeared also to be very influential on knowledge workers' decision for a certain job when assessing the work environment related factors. For example, women value this variable significantly higher than men and Millennials significantly higher than Generation X. Another variable that was valued very high is *Opportunities for Remote Working*, which is significantly valued higher by employed people (over students), by Generation X (over Millennials), and by parttime workers (over fulltime workers).

In addition, it is noticeable that mainly employed people who value the variable *Personal Workplace* above average influential, prefer an assigned desk (with medium quality interior) significantly more often than all other respondents, who in general prefer a flexible desk (with high quality interior).

The respondents indicated that they are, on average, willing to give up 7,1% of their (future) salary in exchange for their *ideal* work environment. Big differences were measured between people who are already employed (they are willing to give up 6% of their salary) and students (they are willing to give up 10,4% of their future salary). This demonstrates that the *work environment* has such an impact on people's choices for a certain job, that they would agree with a lower salary. However, to some (socio-demographic) groups this is more applicable than to others. Next to the difference between employed people and students, women are significantly willing to give up more salary than men, Millennials significantly more than Generation X, people with a scientific educational level significantly more than people with a HBO educational level, and people with children significantly lesser than people within all other household compositions. However, their perceived *ideal* work environment differs significantly per group.

In providing companies insights in the influence of the work environments within the battle for their employee target groups, it can be concluded that the work environment has a comparable influence on knowledge workers' job choice decision-making relative to other attraction factors. It seems that many of the respondents realise that they spend the majority of their wakening lives in the workplace, as Earle expressed (Earle, 2003, p. 249). However, the *work environment* is not perceived as one of the most influential factors. In addition, almost all variables and sub variables showed significant differences in the opinions of groups from different (socio-demographic) perspectives. Therefore, the following advice for companies, in order to attract the employees they are targeting, is formulated: before making the decision to save on people's salary to invest it in the work environment, they should define their target group and subsequently link their target group to the corresponding employee profile. Besides, there should be taken into account that although people are placeable in certain (socio-demographic) groups, all individuals are different and therefore all have different preferences. The different aspects of the work environment should be set up in such a way that there is 'something for everyone' in order to be as attractive as possible for potential employees.

The work environment influences employee attraction in many ways. Some factors have more influence than others, and some people are more influenced by the work environment than others. But it can be stated that the *work environment* certainly competes with other influential factors as a strategic asset in this in this battle for employees!

8 DISCUSSION AND RECOMMENDATIONS

DISCUSSION AND RECOMMENDATIONS

8.1 DISCUSSION

Potential absence of information on work environment in job application process

In the selection of the work environment variables is attempted to only include variables which represent information that could be known by potential employees. However, it might be that the information is not present in some cases. For example, some companies invite students (multiple times) to their office as part of their recruitment strategy, while some companies do not. Likewise do some companies invite job applicants to their office (multiple times), while others have the job interview at an external location. Because of these differences in approach of different companies, there is a possibility that a potential employee has no or barely information on the work environment of a certain company. It can be assumed that in those cases, the work environment has another degree of influence on employee attraction.

Different economic circumstances

As is explained in the introduction of this thesis, the War for Talent is of all times, and is not only present in a prosperous economy. The War for Talent comes with the 'luxurious' situation that potential employees can be critical about accepting a job. However, when there is an economic recession it could be assumed that in general a smaller number of people are targeted within the War for Talent. In an economic recession, the people that are left out the War for Talent pool might be 'fighting' for retaining or getting a job, wherefore certain attraction factors -including the work environment- might play a smaller role or do not play a role at all.

Research Method

In this thesis is chosen for a survey to generate most information in order to answer the research question. There is a possibility that another research method, for example the use of qualitative interviews or case studies, might provide a different answer to the research question. This will be discussed further in paragraph 8,4.

8.2 LIMITATIONS

Theoretical Limitations

The scientific research on the thesis topic appeared to be very limited. If there would have been more literature on employee *preferences* within Corporate Real Estate Management, a more extended literature

review could have been conducted. This could have let to a more extensive evaluation of the relevant work environment variables, which would have prevented the structured interviews from being essential for the creation of a well-grounded survey.

Number of interviewees

In terms of time restrictions that come with this graduation thesis, ten interviewees have been interviewed as final part of determining the research variables. If more time would have been available, more interviewees would have been interviewed, which could have let to an even more grounded reasoning for the selection of the final variables.

Number and type of survey respondents

An important limitation of this research is the number of survey respondents. The aim was to receive as many respondents as possible in order to get as reliable data as possible. The representative sample was large enough to execute a lot of interesting analyses. However, some cross-group analyses of the heterogeneous data (for example on women with a managerial function), appeared not be possible due to a too small representative sample for those specific groups. Likewise, the combination of the relatively small sample group and the widespread distributed employed respondents among different professional sectors, caused that these groups became too small to draw reliable conclusions from.
Furthermore, the type of respondents has let to some limitations. For example, the majority of the participating students studies a technical study, wherefore a comparison between different study backgrounds would be unreliable.

8.3 VALIDITY AND RELIABAILITY

The survey was online from October the 28th till November the 12th (2019) and received 368 respondents who at least completely filled in the first *influence* question on the General Employee Attraction factors. From these 368 respondents, 337 finished all main questions about the influence of the work environment and their preferences. Eventually 329 respondents finished the complete survey, including the socio-demographic questions and, in some cases, the questions about the current work environment.

This sample is big enough to have sufficient sample sizes (> 30) per tested group in order to have normal distributed data with a mean that can be considered as equal to the population mean (Field, 2009).

With information from CBS, it is roughly estimated that approximately 3 million Dutch people have an office bound job (includes all jobs within the Business Services Sector, Information and Communication sector, Financial sector and Real Estate sector). Wherefore the sample of 329 respondents is relatively small. However, the principle of using statistics is to "collect data from a small subset of the population […] and use these data to infer things about the population as a whole." (Field, 2009, p. 34). Nonetheless, a bigger sample would have provided a more accurate representation of the population.

When analysing the (socio-demographic) background questions, it becomes clear that most of the groups are not equally presented in the sample of this thesis. However, this is taken into account when analysing these groups on significant mean differences.
Of all respondents, 76% is employed, against 24% who are students. The division per gender is comparable, although more women participated in the survey (57% women and 43% man). A significant part of the respondents is Millennial (75%) against the smaller groups of Generation X (21%) and Baby Boomers (4%). In addition, a significant large group of 60% has a university educational level (WO), against 30% of people with a HBO educational level. When looking to the professional sectors, a significant large group is employed in the real estate sector (36%) and when looking at the study backgrounds, 31% of the students studies a technical study. In addition, 31% of the employed respondents has more than 15 years of work experience. Moreover, 74% of the employed people is an individual contributor against 20% in a supervising function and 5% in a managing board function. Moreover, the majority of the employed respondents has a fulltime job (79%).

More information the reliability of the data can be found in paragraph 4.3.2.

8.4 RECOMMENDATIONS FOR FURTHER RESEARCH

Conjunct Method

The survey within this research mainly uses the constant sum method as question method. Another method that could be used is the 'conjunct method'. In this method the respondents have to choose repeatedly between two options that consist of several factors, wherefore an analysis can examine the value of each factor. This question method is not selected for this research by taking into account the survey response rate, because this question method would have extended the survey completion time. However, this method would be a very effective method to find out which variables -unconsciously- are of influence on employee attraction.

Qualitative Interviews

In this thesis, structured interviews are only used to determine the survey variables. Nevertheless, qualitative interviews could have strengthened the completeness of this research by finding more underlying reasons for the answers that the respondents have provided. More extensive and in-depth answers to questions concerning the influence of the work environment on employee attraction could potentially generate very interesting additions to this research.

Case Studies

Another recommendation is to use case studies in order to examine the influence of work environments on employee attraction. Some office buildings are well-known for their attractiveness, wherefore it would be interesting to examine whether these buildings actually attract the employee target group of the companies within these buildings. By using case studies, also work environments that are perceived as unattractive could be examined and compared with attractive work environments. Moreover, not

only companies in attractive buildings can be examined, there can also be focused on companies with very attractive locations, services & facilities, and workplaces.

More sub variables

In the research process is chosen to select certain sub variables to be tested in the survey in order to prevent the survey from being too extensive. Therefore, some variables are excluded, based on well-thought criteria and the structured interviews. A recommendation for future research is to include also the left out variables.

Employee retention

This thesis focusses solely on employee attraction, without considering employee retention. However, most articles combine these two perspectives.

The importance of employee retention is discussed in the introduction of this thesis, where is explained that the costs of employee replacement are very high. Also in the survey answers, some respondents indicated that the work environment does not influence their choice for a certain job, but does influence staying at a certain job. In this thesis is chosen to exclude research on *retaining* as retaining is directly linked to *satisfaction,* which is already a more researched topic within literature and therefore contributes less in filling a scientific gap. On the other hand, as there is not chosen to combine *attraction* and *retention,* this could be considered as a constraint of the research. Hence, there is recommended to do a research on the combination of *attraction* and *retention* in order to advice companies on how to *attract* and *retain* employees.

Push factor perspective

In this thesis, the work environment is only examined from an *attraction* (pull) perspective. The work environment from a *push* perspective, in which is assessed which work environment characteristics might influence the decision for not accepting a job, is not included. Therefore is recommended to study in future research which work environment characteristics might be a push factor and what the influence of these push factors is on employee attraction.

The content of the job

In this research is decided to exclude the actual content of the job as an assessed variable in the General Employee Attraction category. This research is executed with the constraint that the content of the job would be the same for different imaginary choices. However, as some of the survey participants remarked that the content of the job is the most important factor for their choice for a job, it would be interesting to include this variable in future research and test it against the other General Employee Attraction variables, including the Work Environment. Moreover, Thompson (2011) indicates that different generations think differently about the importance of the content of the job. He states in his research that the job itself is for Millennials of secondary concern, as other factors that guide the work experience, such as social utility, are prioritised. Based on these two reasons, it is recommended for future research to do a similar research, taking into account *the content of the job*.

8.5 REFLECTION

FROM A PERSONAL POINT OF VIEW

When reflecting on the past twelve months, I look back at a fruitful, instructive, and joyful period. It already started with getting in contact with graduation company JLL in November 2018, which was exciting and challenging at the same time. By getting in contact with my internship company in an early stage, I started discussing potential graduation topics before the beginning of formal graduation process. My mentors at JLL provided me insights in 'hot topics' from practice, which is in my opinion very useful for a thesis in terms of ensuring that the topic will not only be of scientific relevance, but of societal relevance as well. When I came in contact with my first mentor Philip, he was immediately enthusiastic about doing 'something with locations and employee attraction'. With support of Philip and my graduation mentors I managed to develop the eventual topic of my research: the influence of work environments on employee attraction. My enthusiasm originated partly from my board year at study association BOSS, which I was still part of during the first half of my graduation process. One of the purposes of BOSS is bringing students in contact with potential employers. Especially my function within this board, organising the Real Estate Career Day, is completely focused on this purpose. As I was concerned with connecting students and companies from both perspectives, and meanwhile studying a built environment masters, both interests came perfectly together in this research topic.
Overall, the research process went quite well. I rapidly found the ten people for my structured interviews, got a really convenient software from the TU Delft for my survey (Qualtrics), and got help in analysing my SPSS results from Drs. Gust Marien, employed at the OTB section at the Architecture faculty. In contrast, recruiting companies for distributing my survey was a bit harder than expected. Many companies did not want to bother their employees with another survey and some companies that agreed with distributing the survey, eventually did not. However, luckily I managed to distribute it among five companies and got enough respondents (386) to draw useful conclusions from.

As I really enjoy doing research, I implemented many different research components within the process. This, in combination with that I always do an extensive investigation before I write something down or draw conclusions (my friends call me the "uitpluis-queen"), and my devotion for visualising complex information, resulted in some risks within the time planning. However, I eventually managed to execute all research parts as proposed at the beginning of the graduation process. The results of the thesis appeared to be very interesting, which has motivated me even more to do my utmost to deliver a thesis to be proud of. Hopefully, this thesis contributes to scientific research and to the attraction of employees in practice.

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APPENDICES

APPENDIX I.I | EVALUATION WORK ENVIRONMENT CRITERIA

WORK ENVIRONMENT VARIABLES		Category	Sub category
Image of area	1	Location	General
Safety and cleanliness of area	1	Location	General
Central location	1	Location	General
Accessibility general	1	Location	Accessibility
Accessibility by car	1	Location	Accessibility
Accessibility by public transport	1	Location	Accessibility
Accessibility by walking/ bike	1	Location	Accessibility
Proximity of nature	1	Location	Prox. Of facilities
Proximity restaurants/ cafetarias/ bars	1	Location	Prox. Of facilities
Proximity leisure and culture services	1	Location	Prox. Of facilities
Proximity bank, post, healthcare	1	Location	Prox. Of facilities
Proximity fitness center	1	Location	Prox. Of facilities
Proximity kindergarten	1	Location	Prox. Of facilities
Proximity physioterapist	1	Location	Prox. Of facilities
Overall building	1	Building	General
Building image/ appearance/ aesthetics	1	Building	General
Networking opportunities in the building	1	Building	General
Practical/ hospitality services	2	Services & Facilities	
Lobby/ reception	2	Services & Facilities	
Coffee, tea, other refreshment facilities	2	Services & Facilities	
Building layout	2	Building	General
Cleanliness	2	Building	General
Lightning/ day light	2	Building	Climate
Temperature	2	Building	Climate
Acoustics/ noise	2	Building	Climate
Floor layout	2	Workplace	General
Interior design	2	Workplace	General
Amount of workspace/ density	2	Workplace	General
Openness and transparency of environment	2	Workplace	General
Variety in workspace types	2	Workplace	Types
Meeting places	2	Workplace	Types
Social/ informal places	2	Workplace	Types
Open places	2	Workplace	Types
Innovative places	2	Workplace	Types
Individual workplace layout	2	Workplace	Individual workplace
Functionallity and comfort/ ergonomics of workplace	2	Workplace	Individual workplace
Personalisation of work area	2	Workplace	Individual workplace
(Comfort of) furnishing	2	Workplace	Individual workplace
Privacy	2	Workplace	Contact
Accessbility/ interaction on workfloor	2	Workplace	Contact
Opportunities to communicate	2	Workplace	Contact
Environment supports collaboration	2	Workplace	Contact
Space supports organisational image and values	2	Other	
Possibility to adjust workplace	2	Workplace	Individual workplace
General facilities (management)	3	Services & Facilities	
Parking places (car, motorbike, bicycle)	3	Services & Facilities	
ICT (services)	3	Services & Facilities	
Restaurant offering in the building	3	Services & Facilities	
Choice of workplace	3	Workplace	General
Work related services	4	Services & Facilities	
Opportunities for remote working	4	Workplace	General
Shower and changing facilities	5	Services & Facilities	
Storage space	5	Services & Facilities	
Health and safety provisions	5	Building	General
(Adjustability of) indoor climate	5	Building	Climate
Air control	5	Building	Climate
Material properties (e.g. reflection, isolation)	5	Building	Climate
Room booking systems	5	Workplace	General
Influence on workplace development	5	Workplace	General
Concentration	5	Workplace	Contact
Environmental impact	5	Other	

Knowable by knowledge/ using internet	1	
Noticable when visiting the office	2	
Noticable when visiting the office or knowing after asking (appropriate to ask)	3	
Knowable after asking (appropriate to ask)	4	
Hard to notice when visiting the & topics that are inappropriate to ask	5	Not included in final list

APPENDIX I.II | INTERVIEW QUESTION 3

Select and rank the 7 most important work environment related factors when considering a potential employer:

LOCATION

- ☐ Geographical location
  e.g. in a specific city
- ☐ Image of the location
- ☐ Type of location
  e.g. located in business district/ city centre/ suburb
- ☐ Accessibility of the location
- ☐ Proximity of amenities
  e.g. park, restaurants, fitness centre, physiotherapist

SERVICES & FACILITIES

- ☐ High quality hospitality services
- ☐ High quality ICT services
- ☐ High quality and newest ICT
- ☐ High quality coffee, tea, or other refreshment facilities
- ☐ High quality office restaurant
- ☐ Availability of car parking places

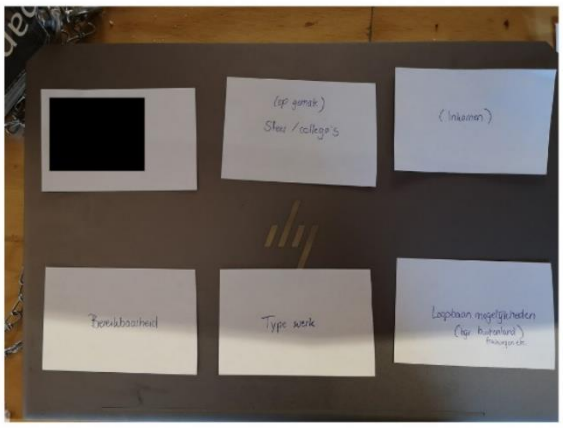
BUILDING

- ☐ Building appearance
- ☐ Networking opportunities
- ☐ Sustainability implementations

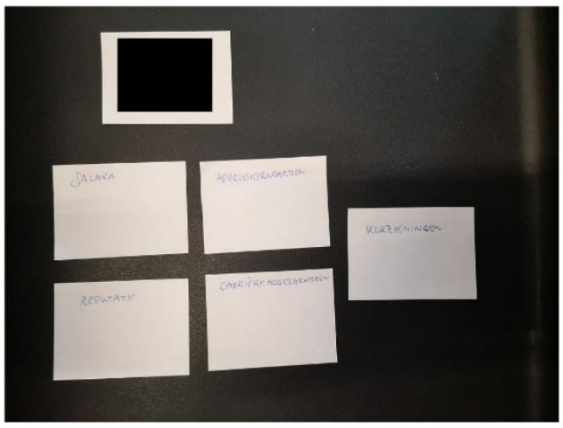
WORKPLACE

- ☐ Floor layout
  e.g. open floor plan, cellular rooms
- ☐ Interior design
- ☐ Own desks or flexible desks
- ☐ Opportunities for remote working
  facilities and work culture that allow working at home/ in train/ in café etc.
- ☐ Amount of workspace
- ☐ Variety in workspace
  e.g. concentration places, meeting places, informal places, open places, etc.
- ☐ Workplace environment supports collaboration
- ☐ Privacy
- ☐ Disturbance/ noise level
- ☐ Informal spaces
  e.g. to have breaks and relax
- ☐ Cleanliness
- ☐ Amount of light
  daylight and lighting
- ☐ Possibility to adapt temperature

