

**Employees' perspectives of the  
current work environment at the  
JAMK School of Health and Social  
Studies**

Margarita Sohlman

Bachelor's thesis  
June 2016

Degree Programme in Facility Management  
School of Business and Services Management

Author(s) Sohlman, Margarita	Type of publication Bachelor's thesis	Date June 2016
	Number of pages 55	Language of publication: English
		Permission for web publication: x
Title of publication <b>Employees' perspectives of the current work environment at the JAMK School of Health and Social Studies</b>		
Degree programme Degree Programme in Facility Management		
Supervisor(s) Soili Partanen		
Assigned by JAMK University of Applied Sciences, Facility Services		
Description  <p>The goal of the thesis was to explore the perspectives of and satisfaction with the current work environment of the employees of JAMK University of Applied Sciences. The objective was to determine if there are development needs, functionality, and user-orientation in the work environment.</p> <p>The research methods used in the study were both qualitative and quantitative. The qualitative research was executed through individual theme interviews with three managers at the JAMK School of Health and Social Studies. The quantitative research was conducted in the form of a survey using the Webropol survey application. The survey was selected to gather information of the employees of the JAMK School of Health and Social Studies. The questionnaire was mailed to the 82 employees of the JAMK School of Health and Social Studies. The survey received a 45 % response rate.</p> <p>The results of the research show that the employees' of the JAMK School of Health and Social Studies were quite satisfied with their current work environment. Some improvements were hoped for to increase their work satisfaction and well-being. Based on the results, some suggestions were made to improve the satisfaction and well-being of the employees.</p> <p>The results of the research offers valuable information from JAMK employees' point of view. In the results, the employees' job satisfaction and experiences of their current work environment came up. The results cannot be utilized as such in the other departments of JAMK. However, the results can be applied in further studies.</p>		
Keywords/tags ( <a href="#">subjects</a> ) Well-being, space efficiency, work environment		
Miscellaneous		

Tekijä(t) Sohlman, Margarita	Julkaisun laji Opinnäytetyö, AMK	Päivämäärä Kesäkuu 2016
	Sivumäärä 55	Julkaisun kieli Englanti
		Verkojulkaisulupa myönnetty: x
Työn nimi <b>JAMK Hyvinvointiyksikön työntekijöiden kokemuksia nykyisestä työympäristöstä</b>		
Koulutusohjelma Facility Management		
Työn ohjaaja(t) Soili Partanen		
Toimeksiantaja(t) Jyväskylän ammattikorkeakoulu, toimitilapalvelut		
<p>Tiivistelmä</p> <p>Opinnäytetyön tavoitteena oli tutkia Jyväskylän ammattikorkeakoulun työntekijöiden kokemuksia ja tyytyväisyyttä heidän nykyisessä työympäristössään. Tavoitteena oli selvittää, onko työympäristössä kehittämistarpeita, toimivuutta, käyttäjälähtöisyyttä.</p> <p>Tutkimuksessa tutkimusmenetelminä käytettiin kvalitatiivista ja kvantitatiivista tutkimusotetta. Kvalitatiivista tutkimusta käytettiin teemahaastatteluissa, ja tutkimus toteutettiin tekemällä yksittäisiä teemahaastatteluja kolmelle päällikölle, jotka työskentelevät JAMK Hyvinvointiyksikössä. Kvantitatiivinen tutkimus toteutettiin kyselynä Webropol-kyselyohjelman kautta. Kysely lähetettiin sähköpostilla 82:lle Hyvinvointiyksikön työntekijälle, kyselyn vastausprosentti oli 45 %.</p> <p>Tutkimuksen tulokset osoittavat, että JAMK Hyvinvointiyksikön työntekijät olivat melko tyytyväisiä nykyiseen työympäristöön. Joitakin parannuksia toivottiin, jotta työtyytyväisyys ja hyvinvointi lisääntyisivät. Tulosten perusteella koottiin ehdotuksia, joilla voidaan parantaa työntekijöiden työtyytyväisyyttä ja työhyvinvointia.</p> <p>Tutkimuksen tulokset tarjoavat arvokasta tietoa ammattikorkeakoulun henkilöstön näkökulmasta. Tuloksissa tuli esille heidän työtyytyväisyytensä ja kokemuksia nykyisestä työympäristöstä. Tuloksia ei voida sellaisenaan hyödyntää muissa JAMK yksiköissä, mutta tuloksia voidaan soveltaa jatkotutkimuksissa.</p>		
Avainsanat ( <a href="#">asiasanat</a> ) työhyvinvointi, tilatehokkuus, työympäristö		
Muut tiedot		

## Contents

1	Introduction.....	4
2	Work Environment .....	8
2.1	Physical work environment .....	11
2.2	Social work environment.....	19
2.3	Virtual work environment .....	21
3	User Types .....	22
4	Research Design and Implementation .....	24
4.1	Methodology .....	25
4.2	Data Collection .....	25
4.3	Data Analysis .....	26
5	Research Results.....	27
5.1	Results from the interviews .....	28
5.2	Results from the survey.....	31
6	Conclusion .....	39
6.1	Discussion .....	41
6.2	Reliability and Validity .....	42
	References.....	44
	Appendices .....	48
	Appendix 1. Theme interviews main questions .....	48
	Appendix 2. The e-mail message for the employees' .....	49
	Appendix 3. Survey in Webropol survey application.....	50

## Figures

Figure 1. School of health and social studies brochure 2015 .....	8
Figure 2. Work process as a whole.....	9
Figure 3. Index of real estate maintenance costs 2010=100 .....	12
Figure 4. Benefits and drawback in an open-area office .....	14
Figure 5. The harms caused by noise .....	16
Figure 6. Factors that plays a vital role in a physical work environment.....	32
Figure 7. Satisfaction in a current work environment in JAMK .....	33
Figure 8. Statement: Social interaction is supported very well in my workplace.....	34
Figure 9. Support in a social well-being .....	35
Figure 10. How often do you work in a virtual work environment? .....	36
Figure 11. Satisfaction in a current virtual work environment in JAMK .....	37
Figure 12. I belong to the following group.....	38

## Tables

Table 1. Building attributes .....	18
Table 2. Multi-locational workspaces .....	22

# 1 Introduction

In this thesis the main focus is on Jyväskylä University of Applied Sciences and the changes that are occurring in the work environment of the Health and Social Studies. Digital environment has created an opportunity to work, regardless of time and place. This will bring to the workspace a new kind of work premises and moving more and more to open floor-plan offices without individual workstations.

The requirements of space efficiency set by the Ministry of Education and Culture were already met five years ago in JAMK University of Applied Science. Only the requirements of the employees' in the new building have to be satisfied, but it is a long process and change and environmental management should be taken into account to achieve work satisfaction and well-being in Jyväskylä University of Applied Sciences.

The work that the employees of the School of Health and Social Studies are doing is important and supporting their well-being in the work environment through solving problems and acknowledging future needs can create a successful and efficient work culture at JAMK.

The School of Health and Social Studies could have many new challenges in their new work environment. Providing suitable learning and working environment for the students and employees' can be a challenge. Facility services and management play an important role in making the right changes in order to avoid unwanted results.

## Research problem

The topic for the thesis came from Facility Management Department of Jyväskylä University of Applied Sciences (JAMK). This thesis will provide information about the current satisfaction level of the JAMK staff in physical, social and virtual working environments.

The aim of the thesis is to explore the perspectives of the physical, social and virtual work environment of the JAMK staff, of the functionality of the working environment including user-orientation and development needs of those three work

environments. Well-being is a strong link to satisfaction with a working environment and it can be measured on a current satisfaction level of the JAMK staff. Change management is a way to manage changes and it is important to manage people if the change of mindset is needed.

The main research question is the following:

- What are the perspectives of the JAMK staff about current physical, social and virtual work environment?

The sub research questions will support the main question:

- What are the viewpoints of the work environment and satisfaction of the JAMK head of department?
- What are the viewpoint of the JAMK's employees' about their current work environment?

The study of the phenomena started from the theory part. It was clear from the beginning that to understand the subject and the phenomena, quantitative and qualitative methods would have to use. Through mixed-methods, the qualitative research method will have focus group and in the interviews the social phenomena could be studied more closely in order to have a deeper understanding of it. With a quantitative research method, the data collection would be measured by using a survey and it would not be influenced by the phenomena that is studied. The survey is an efficient way to collect and analyze the needed data. The use of mixed-method designs will help to conduct relevant and valuable research. (Sale, Lohfeld, & Brazil 2002, 44.)

The theoretical part was one of the key elements for finding the research problem and solving it by asking the right questions, first in the interviews and then in the survey. The phenomenon researched is clearly linked to the studied research problem and research questions will measure and would answer the problems of the studied phenomena.

## **Structure of the thesis**

This thesis consists of seven chapters with the first being an introduction chapter. The first chapter introduces the aim of the thesis, research questions, research problems, and studied phenomena to the reader. The case work environment, JAMK Social Services and Health Care, is introduced. In this chapter, information about of the Dynamo campus will be provided along with the JAMK Social Services and Health Care department.

The second chapter constitutes the theoretical framework of the thesis. This chapter focuses on the introduction of a work environment and tangible/intangible aspects in the work environment of the JAMK employees'. By dividing a work environment into three different combinations, which are Physical work environment including; ergonomics, noise, lighting, heat and ventilation and sustainability, Social environment and Virtual environment, it will point out the importance of every part of the environment where JAMK employees are working in.

Chapter three describes the user types. User types are divided into four user types and their way of working is explained to better understanding of different ways to work. The chapter is a part of theory and it shows what kinds of workers there can also in JAMK. User types helps to understand what kinds of work environment different types needs.

The fourth chapter focuses on the research process as a whole and introduces the methods that were used to conduct this research. The process of data gathering and the implementation of the interviews and survey are explained to the reader.

In chapter five the results are presented, showing JAMK employees' overall feelings about the current work environment and how people experience the current work environment. The results from the interviews and the survey will show similarities in the respondent's answers.

Chapter six is a conclusion of the results including discussion were some suggestions are made including the self-evaluation of the learning process. The reliability and validity of this thesis are shown last.



## **JAMK School of Health and Social Studies**

In JAMK University of Applied Sciences (JAMK), students can study in eight different fields of study: ICT, Culture, Business Administration, Natural Resources and the Environment, Social Services and Health Care, Technology and Transport and Tourism and Hospitality. JAMK also provides teacher education programmes and together with Research, Development and Innovation (RDI), they produce new pedagogical solutions that are shared with educational institutions and with different organisations. JAMK offers Bachelor's and Master's degree programmes in Finnish and also in English. JAMK University of Applied Sciences has a Vision 2020 with the goal to be the best university of applied sciences in Finland, having strong evidence of the quality of education, internationalisation and the promotion of entrepreneurship. (JAMK information 2016.)

This thesis focuses on the School of Health and Social Studies and the teachers working at the Dynamo campus. The field of Social Services and Health Care offers Bachelor's Degrees in Midwifery, Nursing, Occupational Therapy, Physiotherapy, Rehabilitation Counselling and Social Services. Including four Master's Degrees in Advanced Nursing Practice, Health Care and Social Services Development and Management, Health Promotion and Social Services. (JAMK Social Services and Health Care 2016.)

In summer 2014, JAMK School of Health and Social Studies moved from Puistokatu 35 to the Dynamo campus at Piippukatu 2. In June 2014, JAMK's Dynamo campus passed the Green Office audit that was organized by WWF. (JAMK's annual report 2014.)

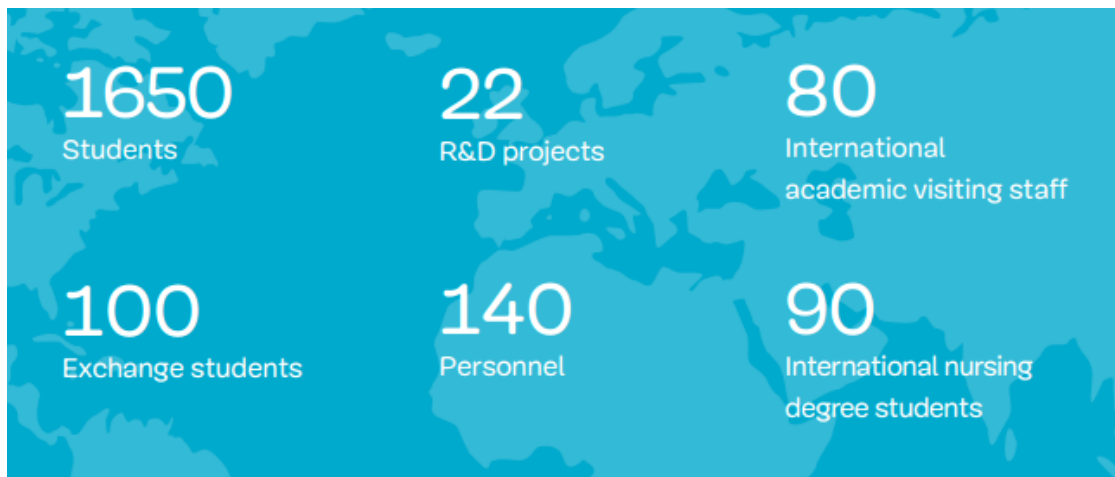


Figure 1. School of health and social studies brochure 2015

In 2015, JAMK School of Health and Social Studies had 1650 students, 100 exchange students, 90 international nursing degree students. The JAMK School of Health and Social Studies is focusing on the R&D work promoting the personal health and well-being of 140 employees'. In 2015 The JAMK School of Health and Social Studies had 22 R&D projects and 80 international visitors. (School of Health and Social Studies Brochure 2015).

## 2 Work Environment

In this chapter, three different work environments are presented and how they are connected to the well-being, a work satisfaction and the performance of a worker. The theory will provide important information and this theoretical framework will support the aim to find all relevant information about the topic of this thesis.

This model shows a needed parts in a mobile workplace. Places, people and technology are the elements that work process management consists of. An outcome is seen as a performance of a work done and well-being as a satisfaction in a work environment. (Vartiainen, Hakonen, Mannonen, Nieminen, Ruohomäki, & Vartola 2007, 1.)

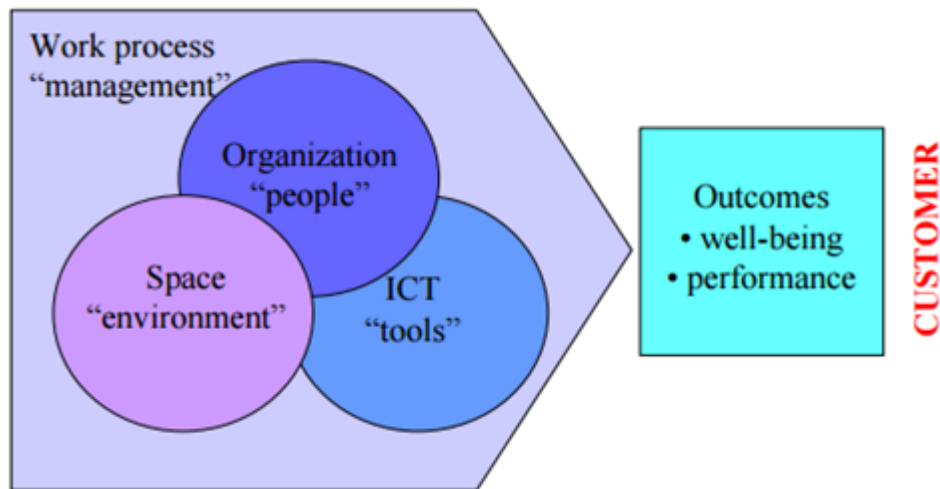


Figure 2. Work process as a whole (Vartiainen et al. 2007, 1)

In *Distributed Work Environments* (Vartiainen et al. 2007, 6) discusses the space use in shared organizations and needed requirements in term of productivity and effective management of work processes. Individual workers can see a work environment as a puzzle of places and people. The view of the workplace is a holistic, individual experience. People have their own unique work styles and they want to make their own choices. However, this aspect of user-centred office design is usually neglected due to different organizational targets such as economic restraints.

(Vartiainen et al. 2007, 6.)

In a working environment, buildings play an important part in defining the workers working place with functionality being seen by many as the most important office quality, for satisfaction. (Luoma, Niemi, Rothe, Lindholm 2010, 4). Vischer (2007, 7) states that from the perspective of the building user, the environmental comfort approach focuses on measuring workplace performance. In an office buildings functional aspects and the concept of comfort has more recently been applied to defining standards for building systems performance. Comfort is a basis for setting environmental standards, creating the recognition that people need more than just being healthy and safe in the buildings that they are working in. Functional comfort is a needed environmental support for the activities that employees' are performing. Workers satisfaction is linked to a comfort as a psychological aspects that is an out-

come of a measures of organizational productivity, environmental support for employees' motivation and improved task performance. (Vischer 2007, 7.)

More recently, office work has become to be defined by a combination of the physical, social and virtual environments. Working environments should, in this view, be suitable to this wider interpretation of working with everything that surrounds workers having an ability to affect them while they work. This include tangible aspects like co-workers, the whole building and its furniture; with intangible aspects that are virtual working environments. These virtual environments can be more important and have a bigger impact on workers satisfaction, which therefore, can reflect on how people cope with each other. (Rantanen 2013, 8.)

It is proposed that satisfied workers will have a better work performance and productivity (which is connected to the well-being), and this would be good for a company's success. Creating the work environment that will be comfortable and satisfactory to all workers needs is not possible due to differences in every person's preferences. (Rantanen 2013, 9.) Those needs and preferences have difference; differences that a person cannot live without. Needs are important in a working environment and with-out them a person may not perform optimally at work. Preferences are a person's wishes and desires which are not needed to be able to do work but that which can increase satisfaction and productivity of a worker. (Rantanen 2013, 9.) The importance of preferences in a working environment should be taken in to consideration with it being shown by Rantanen (2013) where PREFE Project was used as a background material for the thesis, a project gave a good insight of what the office users prefer the most in a workspace that supports a well-being and the ability to enjoy work.

The tangible environment is physical work environment that has all elements to do work and in the next chapter physical work environment gathers all supporting materials in a whole work environment, including space efficiency as an important part of JAMK employees' work environment. The Intangible environment will focus on social and virtual work environment that are increasing more and more in the future and are have an important role in a school environment.

## 2.1 Physical work environment

To provide the best possible working environment it is important to consider all the tangible and physical objects that should support workers well-being. The tangible environment means the building itself and the elements that are outside and inside of the building. Physical work environment can consist of different elements such as heating, ventilation, lighting, noise and ergonomics of furniture. These physical elements have a great role in sustainability and overall working environment. If there are problems in those elements, it can cause disaffection, different health problems and a decrease in productivity. (Rantanen 2013, 10.)

In researches projects, in this case PREFE Project (2010) where the office occupants' needs and preferences were studied, it has been shown that employees' wish to be able to influence on their working environment. Even the environmental sustainability was effecting on workers performance. Public transportation as an example. In questionnaire this example was in the accessibility section and in environmental impact section. In the (PREFE Project 2010) result, the public transport was ranked higher when it was linked to the impact of a work environment. With different preference profiles it is easier to understand employees' with similar preferences. In the future, it is needed to put an effort in user driven, participatory workplace development. (PREFE Project 2010.)

Spending a lot of money on a building or on the look and feel of the office space can result in something that will not work. Getting value for money is a common saying, or in other words, spending money to get the most of value for what you are paying. When there is no value, customers do not notice the change, employees' are not satisfied with the effort because it is not flexible. (Becker 2004, 103.) It is not essential to spend a lot of money, just focusing on small changes that will take time and effort. The change must be targeted at what employees' really care about, not what a hired workspace planner has in mind and guessing what employees' might care about. (Becker 2004, 103.)

Physical work environment is a physical workplace that can be at home, office, and hotel or in a customer's premises. Employees' can choose where they do the work and that provides flexibility working. Flexible working can reduce costs and may bring

environmental benefits to the organization by reducing the carbon footprint. By unitizing existing office space as best as organizations can, it can motivate employees' toward better performance and in meeting needs and technology in work space which are important factors. (Khasu 2015, 9.)

In most of the best Finnish best workplaces, facilities act as an extension of a home. It is a place where people come to enjoy and meet other co-workers and work is done with a great motivation and passion. People are willing to make every effort to give every-thing and that is why it is important that the spaces are flexible according to the needs of employees'. (Borg, Naturvention 2016.)

### Space efficiency

In the recent years, the pressure in space efficiency has increased. In a current economic situation, savings must be done and facilities are one of the biggest targets. Property maintenance costs have risen by 2.0 per cent in a year 2015 in the second quarter, from the same period in 2014. (Statistics Finland 2015.)