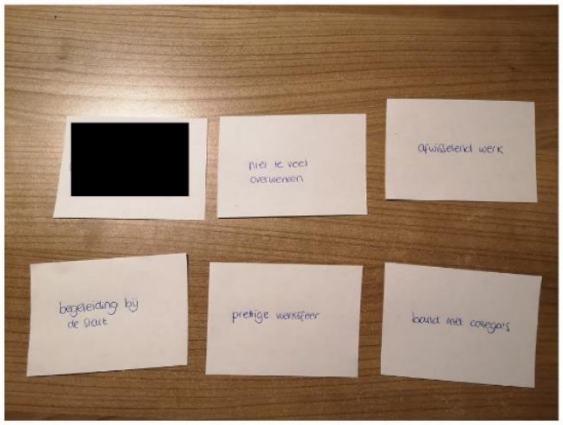
APPENDIX I.III | INTERVIEW RESULTS QUESTION 1



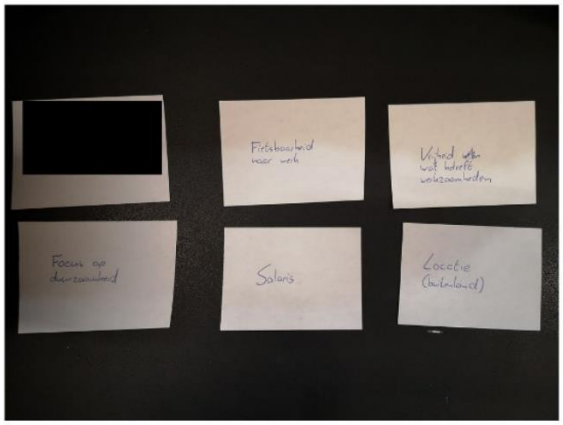
Student 1



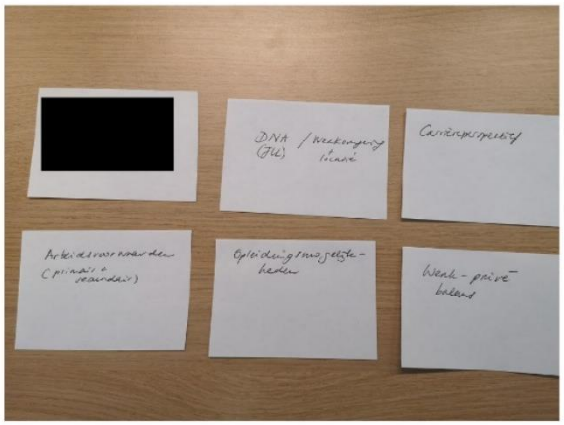
Student 2



Student 3

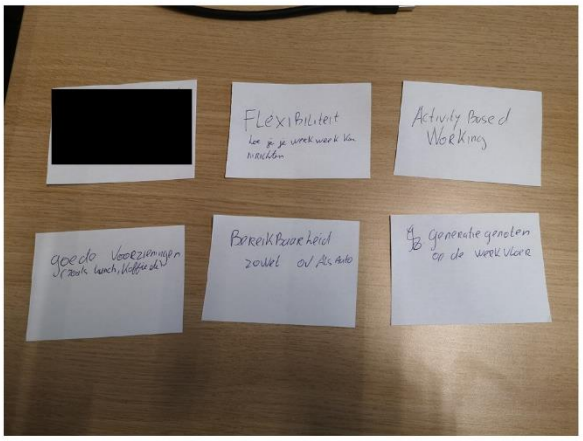


Student 4

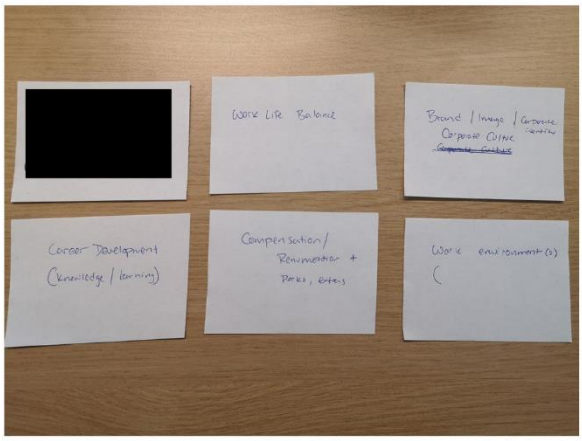


HR Professional 1

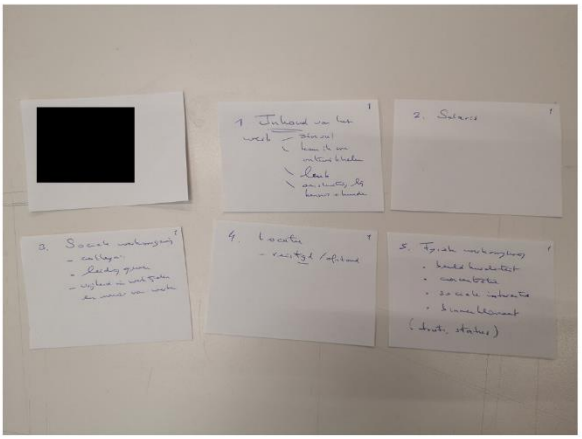
HR Professional 2



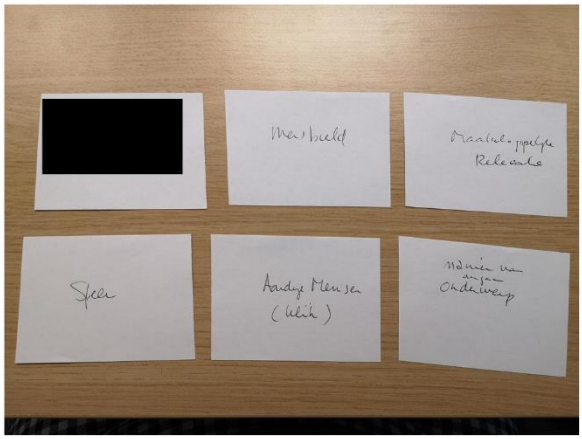
Real Estate Consultant 1



Real Estate Consultant 2



External Expert 1



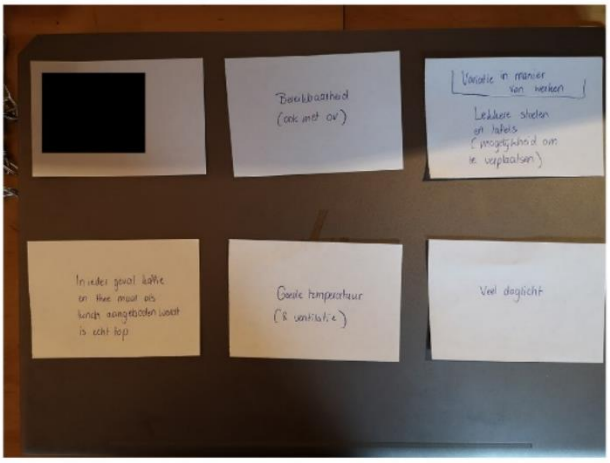
External Expert 2

APPENDIX I.IV | OVERVIEW INTERVIEW RESULTS QUESTION 1

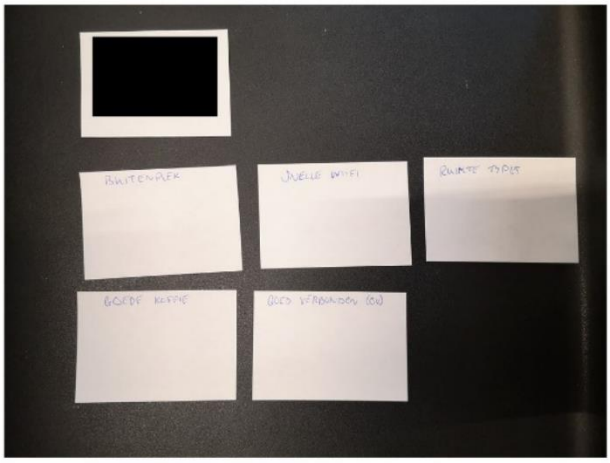
FACTORS	Student 1	Student 2	Student 3	Student 4	HR Professional 1
Salaris	Salaris	Inkomen		Salaris	
Arbeidsvoorwaarden	Arbeidsvoorwaarden				Arbeidsvoorwaarden (primair & secundair)
Reputatie/ DNA/ brand	Reputatie				DNA (werkomgeving & locatie)
Carrièremogelijkheden	Carrièremogelijkheden	Loopbaan mogelijkheden			Carrièreperspectief
Opleidingsmogelijkheden			Begeleiding bij start		Opleidingsmogelijkheden
Collega's/ werksfeer		Sfeer & collega's	Prettige werksfeer en band met collega's		
Bereikbaarheid		Bereikbaarheid		Bereikbaarheid algemeen en met fiets	
Flexibiliteit & balans werk-privé			Niet teveel overwerken	Vrijheid in werkzaamheden	Werk-privé balans
Voorzieningen	Voorzieningen				
Fysieke werkomgeving					
Rest		Type werk	Afwisselend werk	Focus op duurzaamheid	

HR Professional 2	Real Estate Consultant 1	Real Estate Consultant 2	External expert 1	External expert 2	times noted in total
		Compensation/ Renumeration	Salaris		5
Arbeidsvoorwaarden					3
Uitstraling/ brand/ horen van vrienden		Brand/ image/ corporate identity/ corporate culture			4
Carrièremogelijkheden		Career Development (knowledge/ learning)			5
			Ontwikkelingsmogelijkheden		3
	Generatiegenoten		Sociale werkomgeving (collega's, leidinggevende, vrijheid van werktijden)	Sfeer, aardige mensen	5
	Bereikbaarheid OV & auto		Locatie (reistijd & afstand)		4
	Flexibiliteit werkuren	Work life balance			5
	Goede voorzieningen (lunch, koffie, etc.)				2
	Activity Based Working	Work environment	(beeldkwaliteit, concentratie, sociale interactie, binnenklimaat)		3
Iets goeds doen voor maatschappij (social repsonisbility)				Mensbeeld, maatschappelijke relevantie, manier van aangaan onderwerp.	

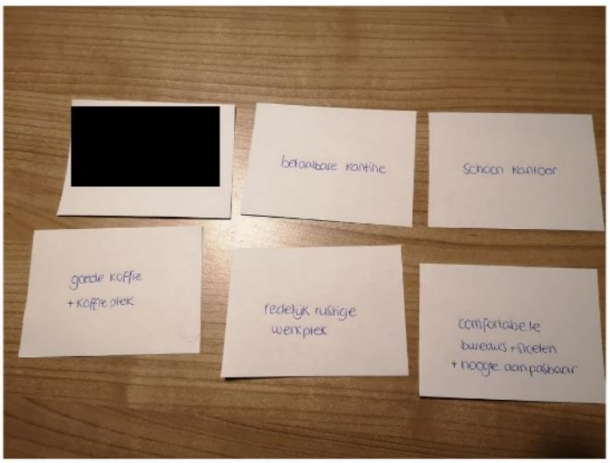
APPENDIX I.V | INTERVIEW RESULTS QUESTION 2



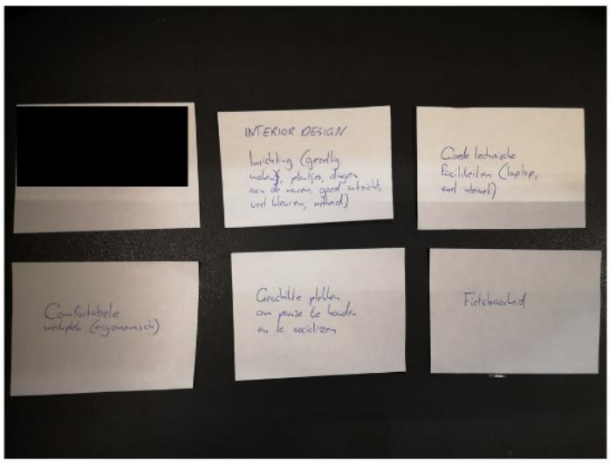
Student 1



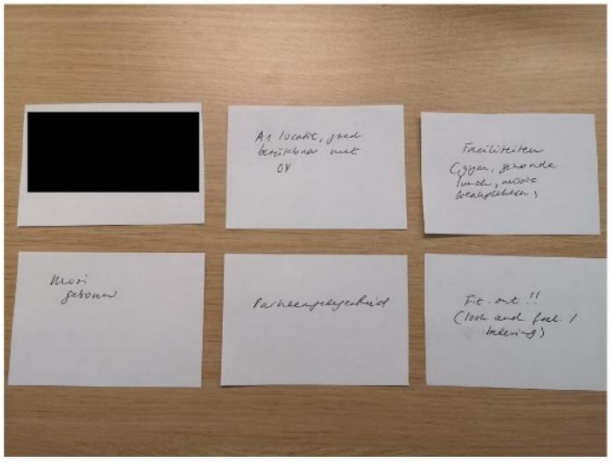
Student 2



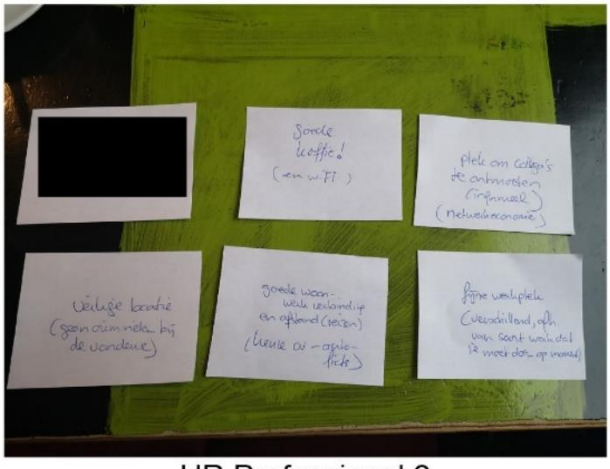
Student 3



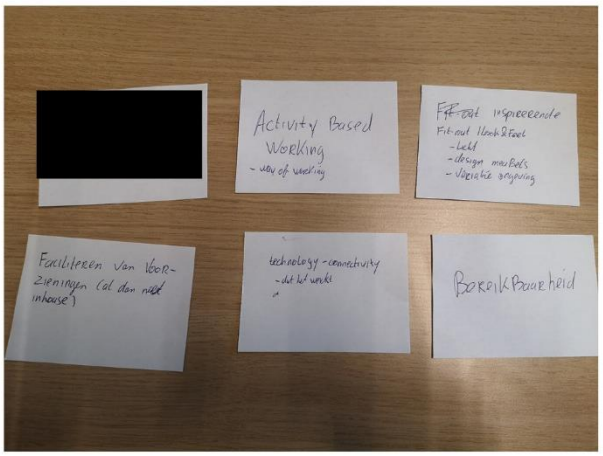
Student 4



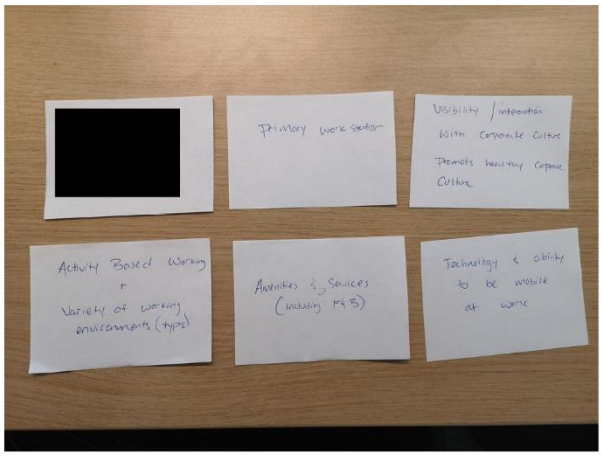
HR Professional 1



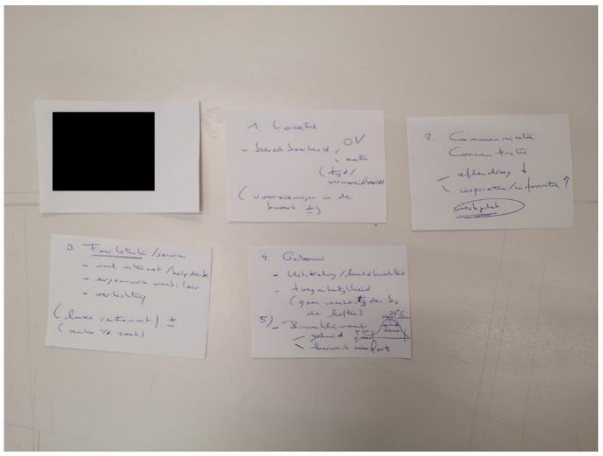
HR Professional 2



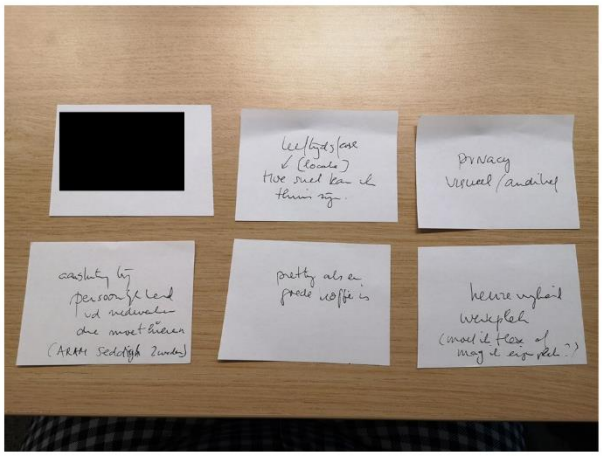
Real Estate Consultant 1



Real Estate Consultant 2



External Expert 1



External Expert 2

APPENDIX I.VI | OVERVIEW INTERVIEW RESULTS QUESTION 2

	FACTORS	Student 1	Student 2	Student 3	Student 4	HR Professional 1
LOCATION	Geograpical location					A1 locatie, goed bereikbaar met OV
	Image of the location					
	Type of location					
	Accessibility of the location	Goede verbinding (OV)	Bereikbaarheid (ook OV)		Bereikbaarheid met fiets	
	Proximity of amenities					Faciliteiten (gym, gezonde lunch, mooie werkplekken)
SERVICES AND FACILITIES	High quality hospitality services					
	High quality ICT services					
	High quality and newest ICT	Snelle wi-fi			Technische faciliteiten	
	High quality coffee, tea, or other refreshment fac.	Goede koffie	Koffie & Thee	Goede koffie & koffieplek		
	High quality office restaurants		Lunch is "echt top"	Betaalbare kantine		
	Availability of car parking places					Parkeergelegenheid
BUILDING	Building appearance					Mooi gebouw
	Networking opportunities					
	Sustainability implementations					
WORKPLACE	Floor layout					
	Interior design				Interior design	Fit-out (look and feel, beleving)
	Own desks or flexible desks					
	Opportunities for remote working					
	Amount of workspace					
	Variety in workspace	Ruimte types	Variatie in werkplekken			
	Workplace environment supports collaboration					
	Privacy					
	Disturbance/ noise level			Rustige werkplek		
	Informal spaces				Informele ruimtes	
	Cleanliness			Schoon kantoor		
	Amount of light		Veel daglicht			
	Possibility to adapt temperature		Goede temperatuur (& Ventilatie)			
Other		Buitenplek		Comfortabele bureaus en stoelen & aanpasbaarheid	Comfortabele, ergonomische werkplek	

HR Professional 2	Real Estate Consultant 1	Real Estate Consultant 2	External expert 1	External expert 2	times noted in total
				Locatie: reistijd	2
Bereikbaarheid (keuze ov, auto,	Bereikbaarheid		Locatie (bereikbaarheid OV en auto) (voorzieningen in de		6
	Faciliteren voorzieningen (intern of	Amenities & services (incl. food & beverage)			3
			Helpdesk		
	Technology-connectivity	Technology & ability to be mobile	Snelle wifi		4
Goede koffie & wifi				Prettig als er lekkere koffie is	5
			Luxe restaurant		3
					1
			Gebouw: beeldkwaliteit, toegankelijkheid		2
				Aansluiten werkomgeving bij persoonlijkheid van	1
	Inspirerende fit-out (licht, design,				3
		Primary work station		Keuzevrijheid werkplek (moét je flexplek of mag je eigen	2
		Technology & ability to be mobile at work			1
Verschillende soorten werkplekken		Activity based working + variety of working			4
	Activity Based Working		Werkplek: Communicatie vs concentratie		2
				Privacy: visueel en auditief	1
			Geluid		2
Informele plekken om collega's te ontmoeten					2
					1
					1
			Technisch comfort		2
Veilige locatie		Visibility/ interaction with corporate culture. Promotes healthy corporate culture	Ergonomisch meubilair, auto vd zaak		

CATEGORIES	FACTORS	Student 1	Student 2	Student 3	Student 5	HR Professional 1	HR Professional 2	Real Estate Consultant 1	Real Estate Consultant 2	External expert 1	External expert 2	Points
LOCATION	Geograpical location				7	7		5			1	20
	Image of the location											0
	Type of location						1		7			8
	Accessibility of the location	6	5	3			6	3		7		30
	Proximity of amenities		2									2
SERVICES	High quality hospitality services					4						4
AND FACILITIES	High quality ICT services						5			2	3	10
	High quality and newest ICT							2		4		6
	High quality coffee, tea, or other refreshment facilities	1	1	4	1	3	7		3		4	24
	High quality office restaurants			2								2
	Availability of car parking places					5						5
BUILDING	Building appearance	2				1				1		4
	Networking opportunities											0
	Sustainability implementations								7			7
WORKPLACE	Floor layout								4	6		10
	Interior design				5	2						7
	Own desks or flexible desks				6			6			5	17
	Opportunities for remote working	3	6			6	3	1		3		22
	Amount of workspace				3				5			8
	Variety in workspace	7	4	7			4	7	6		4	39
	Workplace environment supports collaboration							4				4
	Privacy										6	6
	Disturbance/ noise level	4	3	6						5	7	25
	Informal spaces	5		1	2							8
	Cleanliness											0
	Amount of light		7	5	4		2		2			20
	Possibility to adapt temperature											0