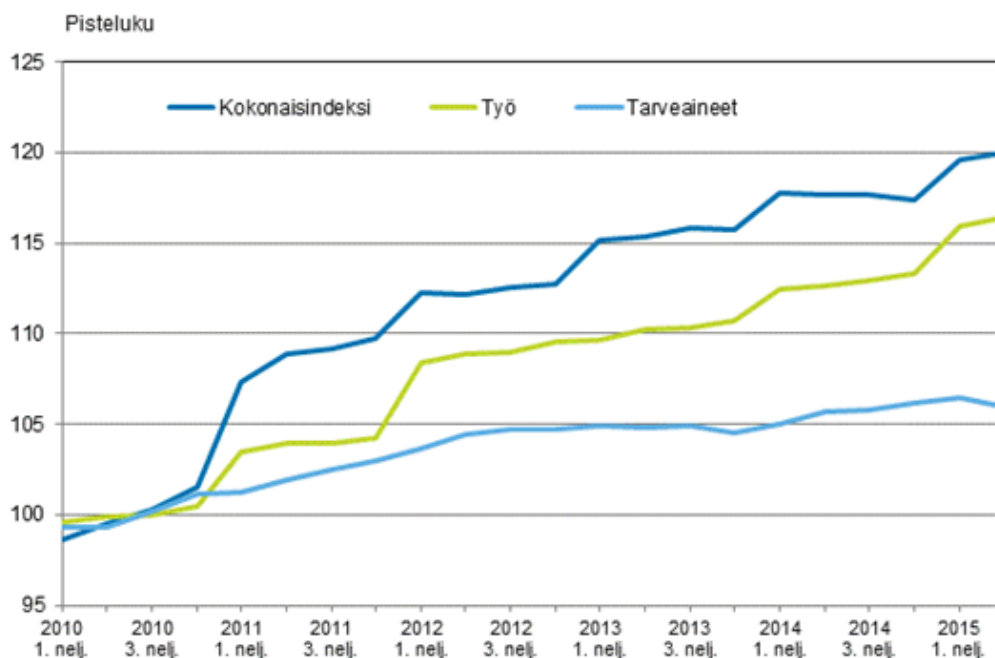


Figure 3. Index of real estate maintenance costs 2010=100 (Statistics Finland 2015)

Äijälä (2012) mentions possible savings that could be in the optimization of space use, renting an extra unused space, minimising the maintenance level or giving up the property altogether. Space efficiency can grow when unused premises are rented, dividing the surface area by a larger pool of users. Inversely, by increasing remote work, the use of working space need will decrease and the premises will be able to operate with smaller amounts of space provision. Also making a one person office to three person office and moving from small office space to large office space solutions may increase space efficiency. (9-10.)

When moving in to a smaller building, managers must implement changes in an office space use and this can increase the use of a large office space solutions. Vartiainen et al. (2007, 26) mentioned that as an open-area offices, shared-offices, there are many advantages and disadvantages in utilizing this model. Having many possibilities in sharing workspace for a different purposes can be beneficial and that can maximize the use of unassigned space. Also minimizing the costs of workstations due to flexible usages of other locations to do their work and not use their desks fulltime. This table shows benefits and drawbacks while working in an open-area office. (Vartiainen et al. 2007, 26).

Benefits	Drawbacks
<p>From the viewpoint of companies</p> <ul style="list-style-type: none"> <li>- Cutting costs of office space when compared to cubicle office</li> <li>- Better use of space by increased headcount per desk</li> <li>- More interaction between managers and their teams (if that is valuable)</li> <li>- Enhanced flexibility and satisfaction of employees when implemented carefully and effectively</li> <li>- Quicker decisions because of enhanced communication</li> </ul>	<p>From the viewpoint of companies</p> <ul style="list-style-type: none"> <li>- Employees may be reluctant to give up their own space</li> <li>- Too high density may become counterproductive</li> <li>- Size of teams may create space shortage</li> <li>- Managing turnover of spaces between users</li> <li>- Scheduling conflicts</li> <li>- Investments in equipment and training</li> </ul>
<p>From the viewpoint of employees</p> <ul style="list-style-type: none"> <li>- Encourages interaction</li> <li>- Fluent communication</li> <li>- Social support from colleagues</li> <li>- Explicit and tacit learning</li> <li>- Feedback</li> <li>- Rich communication</li> <li>- Business is performed in a spontaneous, informal and flexible manner</li> </ul>	<p>From the viewpoint of employees</p> <ul style="list-style-type: none"> <li>- Feelings of lost privacy</li> <li>- Uncontrolled noise and interruptions (uninvited chatting and asking questions) in work</li> <li>- Disturbances created by meetings within the space → difficulties in concentrating</li> <li>- Overhearing co-workers</li> <li>- Two people trying to use same desk, not finding a place to work</li> <li>- Losing “sense of space” in the organization</li> <li>- Storage can be problematic</li> </ul>

Figure 4. Benefits and drawback in an open-area office (Vartiainen et al. 2007, 26)

There are many different physical aspects that are important to the employees' well-being, supports their work and provide privacy and flexibility for a different tasks. These physical aspects should be taking into consider when offering that environment that is best for the users. (Rantanen 2003, 10.)

### **Ergonomics**

Ergonomics are the biggest part of physical working environment and it has an affect no matter what you do and where you are. Ergonomics can be categorized as functional comfort that can be measured and established if it is working or failing. By having functionally uncomfortable workspaces, energy will be taken out of the workers productivity and consequently out of the work at hand. In the workspace the



ergonomic support should be for all office tasks and it should be adaptable and supportive to the users. (Vischer 2007, 180-182.)

Ergonomics are linked to the well-being and to the workers' health. All aspects of the physical working environment can effect on stress and job performance. Furniture together with equipment should be ergonomic to prevent and to preserve workers from long-term muscular or nerve injury due to a low muscle use. (Vischer 2007, 176-177.)

For the workers it is very important to have an influence upon their own surroundings and work place development. Workers want to adjust their workspace furniture. By modifying their workspace to their desire, they can have a comfortable and ergonomic workspace. (PREFE Project 2010.)

## **Noise**

In open-space and in multi-seat offices noise is one of primary reasons for discomfort and reduced productivity. (Vischer 2007, 178). When people work in a same space and have constant collaboration and communication between each other, it can create extensive noise that may bring annoyance between the employees'. (Lehto, & Salo 2014, 18).

Banburry and Berry (2010) had many examples like Boyce (1974) survey on open-plan office and he found that out of 200 workers, 67% were disturbed by telephones ringing, 55% by people talking and about half of the sample by air conditioning and office machinery. These studies shows that background speech is reported to be the most bothersome noise source in the office environment. (26.)

Having more than two people in one space, it is important to pay closer attention to the acoustics of the space. Different kinds of offices may contain different sources of noise such as clatter from walking, typing on the computer, telephone ringing, printing and people talking. To lower this types of noise it may require a carefully made interior design plan that could keep noise levels down. (Rantanen 2003, 12.)

As it is stated in Finnish law (Finlex 2016) that in the office space the recommendation value of noise is 45dB and in the teaching and meeting space the recommendation value of noise is 35dB. Noise can affect people in a different ways, everyone hears sounds differently and depending on the task the same level of noise can bother users differently than the another person. Getting interrupted by noise causes frustration for the worker, who cannot complete the needed tasks. The Figure 5 provides a clear possible outcome showing what kind of harm can be caused by noise. (Finnish Institute of Occupational Health 2010.)

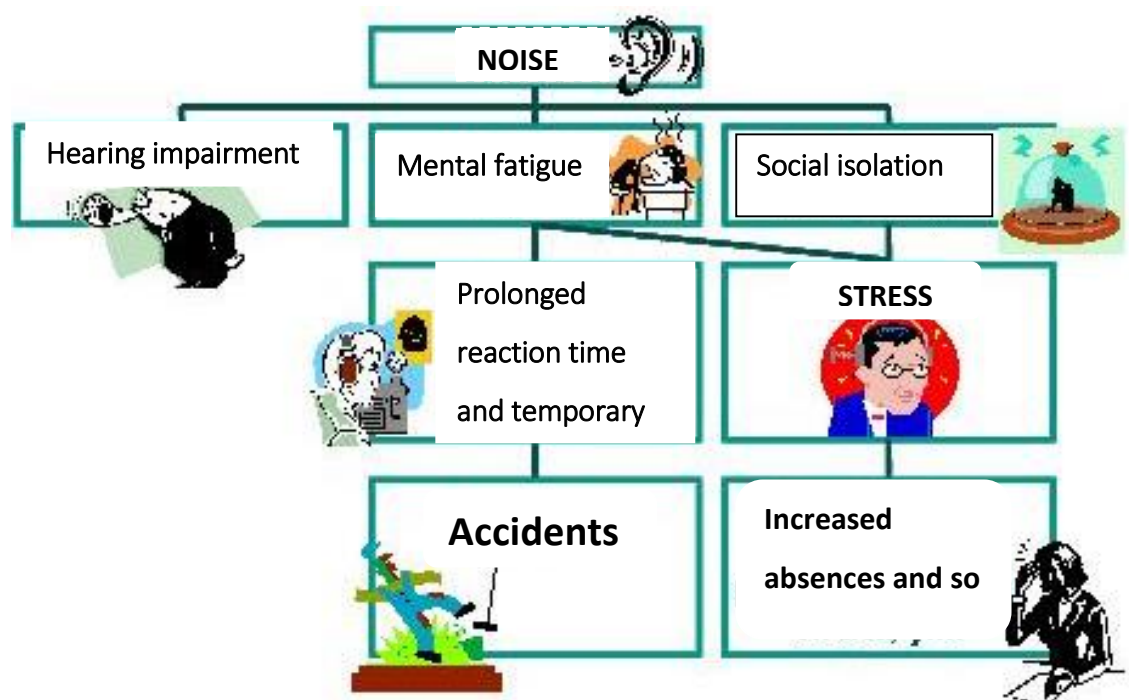


Figure 5. The harms caused by noise (Finnish Institute of Occupational Health 2010)

### Lighting

As a factor, lighting can be seen as a basic need to the overall comfort of employees' in a work environment, making comfort as the basis for efficiency. (Lehto, & Salo 2014, 13). Especially, daylighting was linked to increased comfort and productivity and also with a view out and having control over blinds. (Vischer 2007, 178). Boosting workers productivity through a workstation with natural light or artwork on the wall is a known thing and it has a great impact on a workers well-being. Also, having

pleasant scenery outside the window can make people feel better in their working environment and can give positive impact on well-being. (Balch, The Guardian 2016.)

Lighting could be a problem in open-plan offices where all employees' needs and requirements cannot be satisfied. If people get a choice they prefer natural daylight rather than electric lighting, also, individual lighting control is a good way to have more satisfied employees. (Wand 2009, 21.)

The adjustability of lighting was the third most important attribute in the (Luoma et al. 2010, 11) preference study. It clearly means that workers really want to have an effect on the physical working environment and the results in Table 1 show what occupiers need and prefer in terms of buildings.

### **Air conditioning and temperature**

Most employees' are working indoors and since JAMK School of Health and Social Studies had to move from Puistokatu to Lutakko Dynamo campus because of the bad air quality, the good air quality of the indoor environment may have a significant effect on the health and productivity of currently working employees' in a Dynamo campus. If indoor environmental quality and indoor air quality is not satisfying employees' and other building users, their health can be impacted and the results could be a reduction in productivity and significant health degradation. (Dorgan, & Dorgan 2005, 107.)

In Luoma and colleagues preference study, what occupiers valued the most was the adjustability of temperature and air conditioning. Adjustable lighting, was in the statistics, the third valued and most important factor among studied building factors. (2010, 11.)

Table 1. Building attributes (Luoma et al. 2010)

Attributes	Important (%) *	Unimportant (%) **	Balance figure (%)	Rank in the study
Adjustability of temperature	95.5	0.0	95.5	1
Adjustability of air conditioning	95.5	1.1	94.4	2
Adjustability of lighting	87.6	1.1	86.5	8***
Elevator	87.6	4.5	83.2	12
Shower and dressing room	87.6	2.3	85.4	10
The energy efficiency of the building	85.2	2.3	83.0	13
The first impression when stepping into the building	83.2	2.3	80.9	16***
Building that has customers and other interest groups	18.2	42.1	-23.9	-18***
Building that has other players in the same business field	13.5	58.4	-44.9	-9
* The portion (%) of answers rating the attribute very important or important to some extent				
** The portion (%) of answers rating the attribute not important or less important				
*** Equally ranked with at least one other attribute				

Table 1 above shows what kind of attributes are important to different kinds of organizations and could bring more value by creating organizational profiles based on the office occupants' known preferences. (Luoma et al. 2010, 12.)

### Sustainability

A workplace is a part of a natural environment and environmental issues have a significant part in corporate social responsibility. The importance of environmental responsibility has been very high, yet economical and social responsibility should get that needed attention too. (Vartiainen 2006, 97.)

Sustainability in the companies can become a strategic issue by taking actions to improve the performance of the current work facilities as a strategy for enhancing their environmental actions. Financial consequences will be important part of the chosen feasible environmental strategy. In Junnila and Nousiainen (2005) study was showing the relevance of sustainable facility management in the environmental strategy inside the organization. In this study the life cycle assessment method was used to calculate caused environmental impact, and an operation cost computation was conducted in order to compare both the environmental impact and costs of the facility operations to other operations in the company.

In the result, the use of the office facilities had clearly the most impact on the environment from the range of individual activities. This results propose that facility

managements should support the environmental work that may create environmental improvement and the improvement cost would be quite low when compared to other strategic options. (Junnila, & Nousiainen 2005.)

In Space Management Project: case studies (2006) when colleges would have the new premises they would be environmentally and financially sustainable. The financial sustainability was important due to expected recurrent costs of operating the estate, keeping the new campus for purpose and maintaining it in a good condition. (Space Management Project 2006, 8.) When a building is designed to be sustainable, having low running and maintenance cost, would be adaptable also in the future allowing for a new changes in function and technology in the future. (Space Management Project 2006, 13.)

In case studies financial and environmental sustainability was an important concept in the design of the new campuses. From the beginning, the long term financial sustainability of the new campus was also important. The space efficiency was a critical success factor and the new estate was needed to be affordable in the long term also. If the floor area is reduced, it will generate a higher income per square meter and it could support a financially sustainable estate. (Space Management Project 2006, 14-15.)

Environmental, financial and social sustainability are all important and strategically it could bring a lot of savings, good image and support long lasting relationship between humans and the facilities. Prevention is a very important issue and it should be taken into consideration in every aspects of the physical work environment.

## 2.2 Social work environment

The social work environment is a place where workers can have an encouraging working atmosphere that will motivate them and give them an overall feeling of belonging and respect. A company's goal to achieve a competitive advantage in among the competitors has risen in line with the employee' satisfaction with a well-being in the working place. (Rantanen 2013, 18).

However face-to-face communication and being in the same place is not necessarily needed due to the increasing usage of virtual connection. Workers can talk to each

other by instant messages and e-mails by having connections through virtual communication channels which can affect the social work environment. Therefore the importance of face-to-face meeting should be properly noted, as it is still customary to view the use of social media in private life but in working life as it is not always deemed acceptable even if it used as a working tool. (Rantanen 2013, 18).

According to Hackman (2014, 12) teamwork and collaboration are critical when an organization must quickly respond to changing circumstances, like moving in to a new building. Conflicts are good and can bring about more creative solutions than in conflict-free teams and that is what research shows. It is better to have disagreements about work itself rather than having harmonious work together. These conflicts were some of the mistaken beliefs that Hackman revealed about how teamwork can change productive collaboration. The other five mistaken beliefs are linked to a social environment. Also working in a face-to-face interaction has its own benefits and is worth the time. Leader has to create conditions that will help members competently manage themselves and have effective collaboration. Having small teams will be more efficient, less frustrating and teams that stay together longer work together better. (Hackman 2014, 12-13.)

In Fayard and Weeks (2014) research showed the space may or may not encourage interaction. Depending on how the three balance dimensions that have physical and social aspects: proximity, privacy and permission. Proximity depends on traffic patterns that are shaped just as much by social and psychological aspects. The social space is a crucial component of its physical layout. In privacy, research shows that informal intersections will not flourish if people cannot avoid interacting when they wish to. Therefore space must be designed with visibility and acoustics in mind. The power of permission is critical in a social dimension and also in the physical one, having a company culture that allows employees to move around, work near whomever they are collaborating with and encourage them to spend their time on socializing and team building. (Fayard, & Weeks 2014, 94-95.)

Effective space can bring people together and make possible barriers to provide sufficient privacy that people can communicate and not fear being overheard or interrupted. This can apply to both virtual and physical environments, even if they

may be different. Getting the balance wrong can turn a good effort to foster creative collaboration into unintended consequences. (Fayard, & Weeks 2014, 92.)

### 2.3 Virtual work environment

The Virtual environment refers to a virtual workspace that can be a working platform for different communication tools such as e-mail, chat and document management. By using different ITtools in different places when communicating, the importance of virtual environment will increase. (Khasu 2015, 8.) When the location is irrelevant the quality of the work place will be seen as more critical. Quality and functionality of the technological infrastructure and tools will be useful for collaboration in a distributed workplace. (Vartiainen et al. 2007, 10.) The awareness of a virtual environment varies from person to person, and the different needs can create higher demands in the virtual space that are used for work. Therefore, it is needed to take the virtual work space into a higher consideration when aiming to fulfill those work environment needs of the different users. Technological development also affects on social work environment. Getting information and sharing it in a virtual world allows people to stay in a virtual environment more often, be that at a home or in a work place. It affects upon their private lives and can become a huge part in keeping social connections. (Rantanen 2013, 16.)

In Table 2 Vartiainen and his colleagues mention that co-located employees' working together in an office and others who work in multiple locations have differences in their space. By working in multiple locations, employees' could have a greater number of physical places they rotate and use. That will increase the use of virtual space significantly so that all members of a distributed team can communicate and collaborate with each other from different locations. Virtual space is used simultaneously when sharing documents on the intranet. Having a common goal to reach the aim will be relations between team members in a social space. Mental space is sharing common ideas, beliefs and values. (Vartiainen et al. 2007, 22.)

Table 2. Multi-locational workspaces (Vartiainen et al. 2007, 22)

<b>Physical Spaces</b> - Settings - Arenas - Environments - Tasks	 <b>Home</b>	 <b>Main workplace(s) 'Office'</b>	 <b>Moving places, (e. trains, airplanes, ships)</b>	 <b>'Other workspaces' e.g. clients' and suppliers' places</b>	 <b>'Third workspaces' e.g. hotel, cafe, business venue</b>
<b>Virtual Spaces</b> - Connections - Devices - Services - Purposes - Functionality	PC, phone, Internet, broadband, wlan	Intranet, communication and collaboration systems	Mobile devices 	Intra- and extranet, Internet	Laptop, intranet
<b>Mental and Social Spaces</b> - G&O and HRM issues	Tranquility, well-being <b>family</b>	Shared goals and values, 'stress', <b>peers</b>	Change and solitude, <b>strangers</b>	Trust, <b>partners</b>	Interruptions, <b>mostly strangers</b>

The next chapter will explain what kinds of user types there are in a working environment. Knowing all of those types will provide important information as to what they need in their working environment and which work environment is the most used in that user type.

### 3 User Types

In this chapter, four user types are presented; The Anchor, The Connector, The Gatherer and The Navigator. These users are not only a homogenous group. In changing working environment it is important to identify how the work environment could serve a whole variety of ways of doing work as well as different users. (Nenonen, Hyrkkänen, Rasila, Hongisto, Keränen, Koskela, & Sandberg 2012, 14.)

According to Nenonen et al. (2012, 14) the first user is called The Anchor, that person is sitting and working every day in the office and managing most of the work at his/her own desktop. Their own desktop is seen as a home base and users appreciate



the stability and quality of it. The Anchor movement is usually limited to their own workstation and conference rooms and a restaurant. The Anchor is an important communication link to other employees' and continuous presence of the anchor plays an important role in internal communication. As the anchor work often emphasizes the concentration on the intensive tasks, the tranquility of the environment like sounds, detection of movement is important. That means that workspace design should have solutions that offer physical ergonomics, visual ergonomics and acoustic design. This design could provide an environment where negative interruptions are at a minimum.

The second user is The Connector; this type spends typically half of the time in a different areas of the organization, such as conference rooms, cafes and in front of colleagues' workstations. Their work focuses on the internal communication in the organization and cooperation at the interfaces between their own organizations various departments and units. A typical example is a product development manager, whose work is based on effective interaction with other head managers of a purchases and the corresponding production. In the Connectors workspace design it is essential to seek solutions that could promote interaction and cooperation. To the Connector, promoting creative thinking in the visual signs is important. (Nenonen et al. 2012, 14.)

The third user is called The Gatherer and his/her responsibility is the external relations of the organization. The Gatherer is working at least half of the week outside the office and often having different meetings in the customer's premises or in coffee shops. Traveling occurs mostly regionally and not so much globally. From the business trips they bring important information, business and new relationships. The Gatherer needs to have a good virtual equipment and a virtual connection because they are constantly communicating on the move. Connection to one's own office is an important data storage which secures successful work in interactive situations with the customers. Current procedures have led to the idea that the Gatherer will focus on the demanding work at home rather than in the office. This is not always the best option in terms of the organization's activities. (Nenonen et al. 2012, 14.)

The last user is The Navigator; they are often key people in their own organizations and they are responsible for large entities. Often work involves influencing in international networks and in their home office they are visitors spending typically one day in a week. The navigator may be a salesman or consultant who visits the office a few times a month, for example, due to a meeting. In the office and in their home office they need a place where to sit and where they can use computer technology to work. Flexibility in the office is an important factor for them. (Nenonen et al. 2012, 15.)

With this theory and the description above, Dynamo teacher's user types could be more likely the Connector and the representatives of the support functions user type would be the Anchors.

## **4 Research Design and Implementation**

The research question is to find out what are the perspectives of the JAMK Dynamo staff about their working environment. There are three categories that were defined; a physical work environment, social work environment and virtual work environment. In order to get answers to the research question the author used the sub research questions:

- What are the viewpoints of the head of department of JAMK's satisfaction in the work environment?
- What are the viewpoints of the JAMK employees' about their current work environment?