≤9
10 till 19
20 till 29
≥ 30

APPENDIX I.VIII | INTERVIEW CONCLUSION SCHEME

CATEGORIES	FACTORS	Points	Remarks	Conclusion
LOCATION	Geograpical location	20		include
	Image of the location	0	Important in interviews (after formal part)	include
	Type of location	8	Important in interviews (after formal part)	include
	Accessibility of the location	30	Important in interviews	include
	Proximity of amenities	2	Important in interviews (after formal part)	include
SERVICES	High quality hospitality services	4	Barely mentioned	exclude
AND FACILITIES	High quality ICT services	10	Important in interviews. Combine with high quality and newest ICT.	include
	High quality and newest ICT	6	Combine with ICT sercvices	include
	High quality coffee, tea, or other refreshment facilities	24	Important in interviews	include
	High quality office restaurants	2	Important in interviews (after formal part)	include
	Availability of car parking places	5	Important in interviews (after formal part)	include
BUILDING	Building appearance	4	Of high relevance for MSc field: MBE	include
	Networking opportunities	0	Of high relevance for MSc field: MBE	include
	Sustainability implementations	7	Of high relevance for MSc field: MBE	include
WORKPLACE	Floor layout	10		include
	Interior design	7	Important in interviews (after formal part)	include
	Own desks or flexible desks	17		include
	Opportunities for remote working	22		include
	Amount of workspace	8	Need	exclude
	Variety in workspace	39	Important in interviews	include
	Workplace environment supports collaboration	4		exclude
	Privacy	6	Need	exclude
	Disturbance/ noise level	25	Need	exclude
	Informal spaces	8		exclude
	Cleanliness	0	Need	exclude
	Amount of light	20		include
	Possibility to adapt temperature	0	Need	exclude

≤9
10 till 19
20 till 29
≥ 30

APPENDIX II.I | QUANTITATIVE OPERATIONALISATION TABLE SURVEY

Concept	Sub Concept	Question Name	Variable (dimension)	Indicator	Set of Values	Type of question	Type of data	Question	Set of interviewees
Demographic Background		Q1	Demographic split	Type of daily activity	I am a student I am employed I am looking for a job (recently graduated or stopped studying) I am looking for a job (prior work experience)	Select	Nominal	Select what applies to you:	All respondents from sample
General Employee Attraction	Image of Organisation	Q2.1_1	Influence of General Employee Attraction Variables	Degree of influence	0 - 100	Constant Sum	Scale	How much influence do the following factors have on your choice for a new job?	All respondents from sample
	Rewards	Q2.1_2							
	Social Climate	Q2.1_3							
	Development Opportunities	Q2.1_4							
	Working Hours	Q2.1_5							
	Work Environment	Q2.1_6							
	Rewards (vs Work Environment)	Q2.2_1	Influence of General Employee Attraction Variables	Degree of influence	0 - 100	Constant Sum	Scale	Just focusing on 'rewards' and 'work environment', how much influence do the following factors have on your choice for a new job?	All respondents from sample
	Work Environment (vs Rewards)	Q2.2_2							
		Q2.3SL	% future salary in exchange for ideal work environment	% salary	0 - 100	%	Scale	What maximum percentage (%) of your future salary would you give up in exchange for your ideal work environment?	Only for participants who selected 'I am a student', 'I am looking for a job (recently graduated or stopped studying)' or 'I am looking for a job (prior work experience)' in Question 1.
		Q2.3E	% current salary in exchange for ideal work environment					What maximum percentage (%) of your current salary would you give up in exchange for you ideal work environment?	Only for participants who selected 'I am a employed' in Question 1.
Work Environment	Location	Q3_1	Influence of Work Environment Variables	Degree of influence	0 - 100	Constant Sum	Scale	How much influence do the following factors have on your choice for a new job?	All respondents from sample
	Services & Facilities	Q3_2							
	Building	Q3_3							
	Workplace	Q3_4							
Location	Geographical Location	Q4.1_1	Influence of Location Variables	Degree of influence	0 - 100	Constant Sum	Scale	How much influence do the following factors have on your choice for a new job?	All respondents from sample. Except from respondents who allocated 0 points to Location in Q3.
	Location Type	Q4.1_2							
	Accessibility of the location	Q4.1_3							
	Proximity of Amenities	Q4.1_4							
		Q4.2	Specific City Preference	-	Yes (please specify) No	Select	Nominal	Is there a specific location or city in which you would like to work?	
	Historical City Center	Q4.3_1	Location Types	Extent would like	Not at all Rather not	Likert	Ordinal	Indicate to what extent	

	Central Business District	Q4.3_2			Neutral Gladly With Great Pleasure			you would like to work at the following location types:	
	Office Complex at City Outskirts	Q4.3_3							
	Former Industrial Site at City Outskirts	Q4.3_4							
	Business Park Outside City	Q4.3_5							
	County House	Q4.3_6							
		Q4.4_1 Q4.4_2 Q4.4_3 Q4.4_4 Q4.4_5 Q4.4_6 Q4.4_7 Q4.4_8 Q4.4_9 Q4.4_10	Location Type Preference Reasoning	Reasoning	Well accessible by train closeby My family/ friends react enthusiastically to this location Pleasant environment for breaks View Networking opportunities Atmosphere of the location Familiar environment Other (please specify):	Select	Nominal	Why would you want to work on the location you appreciated the highest in the previous question?	
		Q4.5	Means of Transport Preference	Preference	Car Public Transport Bicycle	Select	Nominal	Which means of transport would you prefer to travel to work with?	
Services & Facilities	High quality and ICT helpdesk	Q5_1	Influence of Services & Facilities Variables	Degree of Influence	0-100	Constant Sum	Scale	How much influence do the following factors have on your choice for a new job?	All respondents from sample. Except from respondents who allocated 0 points to Services & Facilities in Q3.
	High quality coffee, tea and other refreshments	Q5_2							
	High quality and healthy (lunch) catering	Q5_3							
	Availability of car parking places	Q5_4							
Building	Building Appearance	Q6_1	Influence of Building Variables	Degree of Influence	0-100	Constant Sum	Scale	How much influence do the following factors have on your choice for a new job?	All respondents from sample. Except from respondents who allocated 0 points to Building in Q3.
	Networking Opportunities	Q6_2							
	Sustainability	Q6_3							
Workplace	Interior Design Office	Q7.1_1	Influence of Workplace Variables	Degree of Influence	0-100	Constant Sum	Scale	How much influence do the following factors have on your choice for a new job?	All respondents from sample. Except from respondents who allocated 0 points to Workplace in Q3.
	Personal Workplace	Q7.1_2							
	Remote Working	Q7.1_3							
	Ergonomic Workplace	Q7.1_4							
	Amount of Light	Q7.1_5							
	Variety in Workplace Types	Q7.1_6							
		Q7.2	Preference of desk vs. quality interior	Preference	Assigned desk + average quality interior design Flexible desk + high quality interior design	Select	Nominal	What kind of workplace do you prefer?	
		Q8.1_1	Influence Work Environment	Degree of Influence	0-100	%	Scale	How much influence does the work environment* have on your choice for a new job?	
Current Work Environment	Own Workplace	CS1_1	% Time Spend	% time	0-100	Constant Sum	Scale	What percentage of your time do you spend at the following places during an average	Only for participants who selected 'I am employed' in Question 1.
	Somewhere else at the office	CS1_2							
	Out of office	CS1_3							

								working week:	
		CS2	Desk Type	Applicable	Assigned desk Flexible desk Other (please specify)	Select	Nominal	Select what applies to your current work environment:	
	Location	CS3_1	Satisfaction Current Situation	Degree of Satisfaction	Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied	Likert Scale	Ordinal	Indicate how satisfied you are with the following components of your current work environment	
	Services & Facilities	CS3_2							
	Building	CS3_3							
	Workplace	CS3_4							
Previous Work Environment	Own Workplace	PS1_1	% Time Spend	% time	0-100	Constant Sum	Scale	What percentage of your time do you spend at the following places during an average working week:	Only for participants who selected 'I am looking for a job (prior work experience)' in Question 1.
	Somewhere else at the office	PS1_2							
	Out of office	PS1_3							
		PS2	Desk Type	Applicable	Assigned desk Flexible desk Other (please specify)	Select	Nominal	Select what applies to your current work environment:	
	Location	PS3_1	Satisfaction Current Situation	Degree of Satisfaction	Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied	Likert Scale	Ordinal	Indicate how satisfied you are with the following components of your current work environment	
	Services & Facilities	PS3_2							
	Building	PS3_3							
	Workplace	PS3_4							
Demographic Background **Students & recently graduated/ stopped studying**		DS1	Gender	Type of Gender	Women Man Other	Select	Nominal	Gender:	Only for participants who selected 'I am a student' or 'I am looking for a job (recently graduated or stopped studying) in Question 1.
		DS2	Year of birth	Year	1940 - 2005	Select	Ordinal	Year of birth:	
		DS3	Household composition	Type of Household Composition	Living alone Living with friend(s) Living with partner Living with child(ren) Living with partner and child(ren) Living with parent(s) Other (please specify):	Select	Nominal	Household composition:	
		DS4	Education level	Type of education level	MBO (senior secondary vocational education and training) HBO bachelor (university of applied sciences) HBO master (university of applied sciences) WO bachelor (university) WO master (university) Other (please specify):	Select	Nominal	Education level:	
		DS5	Field of study	Type of study field	Geosciences and environment Economics and business Science* and IT *mathematics, physics, and chemistry Behaviour and society Health Art and culture Education Law, governance and management Languages and communication Technology Other (please specify):	Select	Nominal	Field of study:	

		DS6	Professional sector	Type of professional sector	Accountancy and tax advice Architects, engineers, and construction Chemistry, oil and energy Security and investigation services Pharmacy and biotechnology Fast Moving Consumer Goods (FMCG) Financial and insurance services Holdings and management consultancy firms Information and communication technology (ICT) (Industrial) design Legal services Marketing, media and communication Research Public sector Transport & Logistics Employment agencies and services Real Estate Other (please specify):	Select	Nominal	In which professional sector do you aspire a job?	
Demographic Background **Employed**		DE1	Gender	Type of Gender	Women Man Other	Select	Nominal	Gender:	Only for participants who selected 'I am employed' in Question 1.
		DE2	Year of birth	Year	1940 - 2005	Select	Ordinal	Year of birth:	
		DE3	Household composition	Type of Household Composition	Living alone Living with friend(s) Living with partner Living with child(ren) Living with partner and child(ren) Living with parent(s) Other (please specify):	Select	Nominal	Household composition:	
		DE4	Highest level of Education	Type of highest level of education	Primary education MAVO/ VMBO (preparatory vocational secondary education) HAVO (senior general secondary education) VWO (university preparatory education) MBO (senior secondary vocational education and training) HBO bachelor (university of applied sciences) HBO master (university of applied sciences) WO bachelor (university) WO master (university) Other (please specify):	Select	Nominal	Highest level of education:	
		DE5	Professional sector	Type of professional sector	Accountancy and tax advice Architects, engineers, and construction Chemistry, oil and energy Security and investigation services Pharmacy and biotechnology	Select	Nominal	Current professional sector:	

					Fast Moving Consumer Goods (FMCG) Financial and insurance services Holdings and management consultancy firms Information and communication technology (ICT) (Industrial) design Legal services Marketing, media and communication Research Public sector Transport & Logistics Employment agencies and services Real Estate Other (please specify):				
		DE6	Years Work Experience	Years	<1 1-3 3-7 7-15 >15	Select	Ordinal	Number of years of work experience:	
		DE7	Job Level	Level	Managing board Supervisor Individual Contributor	Select	Nominal	Job level:	
		DE8	Fulltime vs. Parttime	Type of employment	Fulltime Parttime	Select	Nominal	Type of employment:	
Demographic Background **Looking for a job (prior work experience)**		DL1	Gender	Type of Gender	Women Man Other	Select	Nominal	Gender:	Only for participants who selected 'I am looking for a job (prior work experience) in Q1.
		DL2	Year of birth	Year	1940 - 2005	Select	Ordinal	Year of birth:	
		DL3	Household composition	Type of Household Composition	Living alone Living with friend(s) Living with partner Living with child(ren) Living with partner and child(ren) Living with parent(s) Other (please specify):	Select	Nominal	Household composition:	
		DL4	Highest level of Education	Type of highest level of education	Primary education MAVO/ VMBO (preparatory vocational secondary education) HAVO (senior general secondary education) VWO (university preparatory education) MBO (senior secondary vocational education and training) HBO bachelor (university of applied sciences) HBO master (university of applied sciences) WO bachelor (university) WO master (university) Other (please specify):	Select	Nominal	Highest level of education:	
		DL5	Professional sector	Type of professional sector	Accountancy and tax advice Architects, engineers, and construction Chemistry, oil and energy Security and investigation services Pharmacy and biotechnology	Select	Nominal	Previous professional sector:	

					Fast Moving Consumer Goods (FMCG) Financial and insurance services Holdings and management consultancy firms Information and communication technology (ICT) (Industrial) design Legal services Marketing, media and communication Research Public sector Transport & Logistics Employment agencies and services Real Estate Other (please specify):				
		DL6	Years Work Experience	Years	<1 1-3 3-7 7-15 >15	Select	Ordinal	Years work experience:	
		DL7	Job Level	Level	Managing board Supervisor Individual Contributor	Select	Nominal	Job level at previous job:	
		DL8	Fulltime vs. Parttime	Type of employment	Fulltime Parttime	Select	Nominal	Type of employment at previous job:	

APPENDIX II.II | THE SURVEY

Start of Block: Introduction 1

TARGET GROUP: students and employees who are (or will be) based at an office (for a part of the week).

Dear participant, First of all, I would like to thank you for contributing to my graduation research for the Master Management in the Built Environment at Delft University of Technology. The purpose of my research is to identify the factors that influence employee attraction within the current 'War for Talent'. All information obtained in this survey will be treated confidentially: the information will be anonymised and no results that can be traced to you or your organisation will be shared with third parties. Completing this survey will take approximately 10 minutes. If you have any questions or comments about either the survey or the research, please feel free to contact me via S.Themans@student.tudelft.nl.

- Shuly Themans

End of Block: Introduction 1

Start of Block: Demographic split

Select what applies to you:

- ○ I am a student
- ○ I am employed
- ○ I am looking for a job (recently graduated or stopped studying)
- ○ I am looking for a job (prior work experience)

End of Block: Demographic split

Start of Block: Introduction 2.1

For some questions, you will be asked to **divide 100 points** over different factors. By dividing the points, you can indicate the importance of the factors in relation to each other. If a certain factor has no importance to you, you can allocate this factor 0 points.

End of Block: Introduction 2.1

Start of Block: Introduction 2.2

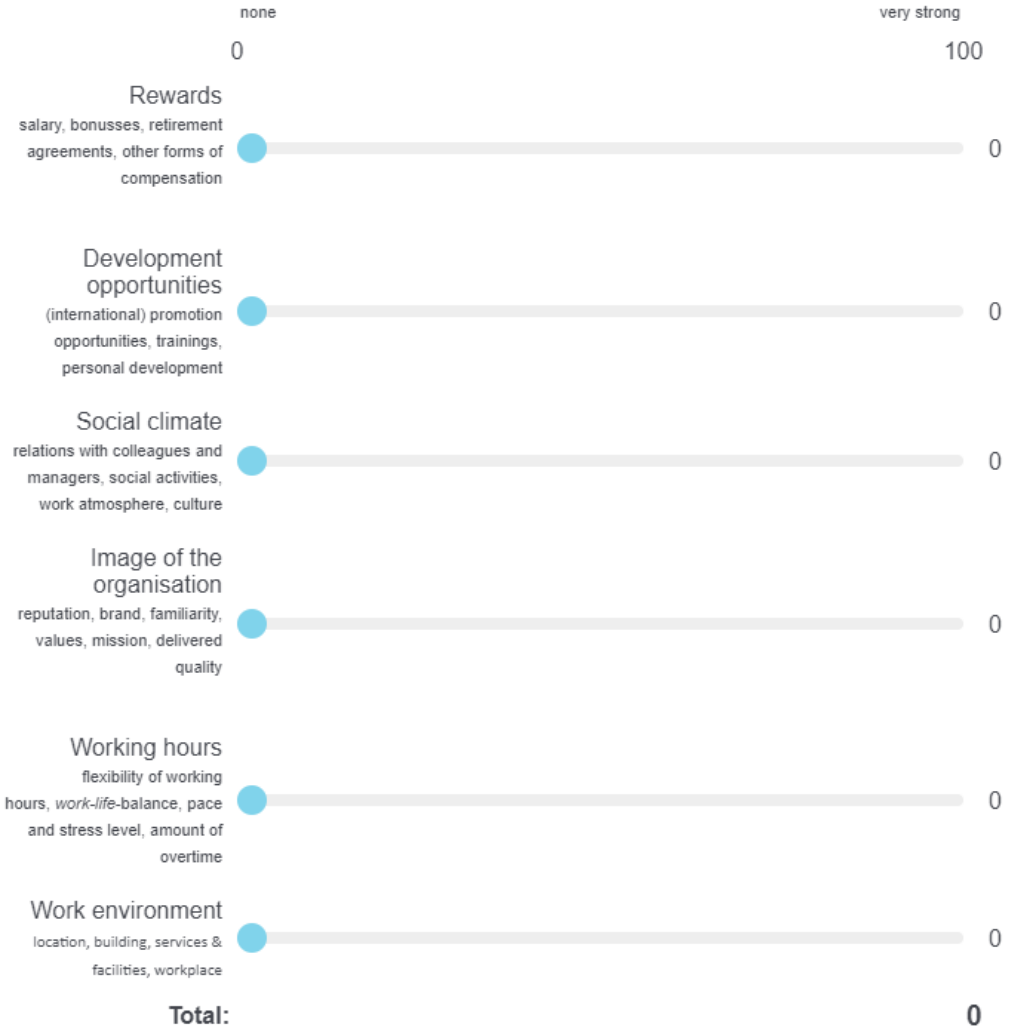
For the first set of questions, you are asked to **imagine** that you are looking for a new job at a new employer.

End of Block: Introduction 2.2

Start of Block: Employer Attraction

How much **influence** do the following factors have on your choice for a new job?

You can divide a total of 100 points over the factors. If a certain factor has no importance to you, you can allocate this factor 0 points.



Just focusing on 'rewards' and 'work environment', how much **influence** do the following factors have on your choice for a new job?

You can **divide** a total of **100 points** over the factors. If a certain factor has no importance to you, you can allocate this factor 0 points.

Only for participants who selected 'I am a student', 'I am looking for a job (recently graduated or stopped studying)' or 'I am looking for a job (prior work experience)' in Question 1.

What maximum percentage (%) of your future salary would you give up in exchange for your ideal work environment*?
*concerning location, building, services & facilities, workplace

Aantal procent (%):

Only for participants who selected 'I am a employed' in Question 1.

What maximum percentage (%) of your current salary would you give up in exchange for you ideal work environment*?
*concerning location, building, services & facilities, workplace

Aantal procent (%):

End of Block: Employer Attraction

Start of Block: Introduction 3

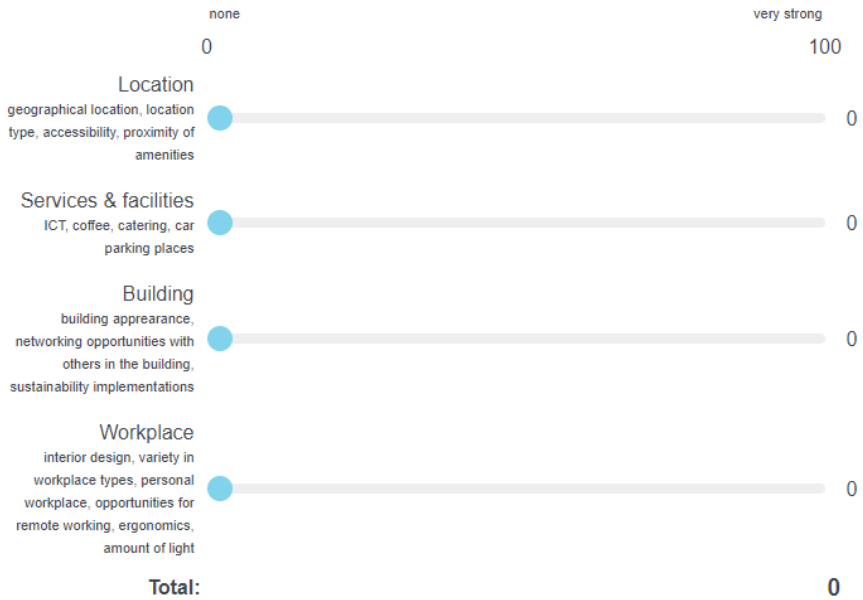
As the last two questions might have suggested, my graduation research focuses on the **work environment**. The eventual goal of my graduation research is therefore to identify the influence of the work environment on employee attraction. The work environment consists of many components, which are divided within this research into the following categories: the **location**, the **building**, the **services & facilities**, and the **workplaces**.