There are three research methodologies; quantitative, qualitative and mixed methods research. For this thesis the research method that was chosen is mixed-methods and it was chosen because it gives better understanding of the phenomenon and it improves the reliability and validity of the thesis. (Kananen 2011, 130).

## 4.1 Methodology

### **Mixed-methods**

In this study mixed-methods was chosen because of the social phenomena and to get a deeper understanding of the JAMK employees' current satisfaction in work environment. In qualitative methods the interviews were used for getting managers' points of views about JAMK's current work environment.

There are five types of interviews; structured interviews, semi-structured interviews, unstructured interviews, informal interviews and focus groups. In this study focus group interview was chosen. All three interviewees had individual interviews and they were chosen because they are in the Dynamo campus and they are in directors or managers positions. The individual interview was semi-structured and it was recorded using a phone. The interview had paper-based guide questions that were sent out before the interview so that interviewees could prepare their answers and get to know the theme. Semi-structured interviews allow interviewees to express their views and interviewers can ask sub questions to get a deeper understanding about the themes.

For quantitative methods the survey was addressed to a big group to get JAMK's staff viewpoints and experiences about their working environment. Survey was made by using Webropol survey application and it contained 20 questions and in the end background information. All the respondents are fully representing fully the target group because they are working in the JAMK Dynamo campus.

## 4.2 Data Collection

The main data collection started in winter 2015 and qualitative research methods were the first methods that were used to obtain the right data. In qualitative research methods part, a management team of three was interviewed from 26th November till the 18th December 2015. The interview took place at Dynamo campus, Jyväskylä University of Applied Sciences. Everyone was interviewed separately and interviewees had read the questions (Appendix 1) before the interview.

The interviews were executed in Finnish because it is the language that everyone uses and it makes it possible to answer all the questions more freely and openly. The interview structure had four main questions that interviewees saw before and around three sub questions if those issues won't come up in the answers of a main questions. The duration of the interviews was under 30 minutes and as predicted the interviews durations vary from 16 to 26 minutes.

The quantitative part of the research included survey for the employees' and it was implemented after the qualitative part of this thesis. By using Webropol survey application for making survey, it will save money and time to use online survey to contact all the right respondents. This research had a population that was size of 82 people. This sample had one week to answer online survey and survey was sent on 11th of April 2016. Online survey was divided in to three work environments; physical, social and virtual environment (Appendix 3). All of these three environments are known to the sample and theory supports survey questions and findings.

The sample size was small due to the size of an employees in JAMK School of Health and Social Studies, but according to Kananen (2011) if the population is homogeneous, the sample can be smaller. Consequently, the sample size is right if everyone that answers it will represent the actual amount of employees' that are working in JAMK Dynamo campus.

### 4.3 Data Analysis

The important step in this thesis was analyzing the qualitative data. When analyzing qualitative data it is important to get well-familiarized with the material, even though there can be some different interpretations and meaning in the answers. The interviews were recorded with the phone in order to capture the data exactly as it was said.

The first step of analyzing the answers was starting to transcribe each interview as soon as possible. After the interviews each recording was listened to and transcribed, some filler words were not written in order to get a more standard language. The

interviews were transcribed in the Word document and every answer was under every question.

After all the interviews are written and have been read many times to see the differences and similarities in the given answers, they are ready to be presented in the results.

Quantitative research was made later and by using the Webropol survey application, it was easy to collect the results from all respondents. Qualitative data and theory support the finding and the interpretation process aims to confirm those results of the analysis to existing theoretical framework. Each divided section in physical, social and virtual would give clear answers and in some cases new research problems may occur.

The survey was anonymous, as it usually is in online survey and the number of the respondents was quite normal. The quantitative research needs all the respondents to say that all respondents agree on the matter. Non-responding is an expected because not everyone wants to answer online survey. (Kananen 2011, 100.) Yet analyzing the data of 37 respondents gave a 45% response rate. Survey was mostly multiple choice survey and in the end respondents could write more about their work environment.

## **5 Research Results**

This chapter is the results of the interviews with three managers and the answers of the employees form the survey. After presenting the results of the qualitative method, the results of the quantitative methods are shown. In the results, the interviewees are numbered from 1-3 and the order of the interviewees was changed so that the answers of the interviewees cannot be recognized based on the number. All the answers were translated and are presented in English so that privacy of the interviewees is protected.

The same pattern is used in the survey, all the answers are translated in English and one cannot tell who has said what. The results from the survey will be presented according to the structure of the theory and the interviews.

In the conclusion part there is a discussion parts where all the results will be summarized and some suggestions given. The reliability and validity of the research is at the conclusion of the thesis. In the Appendices there are attachments of the interview questions and online survey.

## 5.1 Results from the interviews

The main focus in the interviews with the managers was to evaluating the functionality and user orientations of the JAMK Dynamo premises. To get the answers to the research problem, interview was the best way to know: what are the viewpoints of the head of departments of JAMK satisfaction in work environment.

The first question dealt with ergonomics, sustainability and user orientation in the School of Health and Social Studies workspaces. There were similarities about the lack of space but the overall feedback was that ergonomics, sustainability and user orientation were on a good level.

*Interviewee 1: All the time we try to renew this, now we added more height adjustable tables and saddle chair stools.*

*Interviewee 3: I think that ergonomic is realized very well. Sustainable development is realized to a certain point and certainly facilities that support it.*

The managers said that they had all acquired the needed items to support ergonomics, such as table laps and height adjustable tables. However, one thing was that the Dynamo building has a limited amount of space which is an always a challenge that can cause negative feedback from the users. Noise was also one of the problems. If a space is divided into a silent space and can talk space, there should be clear rules and everyone should have a chance to work where they can focus on their work.

The second question was about the current facilities and if they are suitable for different purposes. Two of the interviewees were more satisfied with the facilities but mentioned that there is always some improvement that can be done. Also, the changes that have been done in the library were noticed in the two interviewees' speech.

*Interviewee 2: Library improvement has been good, it has received a lot of positive feedback and it was a success.*

*Interviewee 1: New changes in a library helps the space shortage in Dynamo.*

*Interviewee 3: We can be even more efficiently by taking advantage of the existing rooms and solutions. So probably, in a principle, the situation is okay, but I could see that we could think a little more about how we could do better in the future.*

The interviewees all agree that there is too little space and too few meeting rooms and there is still some improvements that can be done with the space issues. Acknowledging that situations can be better and there are solutions that can be made to have more satisfied users at the Dynamo campus.

The third question was quite hard to answer as for one interviewee. Does the work environment support the functionality of the work process?

*Interviewee 2: Not in every way. In some ways we are being spread out in this campus. We have to do quite a lot teamwork but we are not meeting naturally, we have to organize it and it means that e-mail is working more that humans feet.*

Two interviewees agreed on this matter but the common issue was that there is no place where people can meet such as a coffee room where everyone visits daily.

*Interviewee 1: I think that yes, as a whole this space is good. This campus has a great location and the facilities itself are good.*

*Interviewee 3: I would say that it is in a good shape. But the communication between R&D and the School of Health and Social*

*Studies is not inadequate, because those groups are in a different building and they don't meet in a coffee room.*

The third question was hard and in the answers one can see that Dynamo campus is good and has a great location but, the space issues and the size are still a large problem. People are working on different floors and in several buildings and it is affecting their social environment, and some are experiencing inequality. Every interviewee found something bad related to the space size and something good in the current facilities. The answers were quite long but, the main point was not reached. Everyone understood the question differently and the biggest issue was the size of the facility and their own experience could be different from those of the other employees.

The last question was quite general and it gave the opportunity to freely answer about the satisfaction in a work environment. According to manager's, satisfaction of the employees was good and only one agrees that employees satisfaction level was good. Others answers were not very sure about totally positive feedback being neutral.

*Interviewee 3: I can say that my team was satisfied with the current facilities. This current situation is quite good and as a manager I see that it is in a good situation.*

*Interviewee 1: I would say that it is yes and no. It can be a neutral opinion if you ask all.*

Negative things such as parking space and lack of space will have negative feedback and employees' feel that equality and justice are not met. One interviewee mentioned a need for guidelines for all managers. In this question answers were more varied and more different issues came up. It is clear that some things will need to change so that all the employees' at the Dynamo campus can be satisfied with their current work environment.



## 5.2 Results from the survey

The quantitative data was collected with a survey in Webropol survey application. Survey was sent to 82 people and 37 responses were received. Therefore, the response rate was 45 %. All 37 respondents answered this survey in Finnish. There were 32 people who opened the survey but did not answer it, so the amount of non-response was quite high and it has effects on the research results. Kananen (2011, 99) mentioned that in online surveys the typical response rate is about 30 % and even a call-back round did not improve the rate to a better degree.

The survey had a total of 20 questions; 19 questions were multiple choice questions and the last one was an open question. In the end there were three multiple choice questions about the background (Appendix 3). Respondents could write more if they answered "No" in the "Yes" or "No" questions or if they chose the "Other" option.

### **Physical work environment**

The survey was divided in to three sections; Physical, Social and Virtual work environment. The Physical work environment section had eight questions and the first question asks how many hours employees' are working at their workstation. Most of the workers (41%) were working about 25 to 40 hours per week and only (8%) were working under 5 hours per week. Most of the respondents are teaching staff and they are usually work normal hours.

The second question was how employees' are commuting between work and home. Respondents could choose what they used the most and what transportation they used the least. Mainly most of the respondents were coming to work by a car and least of the respondents came by a public transportation.

The third question was what type of office is assigned to the employee'. Out of 37 people, 12 respondents (32%) has choose "Other" and wrote Open plan office without marked place. The second most chosen office was shared office (27%).

In the fourth question the importance of different factors was evaluated. As it seen the average in the Figure 6, ergonomic furniture and lighting were most important but also other factors were appreciated too.