The following questions will focus on the **influence of the work environment on your choice for a new job**. You are asked again to imagine that you are looking for a new job at a new employer.

End of Block: Introduction 3

Start of Block: Work Environment

How much influence do the following factors have on your choice for a new job?
You can **divide** a total of **100 points** over the factors. If a certain factor has no importance to you, you can allocate this factor 0 points.



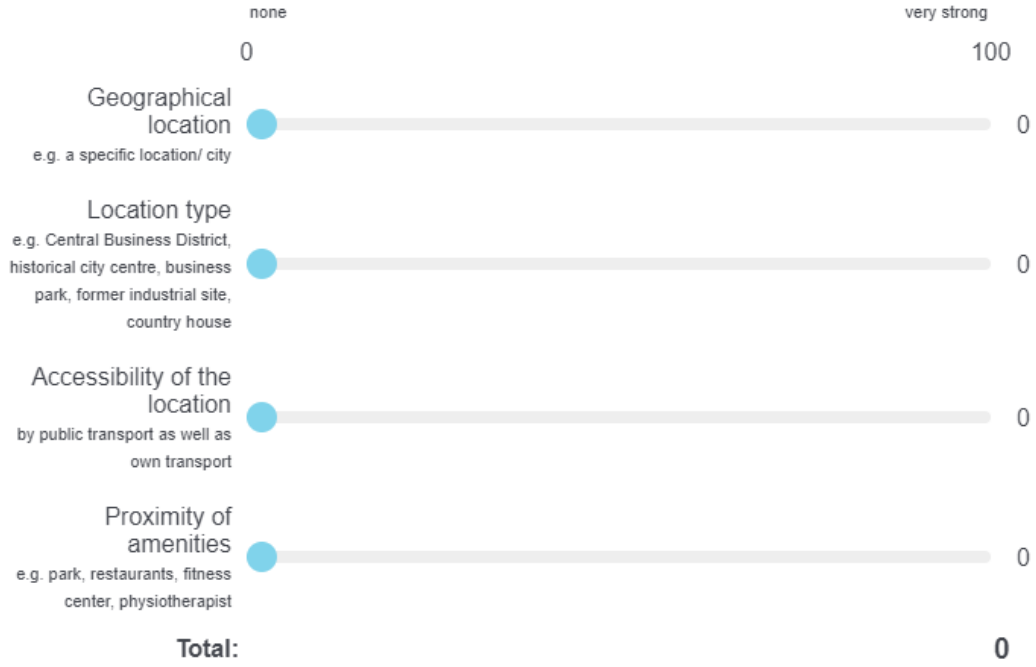
End of Block: Work Environment

Start of Block: Location

LOCATION

How much influence do the following factors have on your choice for a new job?

You can **divide** a total of **100 points** over the factors. If a certain factor has no importance to you, you can allocate this factor 0 points.



Is there a specific location or city in which you would like to work?

- ○ Yes (please specify):
- ○ No

Indicate to what extent you would like to work at the following location types:

	not at all	rather not	neutral	gladly	with great pleasure
 Historical city centre	○	○	○	○	○
 Central Business District	○	○	○	○	○
 Office complex at city outskirts	○	○	○	○	○
 Former industrial site at city outskirts	○	○	○	○	○
 Business park outside city	○	○	○	○	○
 Country house	○	○	○	○	○

Why would you want to work on the location you **appreciated the highest in the previous question**?
Select a maximum of **three answers**.

- ☐ Well accessible by train
- ☐ Well accessible by car
- ☐ Many amenities closeby
- ☐ My family/ friends react enthousiastically to this location
- ☐ Pleasant environment for breaks
- ☐ View
- ☐ Networking opportunities
- ☐ Atmospere of the location
- ☐ Familiar environment
- ☐ Other (please specify):

Which means of transport would you prefer to travel to work with?

- ○ Car
- ○ Public transport
- ○ Bicycle

By using the following means of transport, what is the maximum time in minutes you are willing to travel to the office?
If you are expected at the office for at least three days a week.

Car

Public transport

Bicyle

End of Block: Location

Start of Block: Services & Facilities

SERVICES & FACILITIES

How much influence do the following factors have on your choice for a new job?

You can **divide** a total of **100 points** over the factors. If a certain factor has no importance to you, you can allocate this factor 0 points.

	none 0	very strong 100	
High quality ICT and ICT helpdesk			0
High quality coffee, tea and other refreshment facilities			0
High quality and healthy (lunch) catering			0
Availability of car parking places			0
Total:			**0**

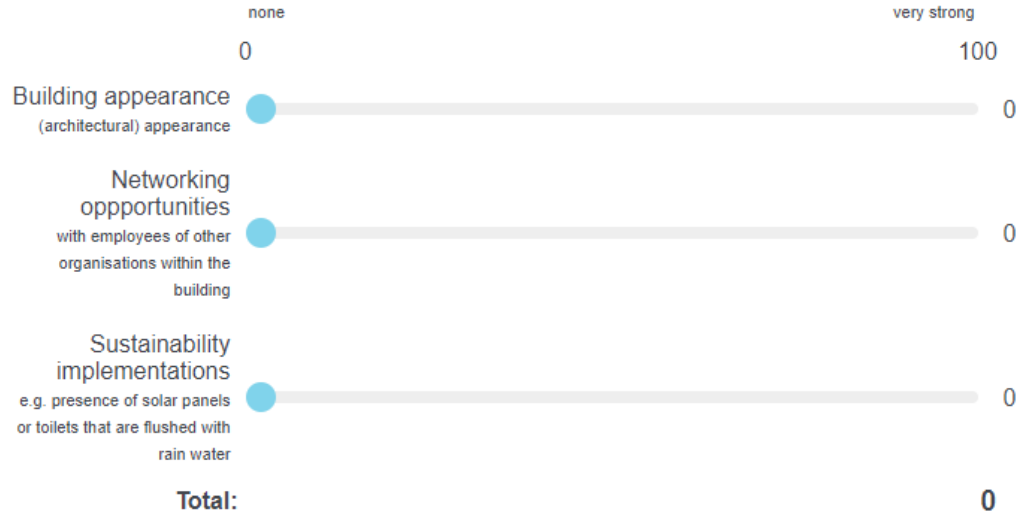
End of Block: Services & Facilities

Start of Block: Building

BUILDING

How much influence do the following factors have on your choice for a new job?

You can divide a total of 100 points over the factors. If a certain factor has no importance to you, you can allocate this factor 0 points.



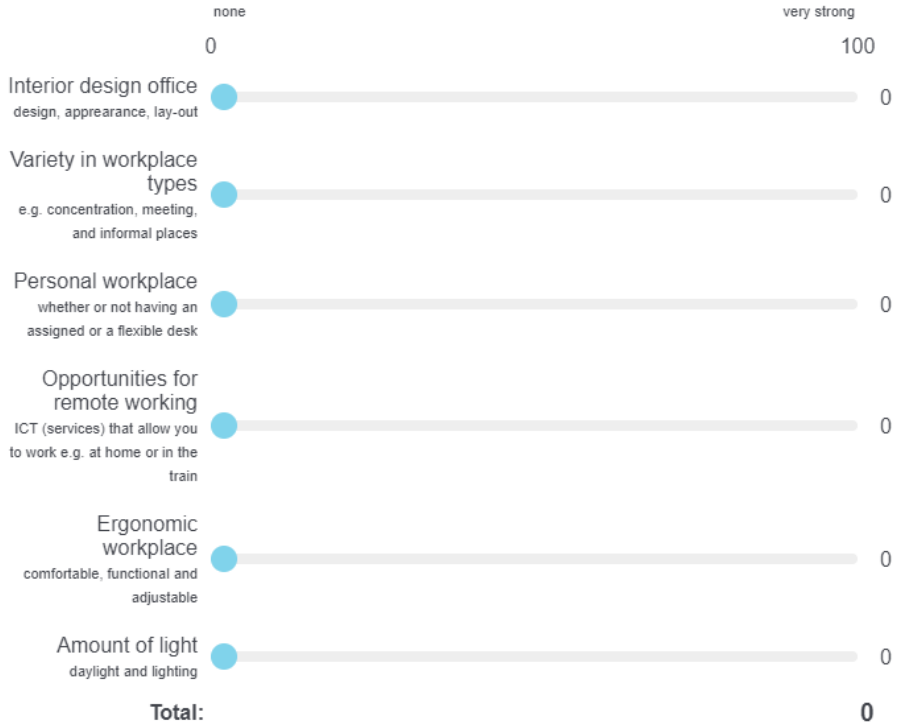
End of Block: Building

Start of Block: Workplace

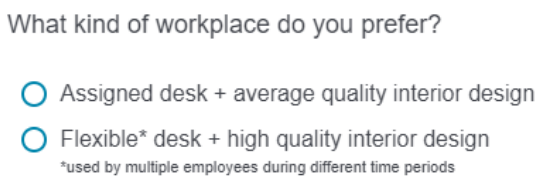
WORKPLACE

How much **influence** do the following factors have on your choice for a new job?

You can **divide** a total of **100 points** over the factors. If a certain factor has no importance to you, you can allocate this factor 0 points.



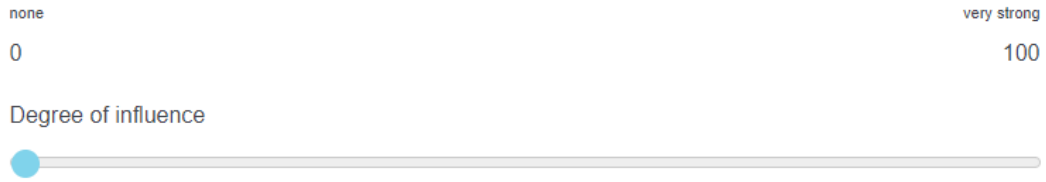
What kind of workplace do you prefer?



End of Block: Workplace

Start of Block: Summarising

How much influence does the work environment* have on your choice for a new job?
*concerns all characteristics of the work environment that are mentioned within this survey



Based on your own experience, is there anything else you want to mention about the influence of the work environment on job searching?

End of Block: Summarising

Start of Block: Current work environment

Only for participants who selected 'I am employed' in Question 1.

Name of employer:
The information will be anonymised and no results that can be traced to you or your organisation will be shared with third parties.

CURRENT WORK ENVIRONMENT
The following questions are related to the work environment of your current job.

What percentage of your time do you spend at the following places during an average working week:

You can **divide** a total of **100%** over the factors. If a certain factor does not apply to you, you can allocate this factor 0%.

Select what applies to your current work environment:

- ○ Assigned desk
- ○ Flexibele desk used by multiple employees during different time periods
- ○ Other (please specify): _____

Indicate how **satisfied** you are with the following components of your current work environment:

	very dissatisfied	dissatisfied	neutral	satisfied	very satisfied
Location	○	○	○	○	○
Building	○	○	○	○	○
Services & Facilities	○	○	○	○	○
Workplace	○	○	○	○	○

End of Block: Current work environment

Start of Block: Previous work environment

Only for participants who selected 'I am looking for a job (prior work experience)'in Question 1.

WORK ENVIRONMENT OF PREVIOUS JOB
The following questions are related to the work environment of your previous job.

What percentage of your time did you spent at the following places in your former job during an average working week:

You can divide a total of 100% over the factors. If a certain factor does not apply to you, you can allocate this factor 0%.

Select what applies to the work environment of your former job:

- ○ Assigned desk
- ○ Flexibele desk
  used by multiple employees during different time periods
- ○ Other (please specify):

Indicate how **satisfied** you were with the following components in the work environment of your former job:

	very dissatisfied	dissatisfied	neutral	satisfied	very satisfied
Location	○	○	○	○	○
Building	○	○	○	○	○
Services & Facilities	○	○	○	○	○
Workplace	○	○	○	○	○

End of Block: Previous work environment

Start of Block: Student

Only for participants who selected 'I am a student' or 'I am looking for a job (recently graduated or stopped studying)' in Question 1.

DEMOGRAPHIC QUESTIONS

The survey will conclude with a few demographic questions.

Gender:

▼ Woman ... Other

Year of birth:

Year:

▼ 1940 ... 2005

Household composition:

- ○ Living alone
- ○ Living with friend(s)
- ○ Living with partner
- ○ Living with child(ren)
- ○ Living with partner and child(ren)
- ○ Living with parent(s)
- ○ Other (please specify): _____

Education level:

- ○ MBO (senior secondary vocational education and training)
- ○ HBO bachelor (university of applied sciences)
- ○ HBO master (university of applied sciences)
- ○ WO bachelor (university)
- ○ WO master (university)
- ○ Other (please specify): _____

Field of study:

- ○ Geosciences and environment
- ○ Economics and business
- ○ Science* and IT *mathematics, physics, and chemistry
- ○ Behaviour and society
- ○ Health
- ○ Art and culture
- ○ Education
- ○ Law, governance and management
- ○ Languages and communication
- ○ Technology
- ○ Other (please specify): _____

In which professional sector do you aspire a job?

- ○ Accountancy and tax advice
- ○ Architects, engineers, and construction
- ○ Chemistry, oil and energy
- ○ Security and investigation services
- ○ Pharmacy and biotechnology
- ○ Fast Moving Consumer Goods (FMCG)
- ○ Financial and insurance services
- ○ Holdings and management consultancy firms
- ○ Information and communication technology (ICT)
- ○ (Industrial) design
- ○ Legal services
- ○ Marketing, media and communication
- ○ Research
- ○ Public sector
- ○ Transport & Logistics
- ○ Employment agencies and services
- ○ Real Estate
- ○ Other (please specify): _____

End of Block: Student

Start of Block: Employed

Only for participants who selected 'I am a employed' in Question 1.

DEMOGRAPHIC QUESTIONS

The survey will conclude with a few demographic questions.

Gender:

▼ Woman ... Other

Year of birth:

Year:

▼ 1940 ... 2005

Household composition:

- ○ Living alone
- ○ Living with friend(s)
- ○ Living with partner
- ○ Living with child(ren)
- ○ Living with partner and child(ren)
- ○ Living with parent(s)
- ○ Other (please specify): _____

Highest level of education:

- ○ Primary education
- ○ MAVO/ VMBO (preparatory vocational secondary education)
- ○ HAVO (senior general secondary education)
- ○ VWO (university preparatory education)
- ○ MBO (senior secondary vocational education and training)
- ○ HBO bachelor (university of applied sciences)
- ○ HBO master (university of applied sciences)
- ○ WO bachelor (university)
- ○ WO master (university)
- ○ Other (please specify): _____

Current professional sector:

- ○ Accountancy and tax advice
- ○ Architects, engineers, and construction
- ○ Chemistry, oil and energy
- ○ Security and investigation services
- ○ Pharmacy and biotechnology
- ○ Fast Moving Consumer Goods (FMCG)
- ○ Financial and insurance services
- ○ Holdings and management consultancy firms
- ○ Information and communication technology (ICT)
- ○ (Industrial) design
- ○ Legal services
- ○ Marketing, media and communication
- ○ Research
- ○ Public sector
- ○ Transport & Logistics
- ○ Employment agencies and services
- ○ Real Estate
- ○ Other (please specify): _____

Number of years of work experience:

▼ < 1 ... 15 >

Job level:

▼ Managing board ... Individual contributor

Type of employment:

▼ Fulltime ... Parttime

End of Block: Employed

Start of Block: Looking for job

Only for participants who selected 'I am looking for a job (prior work experience)' in Question 1.

DEMOGRAPHIC QUESTIONS

The survey will conclude with a few demographic questions.

Gender:

▼ Woman ... Other

Year of birth:
Year:

▼ 1940 ... 2005

Household composition:

- ○ Living alone
- ○ Living with friend(s)
- ○ Living with partner
- ○ Living with child(ren)
- ○ Living with partner and child(ren)
- ○ Living with parent(s)
- ○ Other (please specify): _____

Highest level of education:

- ○ Primary education
- ○ MAVO/ VMBO (preparatory vocational secondary education)
- ○ HAVO (senior general secondary education)
- ○ VWO (university preparatory education)
- ○ MBO (senior secondary vocational education and training)
- ○ HBO bachelor (university of applied sciences)
- ○ HBO master (university of applied sciences)
- ○ WO bachelor (university)
- ○ WO master (university)
- ○ Other (please specify): _____

Professional sector of previous employer:

- ○ Accountancy and tax advice
- ○ Architects, engineers, and construction
- ○ Chemistry, oil and energy
- ○ Security and investigation services
- ○ Pharmacy and biotechnology
- ○ Fast Moving Consumer Goods (FMCG)
- ○ Financial and insurance services
- ○ Holdings and management consultancy firms
- ○ Information and communication technology (ICT)
- ○ (Industrial) design
- ○ Legal services
- ○ Marketing, media and communication
- ○ Research
- ○ Public sector
- ○ Transport & Logistics
- ○ Employment agencies and services
- ○ Real Estate
- ○ Other (please specify): _____

Years work experience:

▼ < 1 ... 15 >

Job level at previous job:

▼ Managing board ... Individual contributor

Type of employment at previous job:

▼ Fulltime ... Parttime

End of Block: Looking for job

APPENDIX II.III | COMPANY ACQUISITION - ONE PAGER

APPENDIX III.I | Data Description

Household Composition

In figure X.1.1 a visualisation of the distributions of household compositions can be found. From the results of this question, is mainly looked at whether people have children or not. As the 33% of the private households in the Netherlands is a household with children, this can be considered as comparable with the sample (29%).

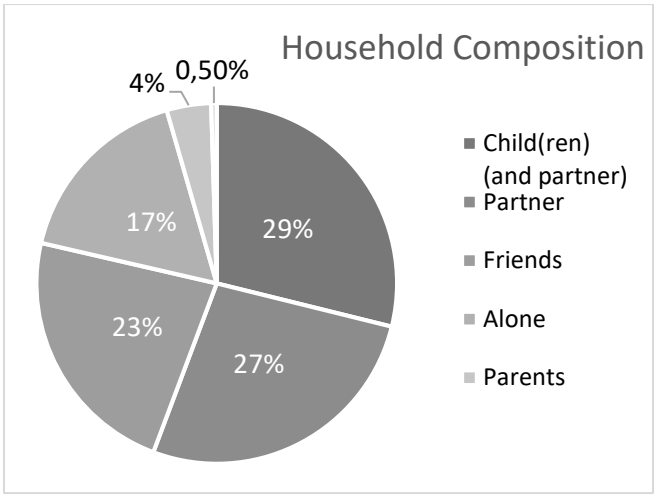


Figure X.1.1: Distribution of Household Compositions

Education Level

Figure X.1.2 shows a visualisation of the distribution of education levels. As the greatest amount of respondents has a HBO or WO educational background, only these two groups (PhD included in WO group) are integrated when examining significant mean differences within different education levels.