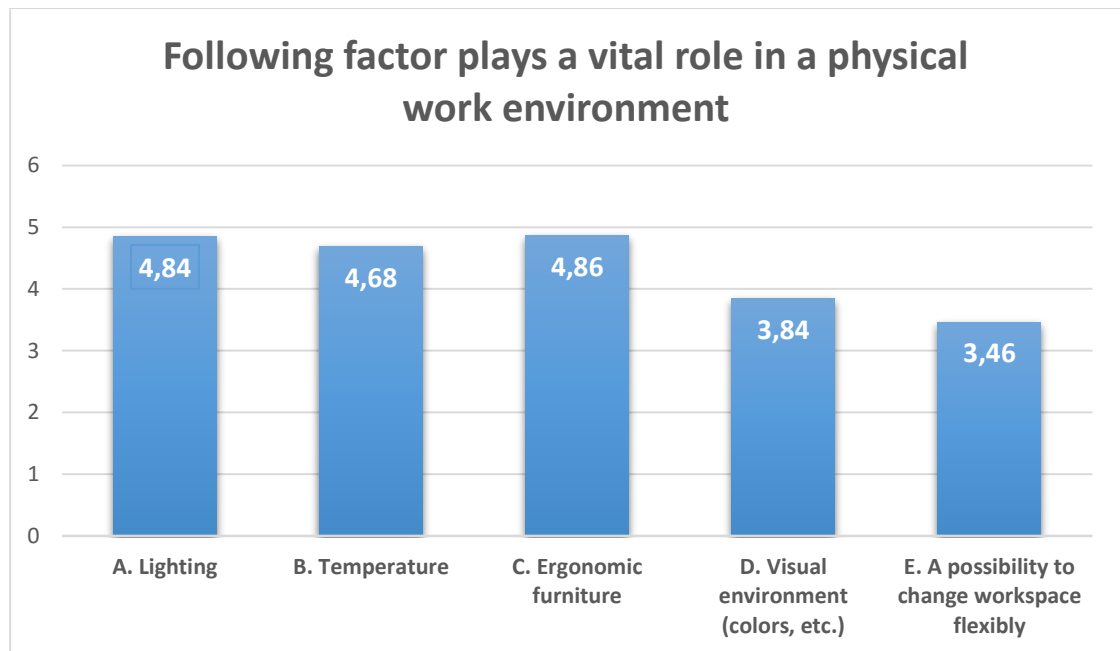


Figure 6. Factors that plays a vital role in a physical work environment

The fifth question concerned about the ergonomics of a current workstation. If respondent is answered “No”, he/she has to write why. From 37 respondents (51%) stated that they are satisfied with the ergonomics in the current workstation. Nevertheless (49%) were answered “No” and they wrote a short explanation why they are not satisfied with the ergonomics. Most comments were about tables and chairs that they stated are not ergonomic. Not having one’s own workstation means that every time they have to adjust chairs and cannot stand while working because not everyone can get a height adjustable tables.

In the sixth question, respondents had to evaluate their own working station and tools that they use in their workspace. Respondents were most pleased with the screen size of the computer and the visibility of a characters on the screen. Location of a keyboard and convenience of the most used computer programs was also very good. Shelves for the materials and table lighting received the lowest average points.

In question seven in which they had to evaluate their workstation, respondents had to agree or disagree on four statements. With the first statement; There are disturbing noises at my workstation, received 15 “I agree” and 10 “I partially agree” answers. In the statement; can I have an effect on the adjustments of an air conditioner and temperature in my work office received 24 “I fully disagree” and 6 “I partially disagree” answers.

The last question in Physical work environment section was about satisfaction in a current work environment in JAMK.

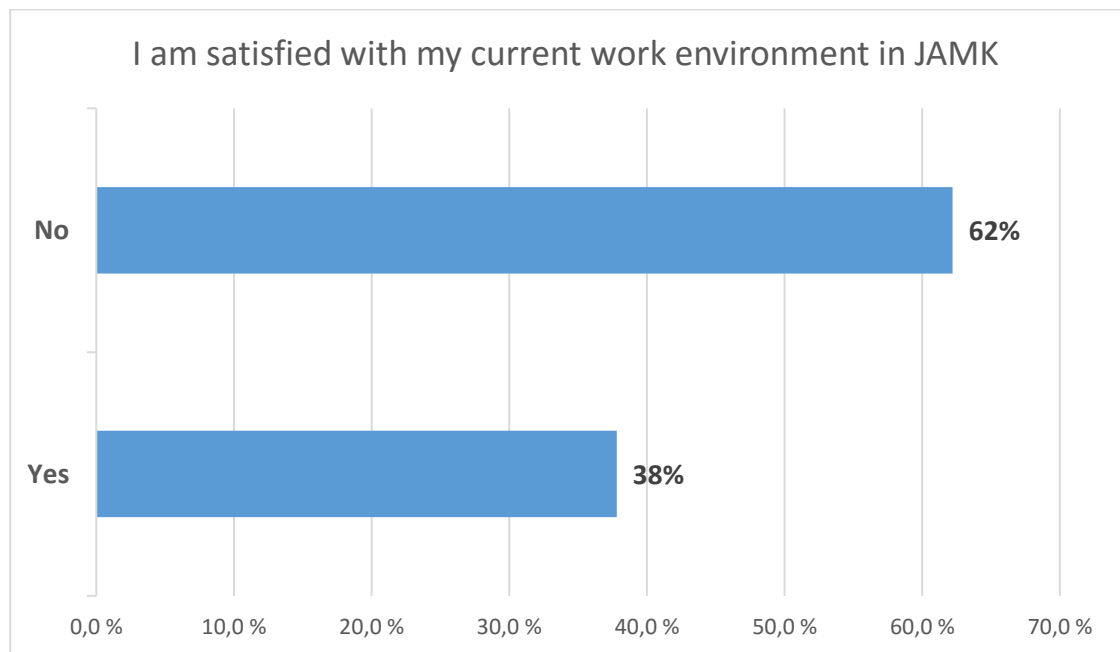


Figure 7. Satisfaction in a current work environment in JAMK

Many respondents criticized the open space office and the noise in it. Not enough space for the meetings and the work communities are scattered, everyone is in a different place.

### **Social work environment**

The next section is Social work environment and the first questions asks how often employees are working with their colleagues. There were 46% who are working every day with their colleagues and only 3% are never working with their colleagues.

The next question was “What type is your current social work environment?” And respondents had to evaluate social interaction and communication between colleagues and management. Totally 24 respondents evaluated that those statements are good and 22 respondents evaluated that it was very good.

In question eleven respondents had to evaluate the statement “Social interaction is supported very well in my workplace”

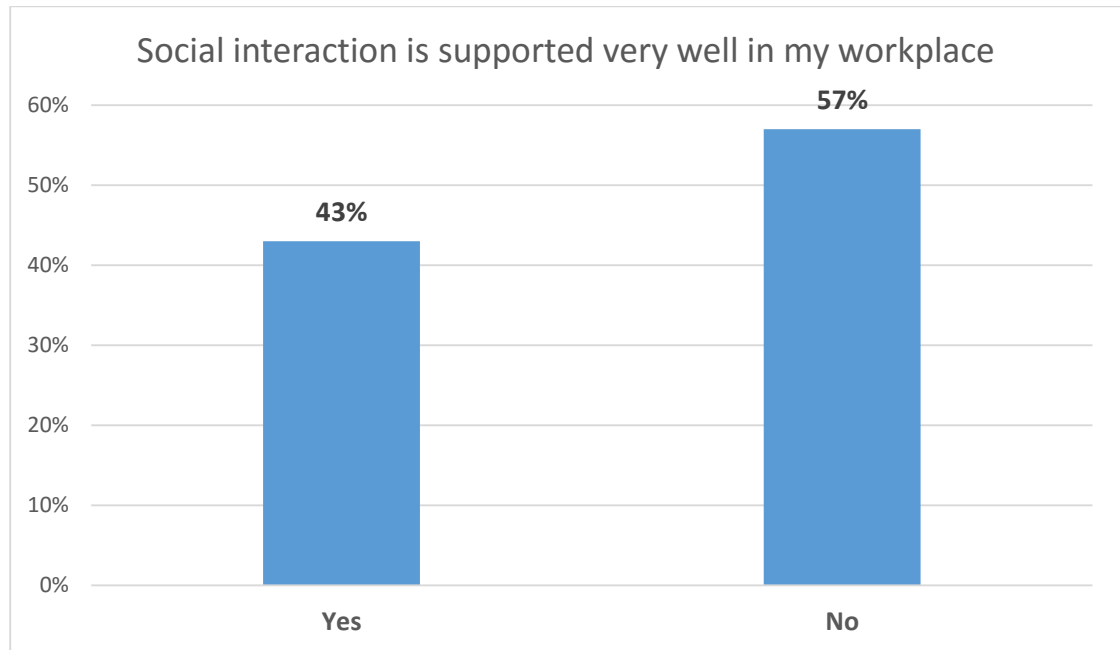


Figure 8. Statement: Social interaction is supported very well in my workplace

In the comments the main reason why respondents were not satisfied was that there was no time and no suitable space, such as a coffee room. Some of the respondents were not happy with supervisor behavior and facilities do not support social environment.

Question twelve asks how communication could be developed and the five following options were presented. Respondents could choose one or more options and also write something other. The most chosen option (78%) was Social facilities (e.g. Kitchen, social and living areas) and the least chosen option (11%) was Expanding the possibilities of virtual interaction.

In the second to the last question in the Social environment section was about social well-being.

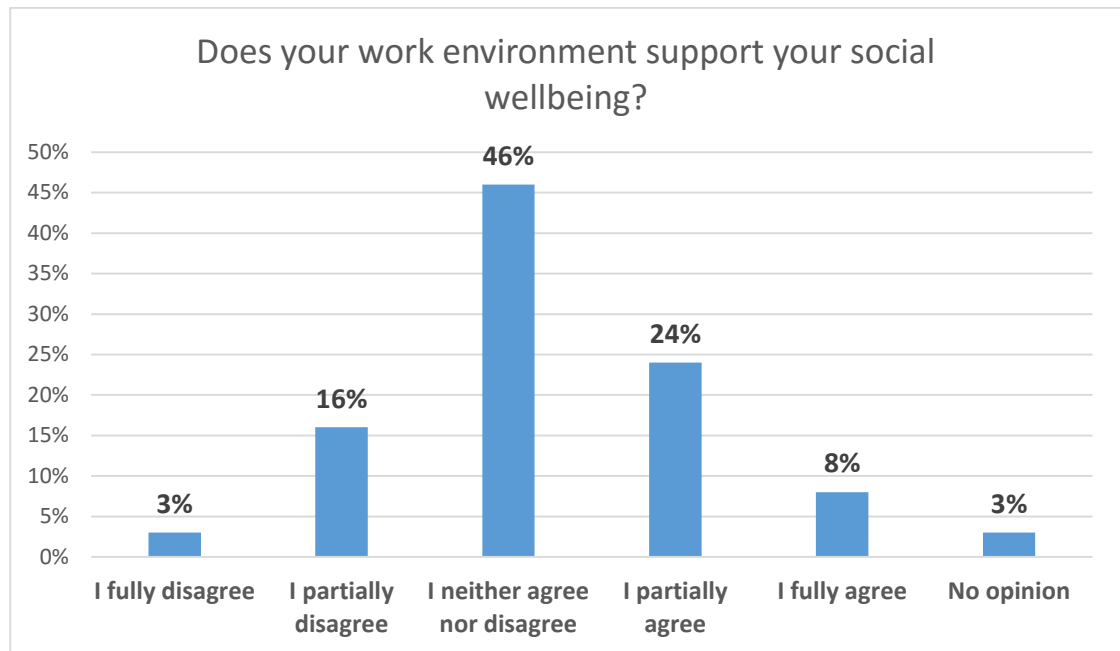


Figure 9. Support in a social well-being

As in a Figure 9 is shown that (46%) of respondents chose “I neither agree nor disagree” and totally (32%) respond that work environment supported their social well-being. Only 3% had no opinion about this matter.