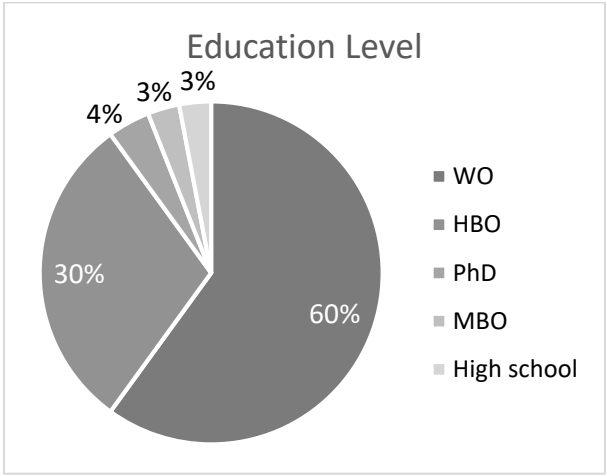


Figure X.1.2: Distribution of Education Level

In table X.1.1 is visible that the representative sample has an enormous amount of high educated people (HBO, WO, PhD), compared to the Dutch working population. Therefore, the sample is not representative for the general Dutch working population. However, as this thesis focusses on

knowledge workers, the general Dutch working population is not the actual population that should be represented. There can be assumed that knowledge workers, by definition, are high educated. Therefore this sample is considered as representative for the Dutch knowledge worker population.

Education Levels	This research		CBS Education Levels	This research		CBS (2019e)
	N	%		N	%	%
Primary education	0	0	Low Education Level	0	0	20
High School	10	3	Medium Education Level	21	7	40
MBO	11	4				
HBO	98	30	High Education Level	308	94	40
WO	195	60				
PhD	15	4				

Table X.1.1: Distribution of Education Level

Professional Sector

In figure X.1.3 is shown that there are relatively many respondents who work in the real estate sector, pharmacy and biotechnology sector, marketing, media, and communication sector, and architects, engineers and construction sector. This can be explained by the distribution of the survey among companies in these sectors. Besides, the Linked-In network and other social media platforms of the author consist for the largest part of students who aspire a job in the real estate and architects, engineers, and construction sectors. When generalising the results to the knowledge worker population of the Netherlands, this should be taken into account.

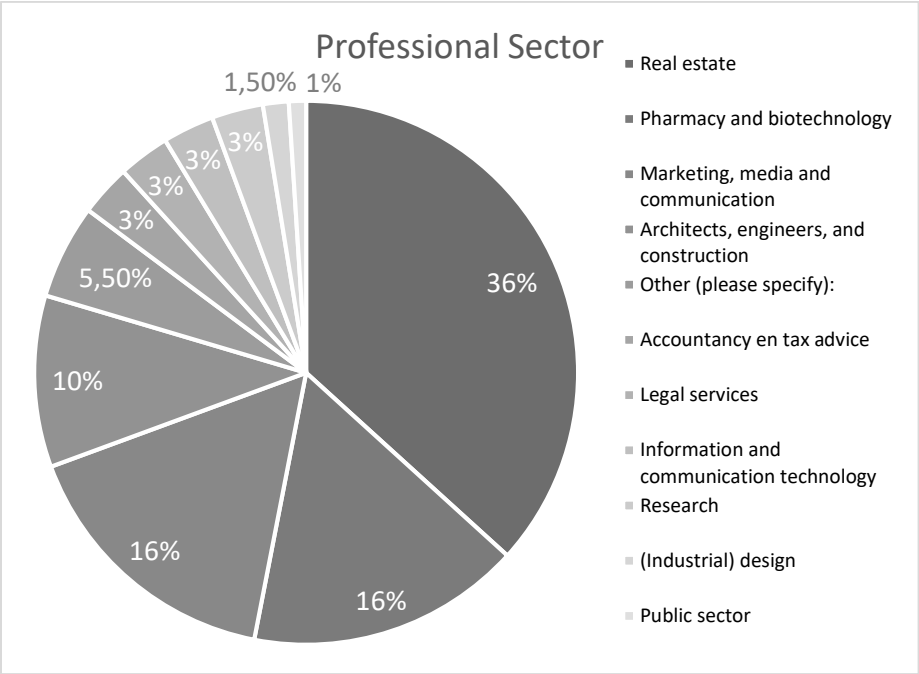


Figure X.1.3: Distribution of Professional Sector

Study Field

In figure X.1.4 is shown that the largest part of the students study a technology based study. In addition, most people who selected 'Other, please specify' study a real estate related study, which could also be defined as a technical study. This high amount of technology students is due to the personal network of the author of this thesis, as the survey is distributed among fellow students at the same university. Therefore does this representative sample not reflect the actual study field distribution of students within the Netherlands. This should be taken into account when generalising the results for the Dutch knowledge worker population.

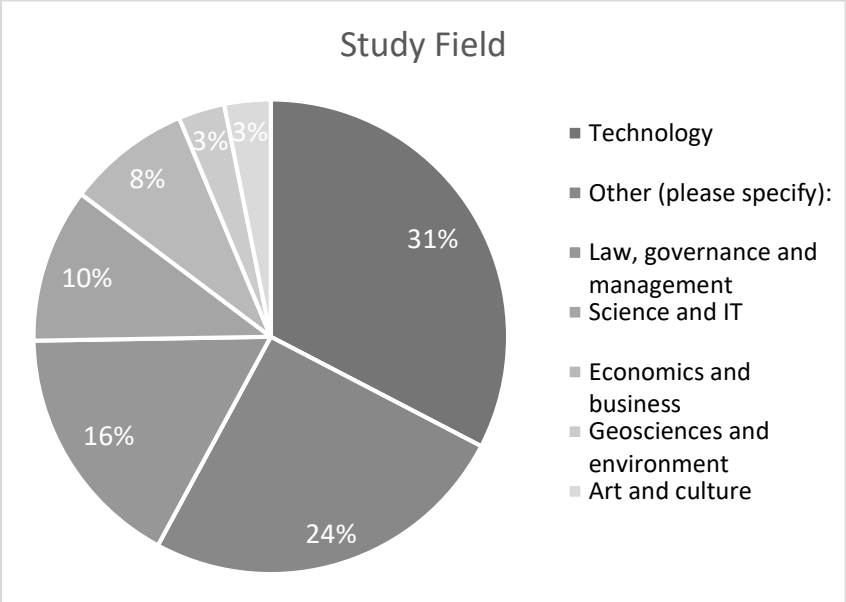


Figure X.1.4: Distribution of Study Field

Job Level

The question that generated data on Job Level was only asked to employed people.

Significantly more individual contributors participated in the survey than supervisors and people within a managing board (figure X.1.5). However, as in the Dutch workforce 8% of man and 3% of women have a managerial function, the number of managerial survey participants is rather high (CBS, 2015).

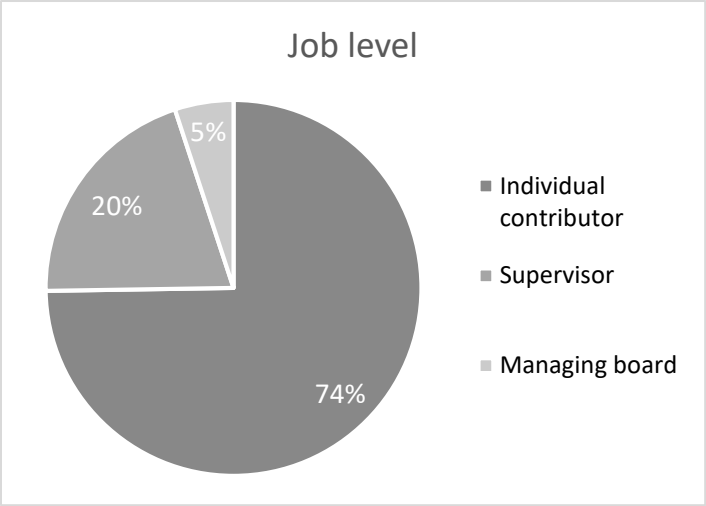


Figure X.1.5: Distribution of Job Level

Working Time

The question that generated data on Working Time was only asked to employed people.
In figure X.1.6 is visible that a significant larger part of the respondents works fulltime than parttime.

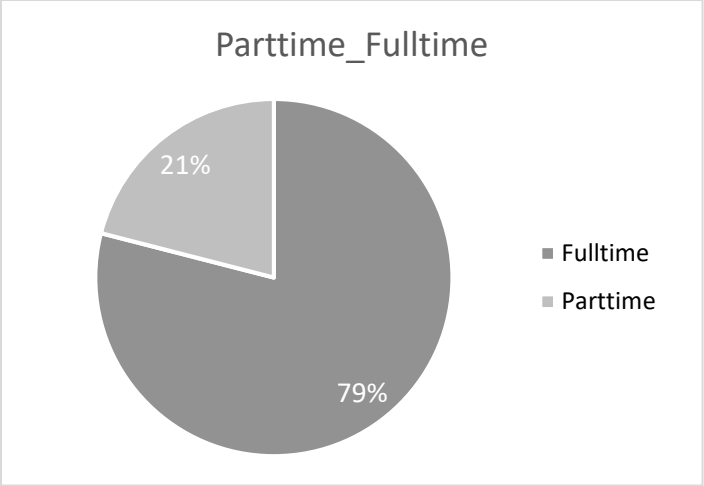


Figure X.1.6 Distribution of Working Time

In table X.1.2 is shown that the distribution is not representative for the Dutch working population.

Working Time	This research		CBS (2019e)
	N	%	%
Fulltime	190	79	51
Parttime	52	21	49

Table X.1.2: Distribution of Working Time

Desk Type

The question that generated data on Desk Type was only asked to employed people. The distribution of people with different desk types can be found in figure X.1.7.

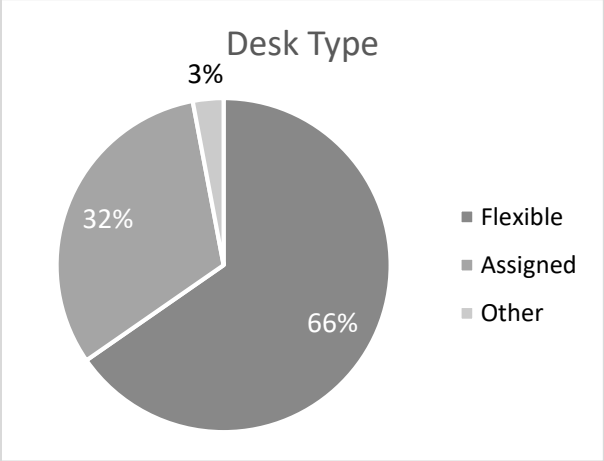


Figure X.1.7: Distribution of desk Type

APPENDIX III.II | Statistics General Employee Attraction Variables

		Mean	Median	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
Influence_EmployeeAttraction_ImageOrganisation	368	11,897	10,000	7,8143	0,801	0,127	1,146	0,254
Influence_EmployeeAttraction_Rewards	368	19,6929	20,0000	10,98206	1,125	0,127	2,787	0,254
Influence_EmployeeAttraction_Social Climate	368	20,2554	20,0000	9,34737	0,615	0,127	1,768	0,254
Influence_EmployeeAttraction_DevelopmentOpportunities	368	18,0734	18,5000	9,03928	0,582	0,127	1,519	0,254
Influence_EmployeeAttraction_WorkingHours	368	15,7527	15,0000	9,40411	1,011	0,127	4,173	0,254
Influence_EmployeeAttraction_WorkEnvironment	368	14,3288	14,5000	7,57905	0,889	0,127	3,244	0,254

Table X.2.1: Descriptives Employee Attraction Variables

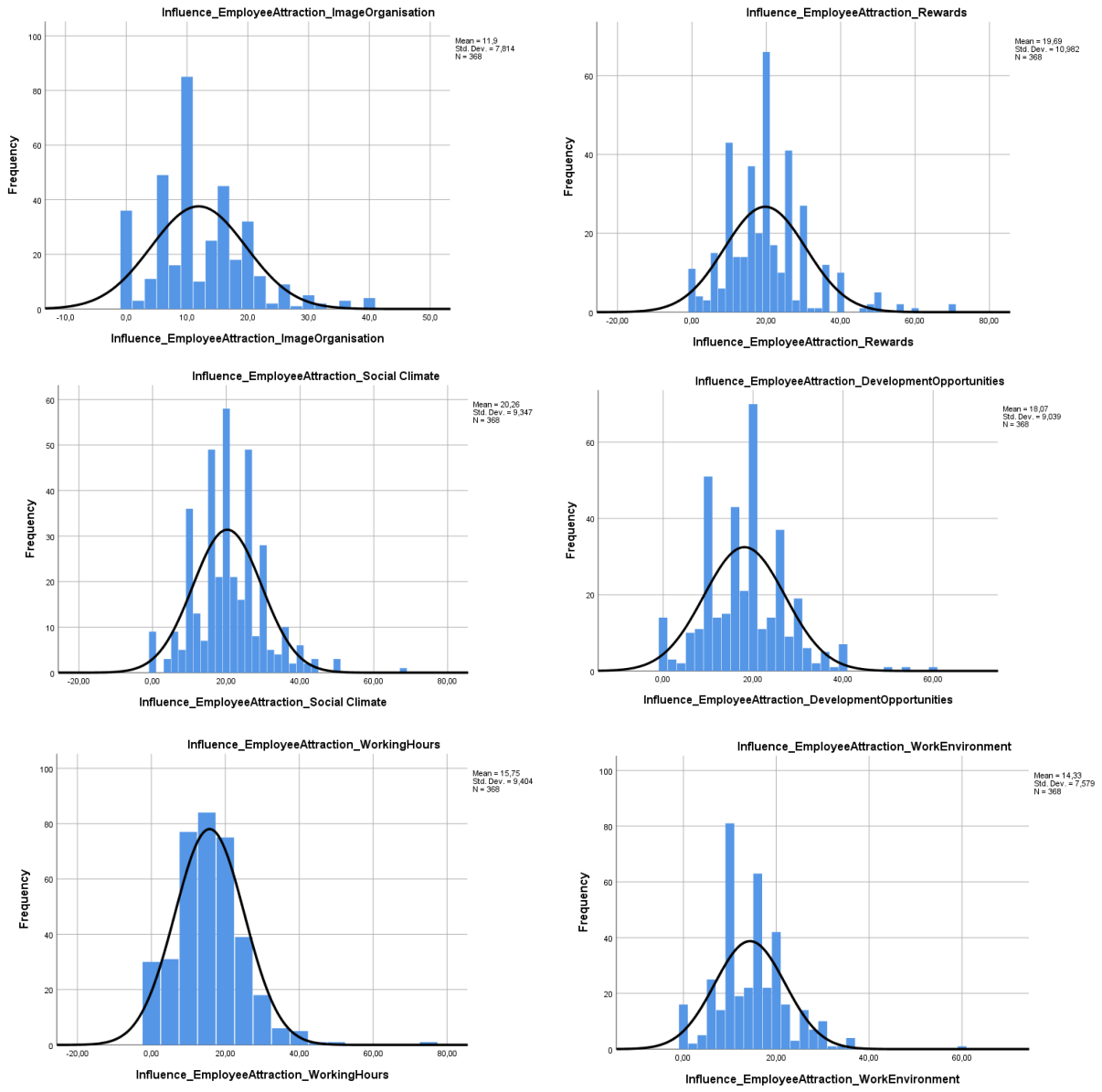


Figure X.2.2: Histograms Employee Attraction Variables

APPENDIX III.III | Statistics Work Environment Variables

	N	Mean	Median	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
Influence_WorkEnvironment_Location	359	38,1643	36,0000	15,86917	0,517	0,129	0,581	0,257
Influence_WorkEnvironment_Services&Facilities	359	18,8914	20,0000	9,41364	0,364	0,129	0,741	0,257
Influence_WorkEnvironment_Building	359	14,6240	15,0000	9,18802	0,123	0,129	-0,706	0,257
Influence_WorkEnvironment_Workplace	359	28,3203	29,0000	11,08804	0,504	0,129	0,752	0,257

Table X.3.1: Descriptives Work Environment Variables

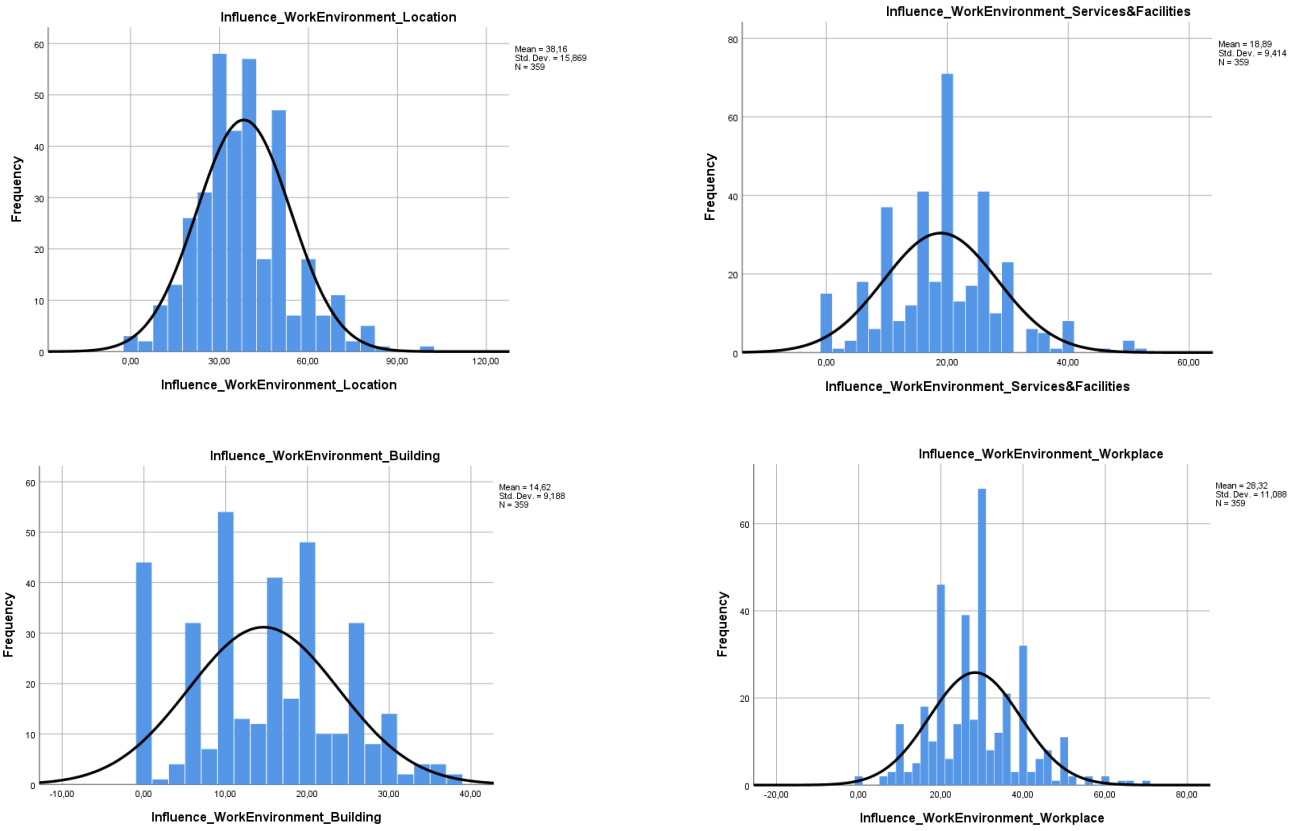


Figure X.3.2: Histograms Work Environment Variables

APPENDIX III.IV | Statistics Location Variables

	N	Mean	Median	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
Influence_Location_Geographical	345	36,7681	35,0000	18,72020	0,431	0,131	0,380	0,262
Influence_Location_Type	345	13,0754	11,0000	11,11960	0,489	0,131	-0,657	0,262
Influence_Location_Accessibility	345	36,7188	35,0000	16,18423	0,806	0,131	1,815	0,262
Influence_Location_ProximityAmenities	345	13,4377	11,0000	11,31460	0,695	0,131	0,178	0,262