The last question of this section was about satisfaction in the current social work environment. Out of all respondents, (54%) answered “Yes” that they were satisfied and (46%) answered “No” and the reasons were that facilities does not support it and people are busy and in a different places. Answers were mostly the same as in question eleven about social environment.

### **Virtual work environment**

The last section is Virtual work environment and it has five questions and one open ended question. The first that was asked was how often employees’ are working in a virtual work environment.

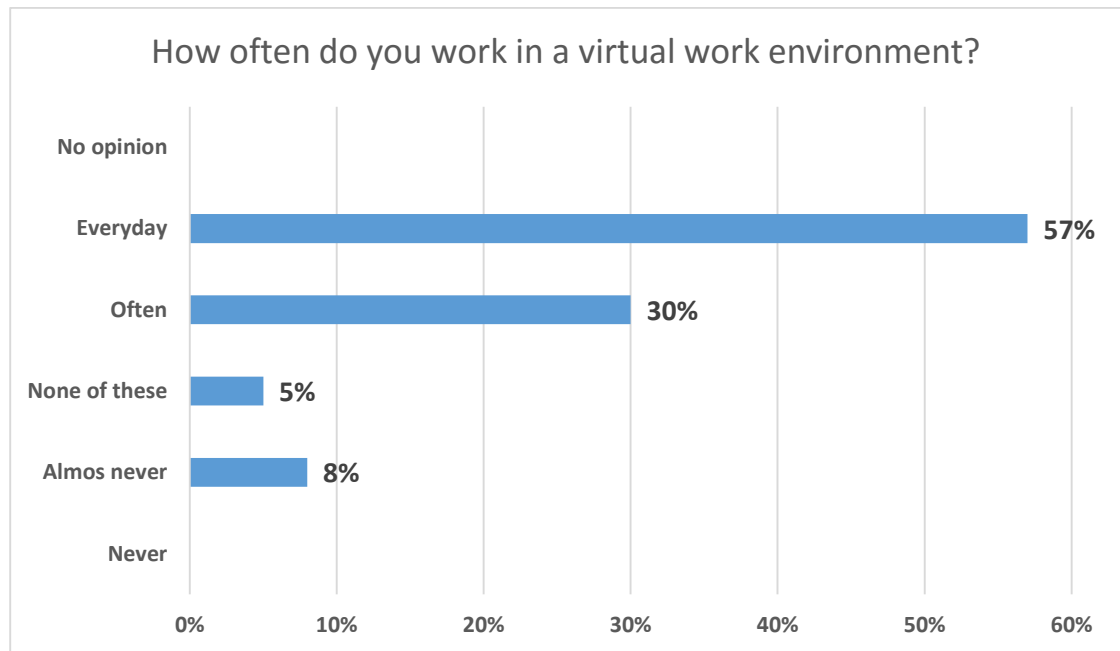


Figure 10. How often do you work in a virtual work environment?

Over half (57%) of the respondents has answered that they are working everyday in a virtual work environment. About one-third were working often and almost never answers were 8% of the respondents. In Figure 10 it is clearly seen that virtual work environment is a common environment to the JAMK employees'.

When respondents were asked about if it is necessary to offer a possibility to work from home, almost all (92%) respondents agreed on that and (8%) partially agreed. Never the less, it seems that work can be mobile and employees' can do work no matter where they are, even at home and JAMK supports that.

The next question wanted to know what would improve employees' virtual work efficiency and motivation. Eight options were given and in one option respondents could write their own answer. This question was not mandatory and only 36 respondents gave their answers. The most chosen option was the functionality of a virtual work environment, getting 22 I fully agree answers, the second best option was Development of a virtual work environment and Increasing training in virtual working skills was also a very highly ranked option. The least chosen option was Freedom from a workstation. Four respondents wrote in the open option and the most important thing was that programs and all the equipment are working in the work environment. Also the workplace should be honest, realistic, fair and respectful.

The second to the last question in Virtual work environment was about virtual well-being. Almost half (46%) of the respondents did not agree or disagreed with the question. Over one-third (35%) partially agreed and (3%) fully agreed on this virtual well-being in their work environment. Only (5%) fully disagreed and as it can be understood that virtual work environment is a big part of the respondents work and most do not have anything bad to say about it.

The last multiple choice question in Virtual work environment was satisfaction in their virtual work environment in JAMK.

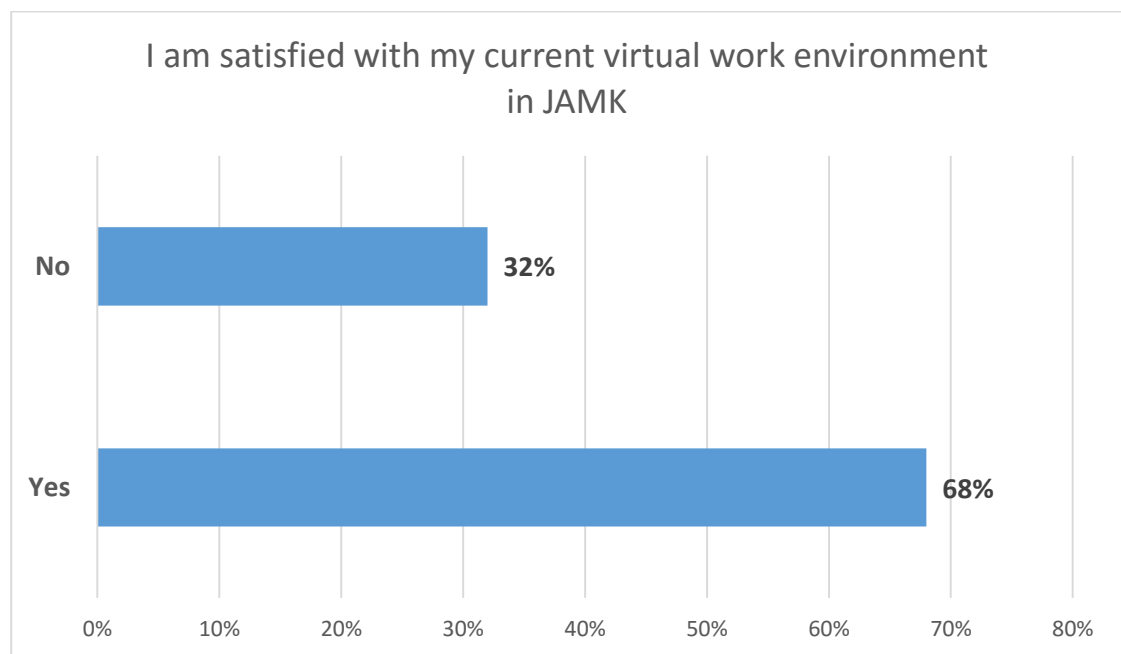


Figure 11. Satisfaction in a current virtual work environment in JAMK

This section had the most satisfied responses and (68%) of the respondents were happy with their current situation. Only (32%) of the respondents answered "No" and of these only eight have written why they are not satisfied. The argument was that all the equipment is not working perfectly and using virtual environment in teaching is not the best way to teach.

In the last question respondents could tell something else about work environment. The number of respondents was thirteen. The answers were analyzed as qualitative data and it showed clearly what kind of issues respondents want to change and have an affect on. The most common answer was that the facilities are small and

employees' experience inequality in a workspace compares to the other departments.

However, the overall opinion was normal and slightly neutral. There were some things that stood out and gives an idea as to what kind of issues JAMK School of Health and Social Studies is dealing with. There were some similarities with the interview answers and in the survey answers.

On the last page of the survey background information was asked. The first one was gender and (78%) of the respondents were women and (22%) were men. In the second background question asked was how long employees' have been working in JAMK. Over half (54%) of the respondents have been working in JAMK over 10 years, (22%) of the respondents had worked 4 to 6 years and only (8%) had worked 1 to 3 years in JAMK.

The final question which in witch group respondent belonged to.

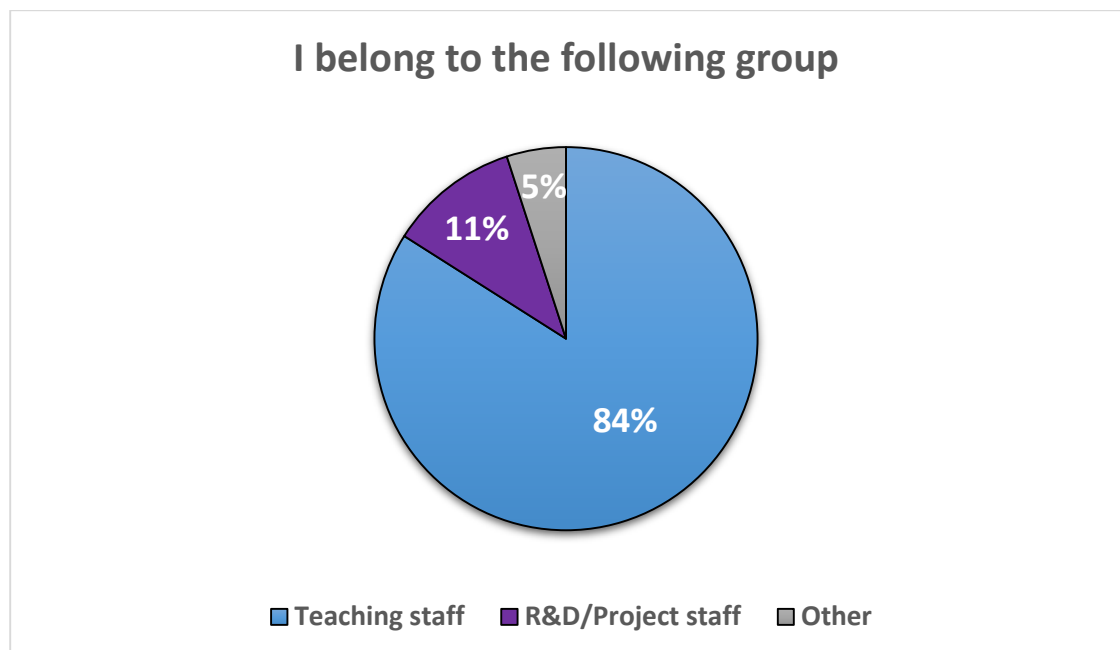


Figure 12. I belong to the following group

As the Figure 12 shows, most (84%) of the respondents were teaching staff, the second group was (11%) R&D/Project staff and the rest (5%) of the respondents were working as teachers and R&D employees'. All the answers above represent the JAMK employees' perspectives and satisfaction about their current work environment.



## 6 Conclusion

The purpose of this research was to get to know the JAMK employees' perspectives of satisfaction with their current work environment. In order to get an answer to the research problem, a theoretical background on work environments and user types were built up through broad sources. The research implementation was qualitative and quantitative. A mixed-methods approach was the most appropriate answer to the research questions. The interviews with the managers and the surveys of the employees' provided good results about the current work environment.