Table X.4.1: Descriptives Location Variables

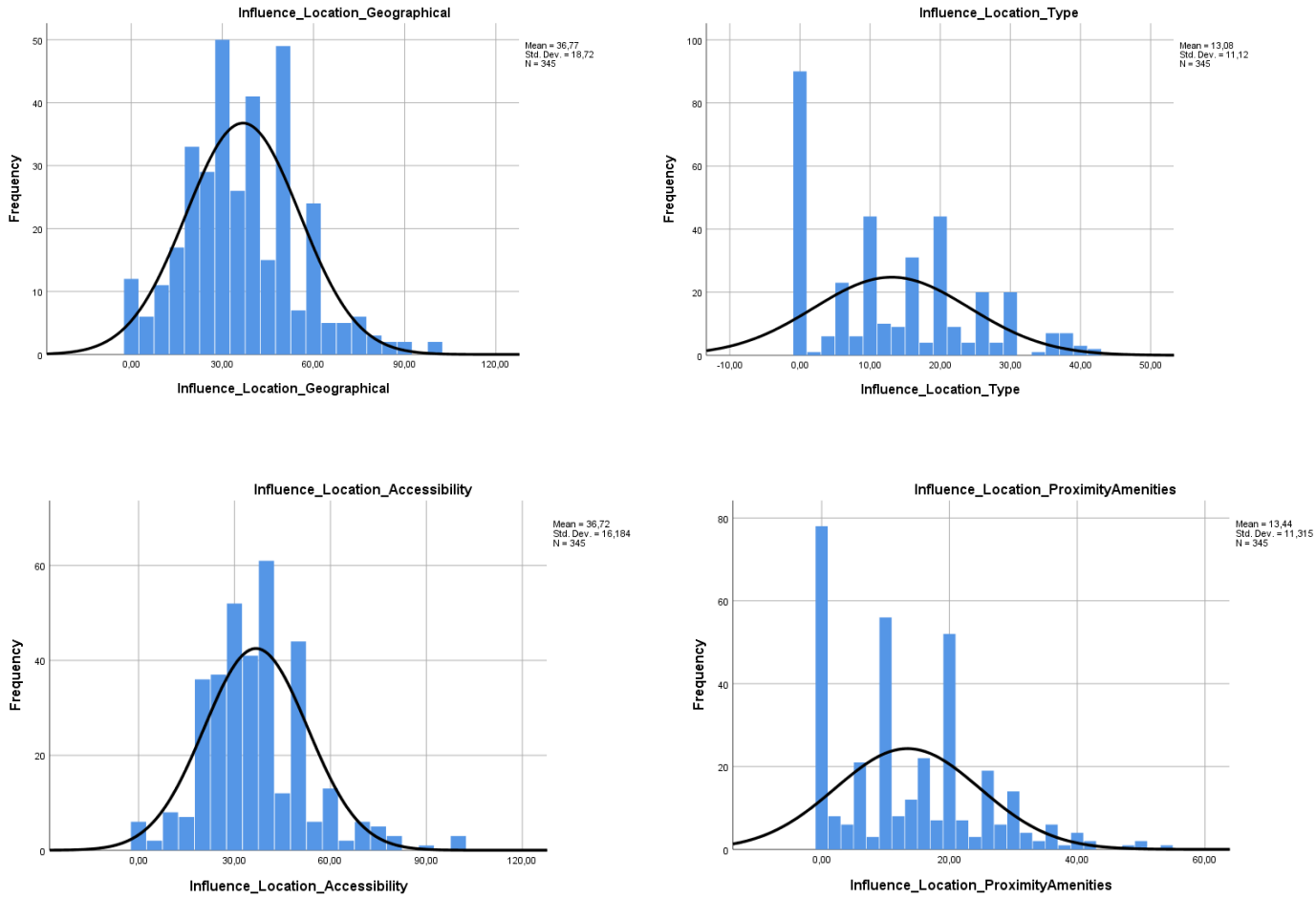


Figure X.4.2: Histograms Location Variables

APPENDIX III.V | Statistics Services & Facilities Variables

	N	Mean	Median	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
Influence_Services&Facilities_ICT	330	25,0091	25,0000	14,08344	0,822	0,134	2,162	0,268
Influence_Services&Facilities_CoffeeTea	330	22,2909	22,5000	12,60049	0,499	0,134	1,368	0,268
Influence_Services&Facilities_Catering	330	33,6424	34,0000	15,26043	0,210	0,134	0,674	0,268
Influence_Services&Facilities_Parking	330	19,0576	15,0000	18,51787	1,133	0,134	1,334	0,268

Table X.5.1: Descriptives Services & Facilities Variables

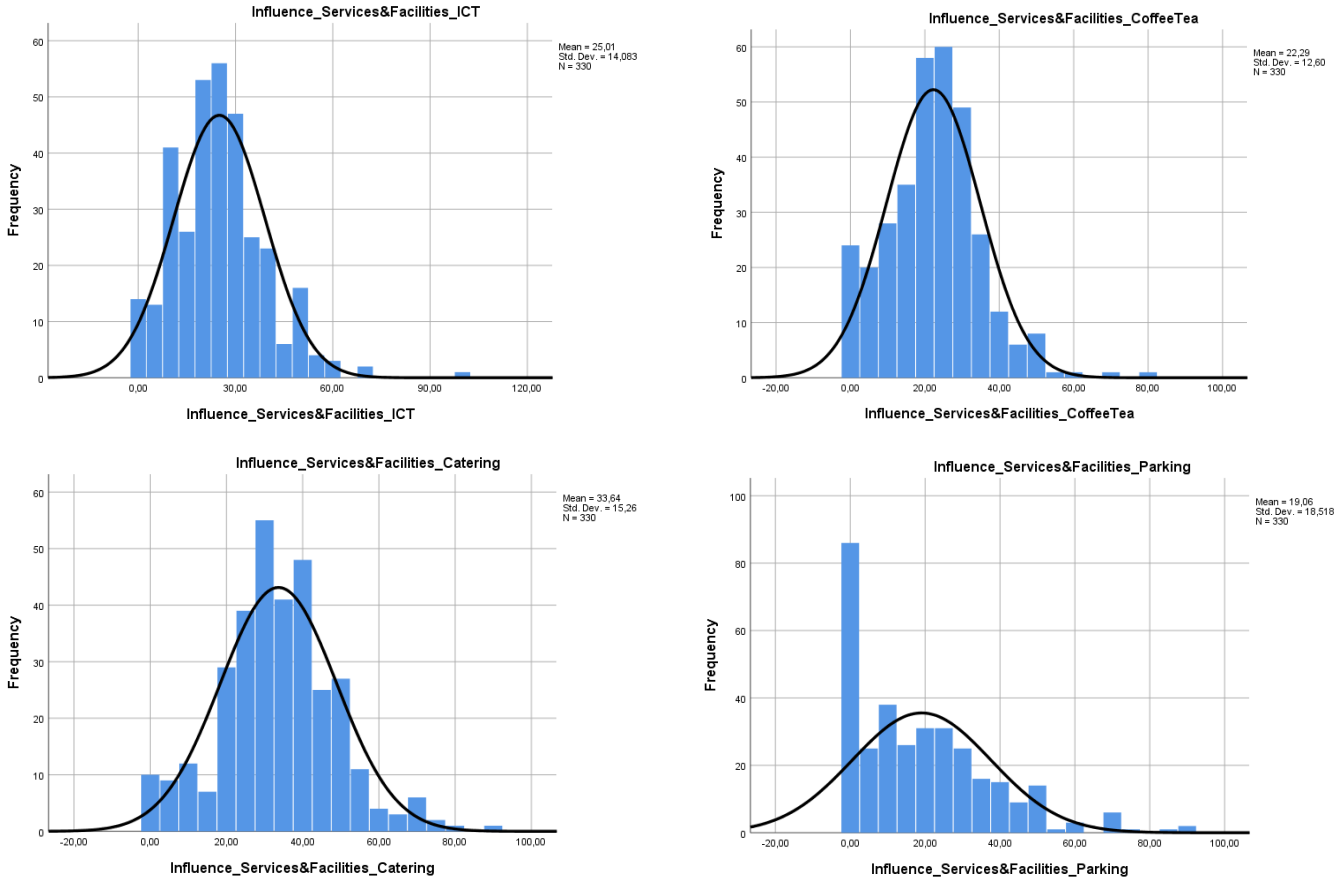


Figure X.5.2: Histograms Services & Facilities Variables

APPENDIX III.VI | Statistics Building Variables

	N	Mean	Median	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
Influence_Building_Apprearance	299	36,1171	34,0000	18,81960	0,694	0,141	1,216	0,281
Influence_Building_Networking	299	30,3645	30,0000	18,80305	0,575	0,141	0,807	0,281
Influence_Building_Sustainability	299	33,5184	33,0000	18,91864	0,546	0,141	1,199	0,281

Table X.6.1: Descriptives Building Variables

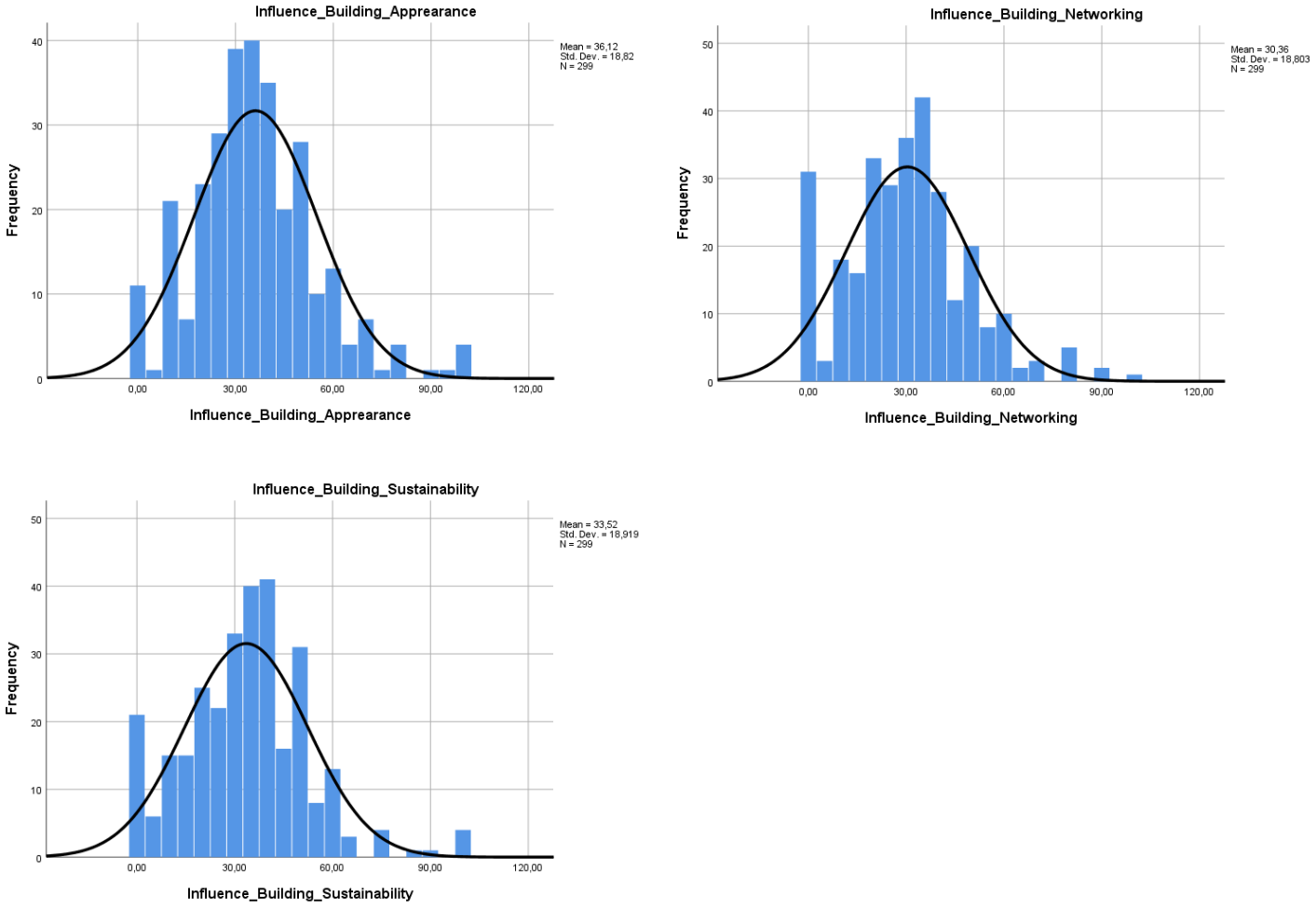


Figure X.6.2: Histograms Building Variables

APPENDIX III.VII | Statistics Workplace Variables

	N	Mean	Median	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
Influence_Workplace_Interior	335	15,2030	15,0000	11,43744	1,476	0,133	8,170	0,266
Influence_Workplace_Personal	335	15,0328	15,0000	13,14072	0,742	0,133	0,271	0,266
Influence_Workplace_RemoteWorking	335	21,7881	20,0000	13,10117	1,031	0,133	2,803	0,266
Influence_Workplace_Ergonomic	335	14,8030	15,0000	9,88330	0,515	0,133	0,888	0,266
Influence_Workplace_Light	335	19,0119	20,0000	10,41676	0,813	0,133	3,388	0,266
Influence_Workplace_VarietyTypes	335	14,1612	15,0000	10,47256	1,507	0,133	9,285	0,266

Table X.7.1: Descriptives Workplace Variables

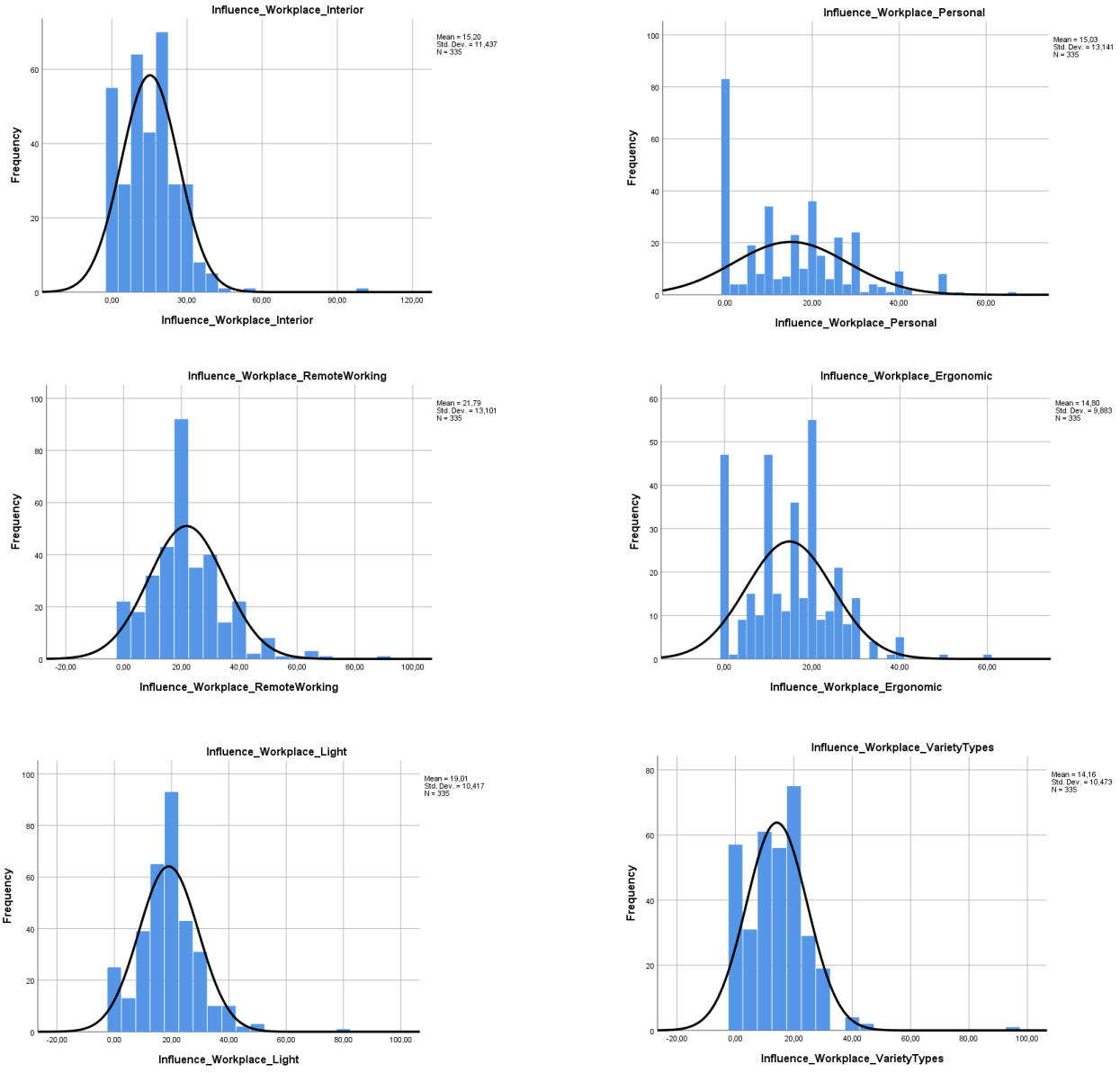
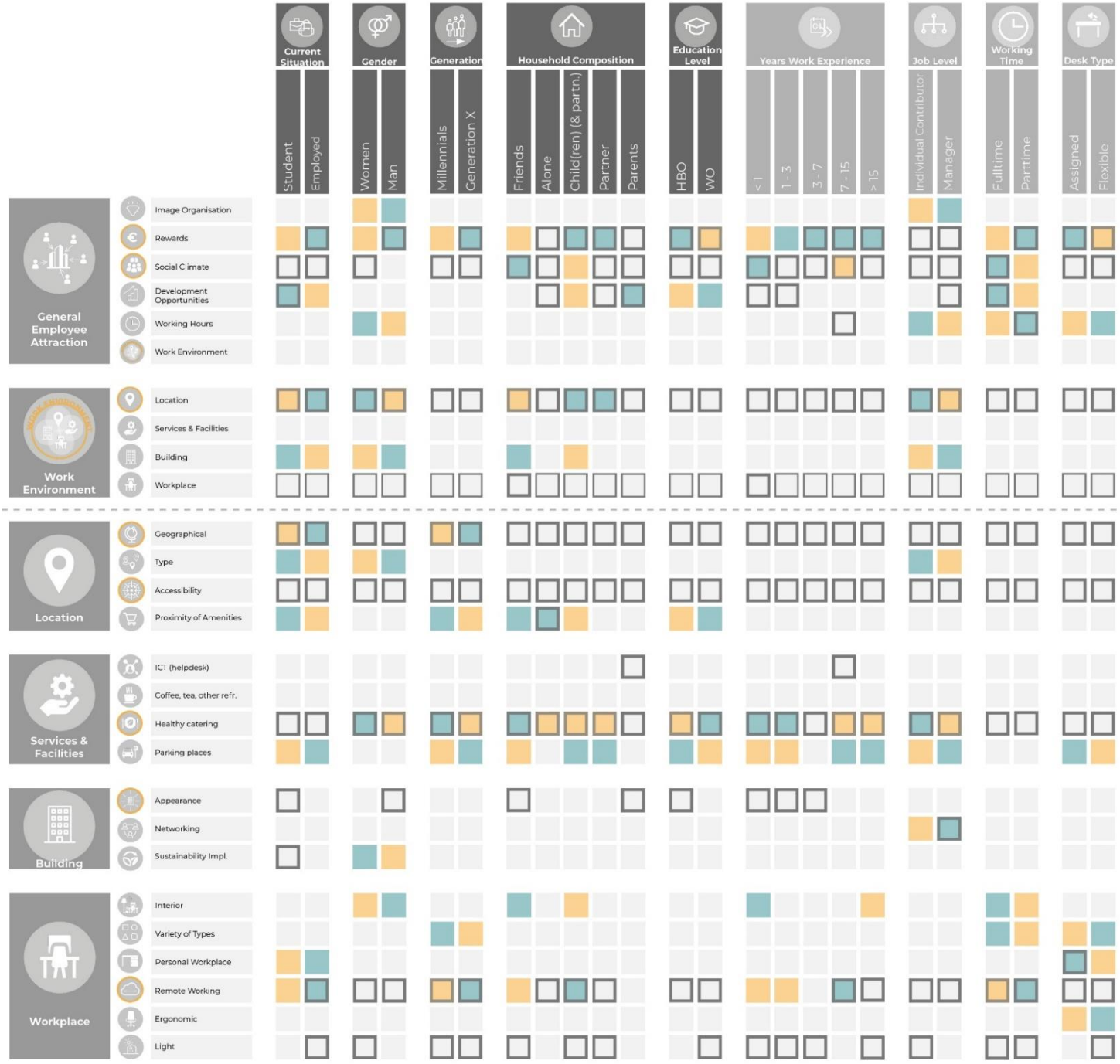


Figure X.7.2: Histograms Workplace Variables

APPENDIX IV.I | RESULT SCHEME

TESTED VARIABLES	MAIN CATEGORY	SUBCATEGORY	QUESTION TYPE	BACKGROUND INFORMATION								
				DEMOGRAPHICS						EMPLOYMENT DEMOGRAPHICS		
				General	Current Status	Gender	Generation	Household Composition	Education Level	Years work Experience	JobLevel	Wokring Time	Desk type
	INFLUENCE (VALUE TREE)												
	General employee attraction	Image organisation	CONSTANT SUM	5	-	MAN	-	-	-	-	MANAGERS	-	-
		Rewards	% (doorrekenen)	1 to 2	EMPLOYED	MAN	GENERATION X	CHILD(REN) AND PARTNER vs. Friends & PARTNER vs. Friends	HBO	< 1 vs. > 3	-	PARTTIME	ASSIGNED
		Social Climate	1	1	-	-	-	FRIENDS vs. Child(ren) (and partner)	-	<1 vs 7 to 15	-	FULLTIME	-
		Development Opportunities		2	STUDENTS	-	-	PARENTS vs. Child(ren) (and partner)	WO	-	-	FULLTIME	-
		Working Hours		3	-	WOMAN	-	-	-	-	INDIVIDUALS	PARTTIME	FLEXIBLE
		Work Environment		4	-	-	-	-	-	-	-	-	-
	Work Environment	Location	2	1	EMPLOYED	WOMAN	-	CHILD(REN) AND PARTNER vs. Friends & PARTNER vs. Friends	-	-	INDIVIDUALS		
		Services & facilities		3	-	-	-	-	-	-	-		
		Building		3	STUDENTS	MAN	-	FRIENDS vs. Child(ren) (and partner)	-	-	MANAGERS		
		Workplace		2	-	-	-	-	-	-	-		
	Location	Geographical	3	1	EMPLOYED	-	GENERATION X	-	-	-	-		
		Type		2	STUDENTS	MAN	-	-	-	-	INDIVIDUALS		
		Accessibility		1	-	-	-	-	-	-	-		
		Proximity Amenities		2	STUDENTS	-	MILLENNIALS	ALONE vs. Child(ren) (and partner) & FRIENDS vs. Child(ren) (and partner)	WO	-	-		
	Services & facilities	ICT		2	-	-	-	-	-		-		
		Coffee, tea, other refreshments		3	-	-	-	-	-		-		
		Healthy Catering		1	-	WOMAN	MILLENNIALS	FRIENDS vs. Alone & Partner & Child(ren) (and partner)	WO	<3 vs > 7	INDIVIDUALS		
		Car Parking		4	EMPLOYED	-	GENERATION X	PARTNER & Child(ren) (and partner) and vs. friends	HBO	>7 vs <3	MANAGERS		ASSIGNED
	Building	Appearance		1	-	-	-	-	-	-	-		
		Networking		2	-	-	-	-	-	-	MANAGERS		
		Sustainability		1 to 2	-	WOMAN	-	-	-	-	-		
	Workplace	Interior		3	-	MAN	-	FRIENDS vs. Child(ren) (and partner)	-	<1 vs. > 15	-	FULLTIME	-
		Variety Types		3	-	-	MILLENNIALS	-	-		-	FULLTIME	FLEXIBLE
		Personal Workplace		3	EMPLOYED	-	-	-	-		-	-	ASSIGNED
		Remote working		1	EMPLOYED	-	GENERATION X	CHILD(ren) (and partner) vs. Alone FRIENDS vs. Alone, Partner, Child(ren) (and partner)	-	7-15 vs <3	-	PARTTIME	-
		Ergonomic		3	-	-	-	-	-	-	-	-	FLEXIBLE
		Light		2	-	-	-	-	-	-	-	-	-
	INFLUENCE												
	General Employee Attraction	Rewards vs work environment	CONSTANT SUM %	R: 57 Wf: 43	S: 47 E: 42	W: 46 M: 39	Gen X: 40,6 Mill: 43,5	FRIENDS : 49.2 vs Child(ren) and P: 37,0	HBO: 40 WO: 44	1-3 vs 3-7	Manager: 40 IC: 42	Full: 41 Part: 40	Ass: 39 Flex: 42
		% Salary	%	7,1	S. 10,4 E. 6,03	W. 7.87 M. 5,93	Gen X: 5,18 Mill: 7,74	FRIENDS: 10,2 Alone: 5,42 Child(ren) (and partner): 4,69 Partner: 7,8 Parents: 6.69	HBO: 4,99 WO: 8,03	<1: 4,98 1-3: 9,53 3-7: 4,6 7-15: 5,09 15>: 4,61	Manager: 5,56 IC: 5,85	Full: 5,56 Part: 6,56	Ass: 5,52 Flex: 5,81
	Work Environment	% Influence	%	0,52	S.53,2 E. 51,8	W. 55,5 M. 47,9	Gen X: 50,1 Mill: 53,0	Friends: 55,1 Alone: 48,6 Child(ren) (and partner): 48,5 Partner: 55,3 Parents: 53	HBO: 55,8 WO: 49,6	<1: 52,8 1-3: 60,3 3-7: 39,8 7-15: 52,2 15>: 50,1	Manager: 46 IC: 53,7	Full: 48,9 Part: 61,8	Ass: 47,8 Flex: 52,6
	PREFERENCES												
	Location	Specific preference	Select	52,% YES 75% in Randstad with 37% Amsterdam	S: 49% E: 57%	W: 57% M: 52%	Gen X: 54% Mill: 57%	Friends: 53% Alone: 49% Child(ren) (and partner): 55% Partner: 61% Parents: 54%	HBO: 55% WO: 56%	<1: 50% 1-3: 60% 3-7: 65% 7-15: 60% 15>: 45%	Manager: 45% IC: 61%	Full: 58% Part: 54%	Ass: 56% Flex: 59%
		Historical City Center	likert (1-5)	1 (3,7)	STUDENTS			FRIENDS vs, alone & child(ren) & part	WO	<1 vs 7-15			
		CBD		1 (3,6)			MILLENNIALS	CHILD(REN) and P vs friends & alone	WO	<1 vs 3+		FULLTIME	
		Outskirts		3 (2,9)	EMPLOYED			FRIENDS vs Partner & Parents	HBO				
		Industrial		3 (2,9)									
		Business Park		4 (2,4)									
		Country House		2 (3,1)						> 15 vs 1-3			
		Reasoning locations	Select (max 3)										
		Transport preference	Select	Car: 27% PT: 17% Bicycle: 56%	Car: S20% E32% PT: S15% E11% Bicycle: S66% E56%	Car: W21% M39% PT: W13% M11% Bicycle: W65% M51%	Car: X42% M24% PT: X13% M11% Bicycle: X44% M64%	Car: F15% A28% C36% P32% P31% PT: F12% A14% C11% P9% P23% Bicycle: F73% A58% C52% P59% P40%	Car: H38% W21% PT: H17% W15% Bicycle: H52% W64%		Car: M40% I28% PT: M16% I9% Bicycle: M44% I62%	Car: F34% P23% PT: F11% P13% Bicycle: F56% P63%	
		Car	Minutes	43	S:39 E:44	W:39 M:51	X:40 M:43	F38 A49 C44 P42 P56	H:44 W:45		M:51 IC:42	F:47 P:34	
		Public Transport		47	S:50 E:46	W:45 M:50	X:44 M:48	F46 A44 C48 P46 P70	H:42 W:51		M:49 IC:47	F:47 P:47	
		Bicycle		27	S:26 E:27	W:28 M:27	X:28 M:27	F30 A25 C28 P28 P23	H:26 W:29		M:25 IC:27	F:27 P:30	
	Workplace	Desk vs interior quality	Select	Ass: 32 % Flex: 68%	ASS: S23 E36 FLEX: S77 E64	ASS: W32 M33 FLEX: W68 M67	ASS: X38 M31 FLEX: X62 M69				ASS: M32 IC37 FLEX: M68 IC 63		ASS: A69 F22 FLEX: A31 F72

APPENDIX IV.II | RESULTS: SIGNIFICANT DIFFERENCES BETWEEN GROUPS WITHIN DIFFERENT PERSPECTIVES



= variable is of significantly more influence for this group, compared to group(s) with yellow box(es) within same perspective

= variable is of significantly less influence for this group, compared to group with green box within same perspective

= variable(s) is/are significantly most influential for this group, compared to the other variables within same variable category

= variable is significantly secundary most influential for this group, compared to the other variables within same variable category

APPENDIX IV.III | MEAN INFLUENCE PER VARIABLE PER GROUP

Main Category	Sub Category	Current Status		Gender		Generation		Household Composition				Education Level		Years work Experience				JobLevel		Working Time		Desk type	
		Student	Employed	Women	Men	Millen-nials	Genera-tion X	Friends	Alone	Child (ren) & Partner)	Partner	Parents	HBO	WO	<1	1 to 3	3 to 7	7 to 15	> 15	Individu-al Contri-butor	Manager	Fulltime	Parttime	Assigned	Flexible
General employee attraction	Image organisation	12,58	11,68	11,09	12,96	11,62	12,76	11,64	10,65	12,87	11,57	13,54	11,20	12,23	12,13	10,50	12,37	11,40	12,18	10,50	15,08	11,97	10,60	11,31	11,58
	Rewards	16,88	20,59	18,18	21,51	18,67	22,29	15,23	19,56	22,30	20,47	19,23	21,57	18,33	13,96	18,34	22,54	21,14	23,00	20,74	20,34	19,88	23,38	23,44	19,40
	Social Climate	20,53	20,17	21,02	19,34	20,72	19,25	24,16	20,14	17,78	20,19	17,92	20,03	20,69	24,42	21,76	20,91	17,77	19,37	20,62	19,02	21,13	16,85	20,67	20,03
	Development Opportunities	20,12	17,42	17,52	18,77	18,78	16,56	18,69	19,60	15,71	18,59	21,54	15,56	19,81	20,75	19,42	16,26	17,02	15,49	16,90	18,44	18,22	13,92	17,01	17,34
	Working Hours	15,76	15,75	17,85	13,08	16,19	14,00	15,16	16,42	16,73	15,10	15,15	16,89	15,01	13,92	15,54	15,37	18,46	14,79	16,99	12,37	14,25	21,48	13,88	16,93
	Work Environment	14,12	14,39	14,34	14,34	14,02	15,13	15,12	13,63	14,61	14,08	12,62	14,74	13,93	14,83	14,44	12,54	14,21	15,17	14,25	14,76	14,55	13,77	13,69	14,73
Work Environment	Location	32,46	39,99	40,21	35,39	37,49	39,32	33,12	37,04	41,70	39,72	34,08	40,16	37,38	35,42	39,18	41,34	43,53	39,30	41,81	35,45	39,71	41,92	39,55	40,60
	Services & facilities	19,83	18,59	18,41	19,53	18,66	19,72	18,85	20,63	17,93	18,56	20,54	18,55	18,88	19,54	18,04	17,51	18,04	19,51	18,30	19,37	18,68	18,19	19,94	17,89
	Building	18,60	13,35	13,37	15,66	14,89	12,90	17,39	14,79	11,82	13,95	16,92	13,47	14,71	14,88	14,62	11,14	12,05	12,34	11,89	15,52	13,30	11,08	13,53	12,67
	Workplace	29,11	28,07	28,01	29,43	28,96	28,06	30,64	27,54	28,55	27,77	28,46	27,82	29,03	30,17	28,16	30,00	26,39	28,84	27,99	29,66	28,32	28,81	26,99	28,84
Location	Geographical	30,61	38,78	37,35	35,70	35,36	41,97	33,15	33,04	40,54	37,40	37,23	37,91	36,14	33,50	38,08	42,66	39,68	38,35	38,67	38,98	38,50	39,67	39,14	38,88
	Type	16,11	12,08	11,79	14,46	13,09	12,72	15,33	14,09	11,34	12,30	9,85	13,30	13,16	12,63	13,84	9,66	10,32	12,27	10,92	14,36	12,02	10,94	11,72	12,04
	Accessibility	35,81	37,02	38,39	35,04	37,00	34,75	34,75	36,80	38,43	36,99	39,46	37,40	36,26	37,88	34,22	36,14	39,75	38,12	38,33	34,59	37,10	38,42	36,99	37,31
	Proximity Amenities	17,47	12,12	12,47	14,80	14,55	10,56	16,77	16,07	9,69	13,32	13,46	11,40	14,45	16,00	13,86	11,54	10,25	11,27	12,08	12,07	12,38	10,96	12,15	11,76
Services & facilities	ICT	25,62	24,80	24,80	25,92	25,46	24,09	24,96	24,36	23,35	26,46	31,62	24,76	25,32	25,26	24,02	22,45	27,00	25,70	25,27	24,75	24,43	27,76	23,66	25,67
	Coffee, tea, other refreshments	24,27	21,60	22,60	21,95	22,56	22,57	24,24	24,32	20,43	22,05	19,85	20,91	23,23	23,04	23,65	23,39	19,92	20,40	21,69	21,58	22,07	20,14	20,28	21,95
	Healthy Catering	36,13	32,78	35,39	31,35	35,48	29,39	39,74	32,88	30,47	32,51	33,54	30,21	36,00	41,17	38,60	35,42	29,98	27,14	34,25	28,53	33,36	30,61	31,66	33,75
	Car Parking	13,98	20,82	17,22	20,78	16,50	23,96	11,07	18,45	25,75	18,98	15,00	24,12	15,46	10,52	13,73	18,73	23,09	26,77	18,79	25,15	20,13	21,49	24,41	18,63
Building	Appearance	34,49	36,76	35,50	37,04	36,71	36,12	38,91	35,00	36,22	34,33	38,23	39,79	35,04	38,95	39,64	31,39	39,15	34,87	38,37	32,85	37,13	35,85	39,90	35,27
	Networking	32,31	29,59	28,68	32,61	30,24	29,93	29,19	32,80	28,17	31,63	30,77	28,31	31,41	24,00	24,80	36,64	32,74	29,59	27,85	34,42	29,29	31,02	29,78	29,61
	Sustainability	33,20	33,64	35,83	30,35	33,05	33,95	31,90	32,20	35,61	34,04	31,00	31,90	33,55	37,05	35,56	32,07	28,11	35,54	33,78	32,73	33,58	33,12	30,32	35,12
Workplace	Interior	17,01	14,57	13,35	17,04	15,67	13,78	18,68	14,63	12,43	14,88	15,00	15,08	15,09	19,04	16,12	13,74	13,39	12,28	14,04	14,77	15,35	10,17	15,48	14,20
	Variety Types	15,89	13,56	14,19	14,28	14,92	11,85	17,69	12,95	12,47	14,50	11,38	14,54	14,57	15,96	14,52	12,23	13,39	13,12	13,19	14,90	14,48	10,56	10,73	14,74
	Personal Workplace	12,66	15,87	15,50	14,30	14,74	15,84	13,85	12,75	15,30	16,14	22,38	15,25	14,36	11,71	16,68	18,54	13,93	16,56	15,92	15,35	15,24	17,71	21,71	12,89
	Remote working	18,31	23,01	21,12	22,62	20,32	25,06	15,28	21,64	27,62	21,10	20,15	22,70	21,05	15,88	18,92	21,89	28,09	24,73	22,67	23,95	22,12	26,21	20,83	23,64
	Ergonomic	15,60	14,52	15,65	13,83	14,80	14,99	13,88	19,32	14,84	13,24	11,54	13,76	15,20	15,58	14,36	12,74	15,34	14,80	15,08	13,26	14,43	15,27	12,13	15,91
	Light	20,54	18,48	20,19	17,92	19,54	18,49	20,61	18,71	17,33	20,15	19,54	18,67	19,74	21,83	19,40	20,86	15,86	18,51	19,10	17,76	18,38	20,08	19,12	18,62

APPENDIX IV.IV | STATISTICAL RESULTS HETEROGENEOUS DATA

GENERAL EMPLOYEE ATTRACTION

ORGANISATIONAL IMAGE

- **A significant difference** between students and employed people was found concerning Image Organisation, t(326) = -2,142, p = 0,033.
  Men value Image Organisation significantly higher than women, mean difference = 1,867.
- **A significant difference** between people with different job levels was found concerning Image Organisation, t(240) = 4,011, p = 0.000
  Managers value image organisation significantly higher than individual contributors, mean difference = 4,581.

REWARDS

- **A significant difference** between students and employed people was found concerning Rewards, t(366) = -2,805, p = 0,005.
  Employed people value Rewards significantly higher than students, mean difference = 3,715.
- **A significant difference** between students and employed people was found concerning Rewards, t(326) = -2,720, p = 0,007.
  Men value Rewards significantly higher than women, mean difference = 3,326.
- **A significant difference** between people within different generations was found concerning Rewards, t(313) = 2,406, p = 0,017.
  Generation X values Rewards significantly higher than Millennials, mean difference = 3,622.
- **A significant difference** between people within different household compositions was found concerning Rewards.
  People living with child(ren) (and partner) value rewards significantly higher than people living with friends, p = 0.000, mean difference = 7,071.
  People living with partner value rewards significantly higher than people living with friends, p = 0.012, mean difference = 5,239.
- **A significant difference** between people with different education levels was found concerning Rewards, t(306) = 2,429, p = 0.016.
  People with HBO level value rewards significantly higher than people with WO level, mean difference = 3,238.
- **A significant difference** between people with different years of work experience was found concerning Rewards.
  People with less than one year of work experience value rewards significantly **lower** than people with 3 to 7 years work experience, p = 0.021, mean difference = 16,250;
  than people with 7 to 15 years work experience, p = 0.002, mean difference = 12,293;
  than people with more than 15 years work experience, p = 0.000, mean difference = 14,295.
- **A significant difference** between fulltime and parttime employed people was found concerning Rewards, t(240) = -1,986, p = 0,048.
  Parttime employed people value Rewards significantly higher than fulltime employed people, mean difference = 3,500.
- **A significant difference** between people with an assigned desk and people with a flexible desk was found concerning Rewards, t(236) = 2,567, p = 0,011.
  People with an assigned desk value Rewards significantly higher than people with a flexible desk, mean difference = 4,036.

SOCIAL CLIMATE

- **A significant difference** between people within different household compositions was found concerning Social Climate.

People living with friends value social climate significantly higher than people living with child(ren) (and partner), p = 0.000, mean difference = 6,383.

- **A significant difference** between people with different years of work experience was found concerning Social Climate.

  People with less than one year of work experience value social climate significantly higher than people with 7 to 15 years work experience, p = 0.031, mean difference = 6,644.

- **A significant difference** between fulltime and parttime employed people was found concerning Social Climate, t(240) = 2,792, p = 0,006.

  Fulltime employed people value Social Climate significantly higher than parttime employed people, mean difference = 4,285.

DEVELOPMENT OPPORTUNITIES

- **A significant difference** between students and employed people was found concerning Development Opportunities, t(366) = 2,475, p = 0,014.

  Students value Rewards significantly higher than employed people, mean difference = 2,704.

- **A significant difference** between people within different household compositions was found concerning Development Opportunities.

  People living with parents value development opportunities significantly higher than people living with child(ren) (and partner), p = 0.010, mean difference = 5,826.

- **A significant difference** between people with different education levels was found concerning Development Opportunities, t(306) = -3,966, p = 0.000.

  People with WO level value development opportunities significantly higher than people with HBO level, mean difference = 4,248.

- **A significant difference** between fulltime and parttime employed people was found concerning Development Opportunities, t(240) = 3,087, p = 0,002.

  Fulltime employed people value Development Opportunities significantly higher than parttime employed people, mean difference = 4,293.

WORKING HOURS

- **A significant difference** between students and employed people was found concerning Working Hours, t(326) = 4,610, p = 0,000.

  Women value Working Hours significantly higher than men, mean difference = 4,772.

- **A significant difference** between people with different job levels was found concerning Working Hours, t(240) = -3,147, p = 0.002

  Individual contributors value working hours significantly higher than managers, mean difference = 4,618.

- **A significant difference** between fulltime and parttime employed people was found concerning Working Hours, t(240) =-4,751, p = 0,000.

  Parttime employed people value Working Hours significantly higher than fulltime employed people, mean difference = 7,228.

- **A significant difference** between people with an assigned desk and people with a flexible desk was found concerning Working Hours, t(236) = -2,182, p = 0,030.

  People with a flexible desk value Working Hours significantly higher than people with an assigned desk, mean difference = 3,040.

WORK ENVIRONMENT

-

REWARDS vs. WORK ENVIRONMENT

- **A significant difference** between students and employed people was found concerning the degree they allocate to the influence of the work environment on their choice for a new job in relation to the influence of rewards, t(366) = 2,335, p = 0,020.

Students allocate a higher degree to the influence of work environments on their choice for a new job in relation to rewards, degree difference = 4,897.

- **A significant difference** between genders was found concerning the degree they allocate to the influence of the work environment on their choice for a new job in relation to the influence of rewards, t(326) = 3,298, p = 0,001.

  Women allocate a higher degree to the influence of work environments on their choice for a new job in relation to rewards, degree difference = 6,270.

- **A significant difference** between people within different household compositions was found concerning The Work Environment in relation to Rewards..

  People living with friends value Work Environment in relation to Rewards significantly higher than people living with child(ren) (and partner), p = 0.000, scale difference = 12,208.

- **A significant difference** between people with different years of work experience was found concerning The Work Environment in relation to Rewards..

  People with 1 to 3 years of work experience value Work Environment in relation to Rewards significantly higher than people with 3 to 7 years of work experience, p = 0.020, scale difference = 11,254.

% OF SALARY WILLING TO GIVE UP IN EXCHANGE FOR IDEAL WORK ENVIRONMENT

- **A significant difference** between students and employed people was found concerning the percentage of their (future) salary they want to give up in exchange for their ideal work environment, t(366) = 4,730, p = 0,000.

  Students are willing to give up a significantly larger part of their (future) salary than employed people, percentage difference = 4,417.

- **A significant difference** between genders was found concerning the percentage of their (future) salary they want to give up in exchange for their ideal work environment, t(317,511) = 2,408, p = 0,017.

  Women are willing to give up a significantly larger part of their (future) salary than men, percentage difference = 1,944.

- **A significant difference** between different generations was found concerning the percentage of their (future) salary they want to give up in exchange for their ideal work environment, t(313) = -2,400, p = 0,017.

  Millennials are willing to give up a significantly larger part of their (future) salary than Generation X, percentage difference = 2,559.

- **A significant difference** between people within different household compositions was found concerning the percentage of their (future) salary they want to give up in exchange for their ideal work environment.

  People living with friends are willing to give up a significantly larger part of their (future) salary
  than people living alone, p= 0.001, percentage difference = 4,779;
  than people living with child(ren) (and partner), p = 0.000, percentage difference = 5,509.

- **A significant difference** between different education levels was found concerning the percentage of their (future) salary they want to give up in exchange for their ideal work environment, t(306) = -3,234, p = 0,001.

  People with education level WO are willing to give up a significantly larger part of their (future) salary than people with education level HBO, percentage difference = 3,041.

% INFLUENCE OF THE WORK ENVIRONMENT

- **A significant difference** between women and men was found concerning the degree they allocate to the influence of the work environment on their choice for a new job, t(326) = 2,804, p = 0,005.

  Women allocate a higher degree to the influence of work environments on their choice for a new job, degree difference = 7,588.

- **A significant difference** between people who work fulltime and parttime was found concerning the degree they allocate to the influence of the work environment on their choice for a new job, t(240) = -3,308, p = 0,001.

  People who work parttime allocate a higher degree to the influence of work environments on their choice for a new job, degree difference = 12,895.

- **A significant difference** between managers and individual contributors was found concerning the degree they allocate to the influence of the work environment on their choice for a new job, t(240) = -2,062, p = 0,040.
  Individual contributors allocate a higher degree to the influence of work environments on their choice for a new job, degree difference = 7,667.

WORK ENVIRONMENT

LOCATION

- **A significant difference** between students and employed people was found concerning Location, t(206,973) = -4,698, p = 0,000.
  Employed people value Location significantly higher than students, mean difference = 7,529.
- **A significant difference** between women and men was found concerning Location, t(326) = 2,744, p = 0,006.
  Women value Location significantly higher than men, mean difference = 4,822.
- **A significant difference** between people within different household compositions was found concerning Location.
  People living with child(ren) (and partner) value location significantly higher than people living with friends, p = 0.003, mean difference = 8,582.
  People living with partner value location significantly higher than people living with friends, p = 0.017, mean difference = 6,596.
- **A significant difference** between people with different job levels was found concerning Location, t(240) = -2,617, p = 0.009
  Individual contributors value location significantly higher than managers, mean difference = 6,360.

SERVICES & FACILITIES

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BUILDING

- **A significant difference** between students and employed people was found concerning Building, t(357) = 4,773, p = 0,000.
  Students valued Building significantly higher than employed people, mean difference = 5,245.
- **A significant difference** between women and men was found concerning Building, t(326) = -2,236, p = 0,026.
  Men value Building significantly higher than women, mean difference = -2,285.
- **A significant difference** between people within different household compositions was found concerning Building.
  People living with friends value building significantly higher than people living with child(ren) (and partner), p = 0.001, mean difference = 5,568.
- **A significant difference** between people with different job levels was found concerning Building, t(240) = 2,770, p = 0.006
  Managers value building significantly higher than individual contributors, mean difference = 3,622.

WORKPLACE

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LOCATION

GEOGRAPHICAL LOCATION

- **A significant difference** between students and employed people was found concerning Geographical Location, t(218,227) = -4,353, p = 0,000.
  Employed people value Geographical Location significantly higher than students, mean difference = 8,169.
- **A significant difference** between people within different generations was found concerning Geographical Location, t(311) = 2,630, p = 0,009.
  Generation X values geographical location significantly higher than Millennials, mean difference = 6,615.

LOCATION TYPE

- **A significant difference** between students and employed people was found concerning Location Type, t(343) = 2,926, p = 0,004.
  Students valued Location Type significantly higher than employed people, mean difference = 4,021.
- **A significant difference** between women and men was found concerning Location Type, t(323) = -2,165, p = 0,031.
  Men value Location Type significantly higher than women, mean difference = 2,665.
- **A significant difference** between people with different job levels was found concerning Location Type, t(239), 2,140, p = 0.033
  Individual contributors value image location type significantly higher than managers, mean difference = 3,444.

ACCESSIBILITY

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PROXIMITY OF AMENITIES

- **A significant difference** between students and employed people was found concerning Proximity of Amenities, t(343) = 3,861, p = 0,000.
  Students valued Proximity of Amenities significantly higher than employed people, mean difference = 5,351.
- **A significant difference** between people within different generations was found concerning Proximity of Amenities, t(311) = -2,575, p = 0,010.
  Millennials value proximity of amenities significantly higher than Generation X, mean difference = 3,988.
- **A significant difference** between people within different household compositions was found concerning Proximity of Amenities.
  People living with friends value proximity of amenities significantly higher than people living with child(ren) (and partner), p = 0.000, mean difference = 7,085.
  People living alone value proximity of amenities significantly higher than people living with child(ren) (and partner), p = 0.012, mean difference = 6,385.
- **A significant difference** between people with different education levels was found concerning Proximity of Amenities, t(303) = -2,237, p = 0.026.
  People with WO level value proximity of amenities significantly higher than people with HBO level, mean difference = 3,051.

SPECIFIC LOCATION TYPE

- **A significant difference** between students and employed people was found concerning preference in Location Type: Historical City Center, t(346) = 5,865, p = 0,000.

Students prefer a historical city center significantly more than employed people, likert scale (1 to 5) difference = 0,736.

- **A significant difference** between students and employed people was found concerning preference in Location Type: Office complex at city outskirts, t(346) = 1,901, p = 0,006.
  Employed people prefer an office complex at city outskirts significantly more than students, likert scale (1 to 5) difference = 0,337.
- **A significant difference** between Generations was found concerning preference in Location Type: CBD, t(313) = -2,533, p = 0,012.
  Millennials prefer a CBD significantly more than Generation X, likert scale (1 to 5) difference = 0,315.
- **A significant difference** between people with different education levels was found concerning preference in Location Type: Historical City Center, t(306) = -2,385, p = 0,018.
  People with WO level prefer a historical city center significantly more than people with HBO level, likert scale (1 to 5) difference = 0,303.
- **A significant difference** between people with different education levels was found concerning preference in Location Type: CBD, t(306) = -2,198, p = 0,029.
  People with WO level prefer a CBD significantly more than people with HBO level, likert scale (1 to 5) difference = 0,246.
- **A significant difference** between people with different education levels was found concerning preference in Location Type: Office complex at outskirts, t(306) = 2,072, p = 0,039.
  People with HBO level prefer an office complex at city outskirts significantly more than people with WO level, likert scale (1 to 5) difference = 0,250.
- **A significant difference** between people within different household compositions was found concerning Historical City Center.
  People living with friends value Historical City centers significantly higher than people living alone, p = 0.006, scale difference = 0,65.
  People living with friends value Historical City centers significantly higher than people living with child(ren) (and partner), p = 0.000, scale difference = 0,87.
  People living friends value City centers significantly higher than people living with partner, p = 0.000, scale difference = 0,70.
- **A significant difference** between people within different household compositions was found concerning Historical CBD's.
  People living with friends value CBD's significantly higher than people living with child(ren) (and partner), p = 0.002, scale difference = 0,53.
  People living alone value CBD's significantly higher than people living with child(ren) (and partner), p = 0.048, scale difference = 0,43.

- **A significant difference** between people within different household compositions was found concerning Historical Office complexes at outskirts.
  People living with partner value Office complexes at outskirts significantly higher than people living with friends, p = 0.042, scale difference = 0,43.
  People living with parents value Office complexes at outskirts significantly higher than people living with friends, p = 0.018, scale difference = 0,70.
- **A significant difference** between people within different household compositions was found concerning Historical City Center.
  People working for less than one year value Historical City centers significantly higher than people working 7 to 15 years, p = 0.028, scale difference = 0,73.
- **A significant difference** between people within different household compositions was found concerning Historical CBD.
  People working for less than one year value CBD's significantly higher than
  people working 3 to 7 years, p = 0.49, scale difference = 0,68;
  people working 7 to 15 years, p = 0.001, scale difference = 0,75;
  people working more than 15 years, p = 0.000, scale difference = 0,97.

People working for 1 to 3 years value CBD's significantly higher than people working more than 15 years, p = 0.002, scale difference = 0,54.

- **A significant difference** between people within different household compositions was found concerning Historical Country House.
  People working for more than 15 years value Country Houses significantly higher than people working 1 to 3 years, p = 0.002 scale difference = 0,75.
- **A significant difference** between people who work fulltime and parttime concerning preference in Location Type: CBD, t(240) = 2,426, p = 0,016.
  People who work fulltime prefer a CBD significantly more than people who work parttime, likert scale (1 to 5) difference = 0,343.

TRANSPORTATION PREFERENCE

- A statistically significant association between Gender and transport preference was observed, χ^2 (2) = 12,620, p = 0.002.
- A statistically significant association between Generations and transport preference was observed, χ^2 (2) = 10,168, p = 0.006.
- A statistically significant association between Education Level and transport preference was observed, χ^2 (2) = 10,603, p = 0.005.
- A statistically significant association between Job Level and transport preference was observed, χ^2 (2) = 6,757, p = 0.034.

TRANSPORTATION TIME

- **A statistically significant association** between Gender and transport time by car was observed concerning Car, χ^2 (39) = 67,156, p = 0.003.
  Men are willing to drive 11 minutes longer (51) than women (39).

- **A statistically significant association** between Generations and transport time concerning public transport was observed, χ^2 (38) = 67,453, p = 0.002.
  Millennials are willing to travel 4 minutes longer (48) than Generation X (44).

SERVICES & FACILITIES

ICT (HELPDESK)

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COFFEE, TEA, OTHER REFRESHMENTS

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HEALTHY CATERING

- **A significant difference** between women and men was found concerning healthy catering, t(312) = 2,380, p = 0,018.
  Women value healthy catering significantly higher than men, mean difference = 4,046.
- **A significant difference** between people within different generations was found concerning healthy catering, t(300) = -3,004, p = 0,003.
  Millennials value healthy catering significantly higher than Generation X, mean difference = 6,089.
- **A significant difference** between people within different household compositions was found concerning Healthy Catering.
  People living with friends value healthy catering significantly higher than people living alone, p = 0.047, mean difference = 6,861.

People living with friends value healthy catering significantly higher than people living with child(ren) (and partner), p = 0.000, mean difference = 9,270.
People living with friends value (healthy) catering significantly higher than people living with partner, p = 0.003, mean difference = 7,224.

- **A significant difference** between people with different education levels was found concerning healthy catering, t(292) = -3,173, p = 0.002.
  People with WO level value healthy catering significantly higher than people with HBO level, mean difference = 5,786.
- **A significant difference** between people with different years of work experience was found concerning healthy catering.
  People with less than one year of work experience value healthy catering significantly higher than people with 7 to 15 years work experience, p = 0.008, mean difference = 11,192;
  than people with more than 15 years work experience, p = 0.000, mean difference = 14,037.
  People with 1 to 3 years of work experience value healthy catering significantly higher than people with 7 to 15 years work experience, p = 0.047, mean difference = 8,623;
  than people with more than 15 years work experience, p = 0.002, mean difference = 11,467.
- **A significant difference** between people with different job levels was found concerning healthy catering, t(228) = -2,445, p = 0.015
  Individual contributors value healthy catering significantly higher than managers, mean difference = 5,720.

CAR PARKING PLACES

- **A significant difference** between students and employed people was found concerning Car Parking Places, t(328) = -2,971, p = 0,003.
  Employed people value Car Parking Places significantly higher than students, mean difference = 6,844.
- **A significant difference** between people within different household compositions was found concerning Car Parking places.
  People living with child(ren) (and partner) value (healthy) catering significantly higher than people living with friends, p = 0.000, mean difference = 14,681.
  People living with partner value (healthy) catering significantly higher than people living with friends, p = 0.019, mean difference = 7,907.
- **A significant difference** between people with different education levels was found concerning Car Parking Places, t(141,354) = 3,526, p = 0.001.
  People with HBO level value car parking places significantly higher than people with WO level, mean difference = 8,663.
- **A significant difference** between people with different years of work experience was found concerning Car Parking Places.
  People with 7 to 15 years of work experience value car parking places significantly higher than people with less than 1 year of work experience, p = 0.010, mean difference = 12,573.
  than people with 1 to 3 years of work experience, p = 0.030, mean difference = 9,365.
  People with more than 15 years of work experience value car parking places significantly higher
  than people with less than 1 year of work experience, p = 0.000, mean difference = 16,245.
  than people with 1 to 3 years of work experience, p = 0.001, mean difference = 13,038.
- **A significant difference** between people with different job levels was found concerning car parking places, t(228) = 2,263, p = 0.025
  Managers value car parking places significantly higher than individual contributors, mean difference = 6,363.
- **A significant difference** between people with an assigned desk and people with a flexible desk was found concerning Car Parking Places, t(224) = 2,208, p = 0,028.
  People with an assigned desk value Car Parking Places significantly higher than people with a flexible desk, mean difference = 5,781.

BUILDING

BUILDING APPEARANCE

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NETWORKING OPPORTUNITIES

- **A significant difference** between people with different job levels was found concerning Networking Opportunities, t(200) = 2,130, p = 0.034

  Managers value networking opportunities significantly higher than individual contributors, mean difference = 6,568.

SUSTAINABILITY IMPLEMENTATIONS

- **A significant difference** between women and men was found concerning Sustainability Implementations, t(284) = 2,438, p = 0,015.

  Women value Sustainability Implementations significantly higher than men, mean difference = 5,474.

WORKPLACE

INTERIOR

- **A significant difference** between women and men was found concerning Interior, t(324) = -3.182, p = 0,002.

  Men value Interior significantly higher than women, mean difference = 3,696.
- **A significant difference** between people within different household compositions was found concerning Interior design.

  People living with friends value interior design significantly higher than people living with child(ren) (and partner), p = 0.001, mean difference = 6,245.
- **A significant difference** between people with different years of work experience was found concerning Interior.

  People with less than one year of work experience value rewards significantly higher than people with more than 15 years work experience, p = 0.024, mean difference = 6,762.
- **A significant difference** between fulltime and parttime employed people was found concerning Interior, t(240) = 3,109, p = 0,002.

  Fulltime employed people value Interior significantly higher than parttime employed people, mean difference = 5,178.

VARIETY IN WORKPLACE TYPES

- **A significant difference** between people within different generations was found concerning variety in workplace types, t(312) = -2,150, p = 0,032.

  Millennials value variety in workplace types significantly higher than Generation X, mean difference = 3,066.
- **A significant difference** between fulltime and parttime employed people was found concerning Variety in Workplace Types, t(240) = 2,294, p = 0,023.

  Fulltime employed people value Variety in Workplace Types significantly higher than parttime employed people, mean difference = 3,921.
- **A significant difference** between people with an assigned desk and people with a flexible desk was found concerning Variety in Workplace Types, t(234) = -2,671, p = 0,008.

  People with a flexible desk value Variety in Workplace Types significantly higher than people with an assigned desk, mean difference = 4,014.

PERSONAL DESK

- **A significant difference** between students and employed people was found concerning Personal Workplace, t(193,643) = -2,227, p = 0,027.

Employed people value Personal Workplace significantly higher than students, mean difference = 3,211.

- **A significant difference** between people with an assigned desk and people with a flexible desk was found concerning Personal Workplace, t(234) = 4,772, p = 0,000.
  People with an assigned desk value Personal Workplace significantly higher people with a flexible desk, mean difference = 8,821.

REMOTE WORKING

- **A significant difference** between students and employed people was found concerning Remote Working, t(333) = -2,910, p = 0,004.
  Employed people value Remote working significantly higher than students, mean difference = 4,698.
- **A significant difference** between people within different generations was found concerning Remote Working, t(312) = 2,708, p = 0,007.
  Generation X values car remote working significantly higher than Millennials, mean difference = 4,738.
- **A significant difference** between people within different household compositions was found concerning Remote Working.
  People living with child(ren) (and partner) value remote working significantly higher than people living friends, p = 0.000, mean difference = 12,344.
  People living alone value remote working significantly higher than people living with friends, p = 0.012, mean difference = 6,363.
  People living with partner value remote working significantly higher than people living with friends, p = 0.011, mean difference = 5,822.
  People living with child(ren) (and partner) value remote working significantly higher than people living alone, p = 0.047, mean difference = 5,981.
  >>> significantly lower by people with friends
- **A significant difference** between people with different years of work experience was found concerning Remote Working.
  People with 7 to 15 years of work experience value remote working significantly higher
  than people less than 1 year of work experience, p = 0.000, mean difference = 12,214;
  than people with 1 to 3 years work experience, p = 0.004, mean difference = 9.169.
  People with more than 15 years of work experience value remote working significantly higher
  than people less than 1 year of work experience, p = 0.004, mean difference = 8,858.
  than people with 1 to 3 years work experience, p = 0.042, mean difference = 5,813.
- **A significant difference** between fulltime and parttime employed people was found concerning Remote Working, t(240) = -1,977, p = 0,049.
  Parttime employed people value Remote working significantly higher than fulltime employed people, mean difference = 4,095.

ERGONOMIC WORKPLACE

- **A significant difference** between people with an assigned desk and people with a flexible desk was found concerning Ergonomics, t(234) = -2,642, p = 0,009.
  People with a flexible desk value Ergonomics significantly higher than people with an assigned desk, mean difference = 3,782.

AMOUNT OF LIGHT

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DESK TYPE PREFERENCE

- **A statistically significant association** between Students & Employed people and desk type preference was observed, χ^2 (2) = 4,499, p = 0.034.
  More students (77%) prefer a flexible desk with a high quality interior above an assigned desks with medium quality interior significantly than employed people do (64%), difference = 13%.

- **A statistically significant association** between Current Desk Type and desk type preference was observed, χ^2 (2) = 50,345, p = 0.000.
  More people with a flexible desk (72%) prefer a flexible desk with a high quality interior above an assigned desks with medium quality interior significantly than people with an assigned desk do (31%), difference = 41%.


TUDelft