The research of this thesis was quite successful in finding the answers to the research problems. The research area was specified to the JAMK School of Health and Social Studies at the Dynamo campus and also to the R&D working in the Innova building. It was very important to ask people for their opinion about their current work environment.

The research results describe the situation of the research period from November 2015 to April 2016. Potential further research could compare the current results with the future results. Studying change management and multi-locality more thoroughly at JAMK would reveal different aspects in the work environment. This research had a specific goal that was connected to the work environment, well-being and different users in different workspaces.

This result showed that there are aspects in the work environment which would need more attention than others. Even if many people were quite satisfied in general, there were still many small issues which made employees' feel unequal and not having enough workspace. As discussed in the theory part, stress and frustration towards work could decrease the motivation and well-being of the employees' preventing them from performing according to their best ability.

All three environments, Physical, Social and Virtual work environments should be supported and the needs of the employees should be fulfilled on the basis of their feedback. These three work environments are strongly linked to a well-being and work satisfaction that greatly affect the employees' health and motivation to work.

Listening to the employees' may enable a work environment that would support working and task completion. People will feel that they are listened to.

From the results it was easy to see that the employees' wanted a more supportive work environment than the current one. An open plan office was criticized in a physical work environment, the space shortage and lack of needed space for working and having meetings was frequently mentioned. For the JAMK School of Health and Social Studies open plan office is the only option, but if the current solution is continued it needs more attention in to the layout, acoustics and the meeting rooms or space that support meetings with the students.

The current social work environment received some complaints about the equality and fairness at JAMK because the employees' felt that the current social environment is not supported as it should be. There should be more possibilities to create more social spots so that employees can better meet other employees and easily communicate with the managers of the department.

The respondents needed a functional work environment, which should support virtual work, for example, mobile work. The current workspace needs to be flexible, adjustable to the needs of different roles and tasks. Lighting and visuality is also an important issue in a workspace. The atmosphere at a workplace should be open, supportive and more communicative. The theory gives a good guide as to what issues in those three work environments should be taken into consideration.

In any organization, employees should be valued. Paying more attention to the employees' needs and their work well-being would allow the employees' feel that their work is appreciated and that managers are willing to listen to them and make changes according to the feedback received.

## 6.1 Discussion

Based on the results from the interviews and survey, it is easy to see that to improve satisfaction and well-being of the employees' changes in a work environment has to be made. The biggest issue that effects on a satisfaction and well-being in a social work environment. Managers should create a supporting social work environment and that would increase satisfaction in other work environments too.

The employees' feel that it is hard to communicate with the managers and that create unwanted situation were changes cannot be made. It is important to listen to the employees' and in the near future execute needed changes. When everyone at workplace feel that their opinion matter and they can talk about the issues that can be solved, it can create that environment that is needed in the JAMK School of Health and Social Studies.

Also different departments should support each other, not being compered of feel any kind of inequality. The JAMK need the management guideline that everyone follows and a teamwork is more important than ever to create a work environment that increase well-being and keep the satisfaction level high.

During my own learning in this thesis process it was noticed how challenging it was to make qualitative and quantitative research for the first time. At first, narrowing the theory was not easy and finding the right materials that support needed studies was quite difficult, even though there were some similar studies made before. Focusing on a JAMK School of Health and Social Studies and R&D employees gave clear guidelines for the interviews and to whom the survey should be sent to.

The interview part was implemented without any problems and it was a clear process at the beginning. Analyzing the qualitative results was challenging because it was hard to find the main point from the answers so that the interviews would bring needed information and answer the research problems.

In quantitative research the implementation had problems because at the beginning there was no contact list to whom to send the survey. Also, using the Webropol survey application for the first time slowed the process. Because of the time limits the survey was out only one week and even a reminder message was sent to get as

many answers as possible. Getting only a 45% response rate did not bring enough respondents to say that everyone in JAMK School of Health and Social Studies and R&D department think in a certain way.

## 6.2 Reliability and Validity

According to Kananen (2011, 138) that it is needed to use scientific data collection and analysis methods to conduct scientific research. Also, the amount of material should be sufficient to estimate the reliability and validity. This research quality is more important than quantity and there is no need for other research methods other than qualitative and quantitative. The nature of the research also required objectivity from the author. All the results are based on the research materials only, my own suggestions are in the discussion part. (Kananen 2011, 139.)

Reliability and validity in qualitative research is challenging and concepts are related to natural sciences not to social sciences (Kananen 2011). Reliability and validity must be taken into account from the beginning of the thesis process. Also, they have different issues in qualitative and in quantitative research.

Reliability means the consistency and repeatability of the measurement and research results, meaning that the result should be the same when it is repeated (66). Validity means that thesis answers the questions that it is intended to answer by researching the right things. Generalisability in validity is the most important sub-concept that means the results can be transferred or applied to other situations and circumstances. (67.)

Reliability and validity issues in qualitative research are assessability of the methods. The thesis process should be documented and justified sufficiently. The consistency of interpretation should receive identical interpretation when it is made by two researchers. (67.) Saturation is important in qualitative research and for this thesis it was needed to get repeated answers and that were reached (68).

In this research triangulation was used to increase reliability of the thesis, by combining two research methods; in this case qualitative as an interviews and quantitative as an survey. Two methods lead to the same results and they are

considered reliable. Also methods cover the phenomena, give better understanding and support the theory part. (69.)

In reliability and validity in quantitative research, it is hard to improve reliability and validity after the work is done and in this case one mistake has been made by not receiving enough respondents in a survey. Even if means that measurements and consistency remains the same, the survey can change people's behaviour. (Kananen 2011, 126.) In external validity, chosen population is a sample that represents the population in every way. Choosing employees' that work in Dynamo campus are homogeneous and all the respondents are representing needed population to ensure external validity. (126.)

There is always a possibility to make mistakes in a survey. Respondents could understand the questions in a different way than what the author has meant. If respondents have not read the question well and given a scale from "I fully disagree" to "I fully agree", it can have distorting effects on the end results. The survey was anonymous to receive honest answers in every question. On the other hand, it can lead to the respondents would answer more negatively. The measurement that was used in this study was satisfaction, agreement or disagreement and background information. Those measurements were chosen for relation to the theory and studied population.

## References

- Balch, O. 2016. The Guardian. *Does a pretty office make a productive workforce?* Accessed on 17 February 2016. Retrieved from <http://www.theguardian.com/sustainable-business/2016/feb/10/office-beautiful-pretty-views-employees-productive>
- Banburry, S., & Berry, D.C. 2005. *Office noise and employee concentration: Identifying causes of disruption and potential improvements*. Ergonomics 48, 25-37. Taylor and Francis January 2005. Accessed on 10 February 2016. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/00140130412331311390>
- Becker, F. 2004. *Office at work: uncommon workspace strategies that add value and improve performance*. 1<sup>st</sup> edition. U.S.A: The Jossey-Bass.
- Borg, K. 2016. Naturvention. *Millaiset tilat, sellainen organisaatio – Anna kulttuurin näkyä tilasuunnittelun kautta!* [What kind of facilities, such an organization – Let the culture be shown through the space design!] Accessed on 18 February 2016. Retrieved from [https://www.naturvention.com/fi/blogi/millaiset-tilat-sellainen-organisaatio-anna-kulttuurin-nakya-tilasuunnittelun-kautta/?utm\\_content=26179183&utm\\_medium=social&utm\\_source=linkedin](https://www.naturvention.com/fi/blogi/millaiset-tilat-sellainen-organisaatio-anna-kulttuurin-nakya-tilasuunnittelun-kautta/?utm_content=26179183&utm_medium=social&utm_source=linkedin)
- Dorgan, C.E., & Dorgan, C.B. 2005. *Creating the Productive Workplace*. 2nd edition. London: E and FN Spon, pp 107. Accessed on 3 April, 2016.
- Fayard A-L., & Weeks J. 2014. *Who moved my cube?* Harvard Business Review OnPoint. Spring 2014, pp 92-95. Accessed on 25 January 2016.
- Hackman, J. R. 2014. *Six common misperceptions about teamwork*. Harvard Business Review OnPoint, Spring 2014, pp 12-13. Accessed on 25 January 2016.
- Finlex. 2016. *Valtioneuvoston päätös melutason ohjearvoista*. [Decision of Council of State about the noise level guide values] Accessed 10 February 2016. Retrieved from <http://www.finlex.fi/fi/laki/alkup/1992/19920993>
- Finlex. 2002. *The Occupational Safety and Health Act (738/2002)*. Accessed 10 February 2016. Retrieved from <http://www.finlex.fi/en/laki/kaanokset/2002/en20020738.pdf>
- JAMK Homepage. *JAMK information*. 2016. Accessed on 3 March 2016. Retrieved from <https://www.jamk.fi/en/JAMK-information/About-JAMK/>
- JAMK Social Services and Health Care 2016. Accessed on 3 March 2016. Retrieved from <https://www.jamk.fi/en/Education/Social-Services-and-Health/>
- JAMK's annual report 2014. Accessed on 3 March 2016. Retrieved from <http://www.jamk.fi/en/JAMK-information/jamks-annual-report-2014/>

Junnila, S., & Nousiainen, M. 2005. *Applying Life-Cycle Assessment to Determine the Existing Facilities Offer to the User Organization*. Accessed on 22 February 2016. Retrieved from <http://www.cem.tkk.fi/fsr/Julkaisut/abstraktit/nousiainenabstracts.htm#Potential>

Kananen, J. 2011. *Rafting through the thesis process Step by step guide to thesis research*. Publication of Jyväskylä University of Applied Sciences 114, Tampere University Print. Accessed on 10 March 2016.

Khasu, S. 2015. *Applying new ways of working in university working environment. A case study: Laurea University of Applied Sciences* (Bachelor's thesis). Laurea University of Applied Sciences, Degree Programme in Facility Management. Accessed on 23 January 2016. Retrieved from [https://www.theseus.fi/bitstream/handle/10024/94907/Thesis\\_FM\\_Sunil%20Khasu.pdf?sequence=1](https://www.theseus.fi/bitstream/handle/10024/94907/Thesis_FM_Sunil%20Khasu.pdf?sequence=1)

Lehto, P., & Salo, J. 2014. *Routine knowledge worker efficiency in physical workspaces* (Bachelor's thesis). JAMK University of Applied Sciences, School of Business and Service Management, Degree Programme in Facility Management. Accessed on 22 January 2016. Retrieved from [https://www.theseus.fi/bitstream/handle/10024/78962/Salo\\_Joonas\\_Lehto\\_Pauliina.pdf?sequence=1](https://www.theseus.fi/bitstream/handle/10024/78962/Salo_Joonas_Lehto_Pauliina.pdf?sequence=1)

Luoma, T., Niemi, J., Rothe, P., & Lindholm A-L. 2010. *Office Occupiers' Real Estate Attributes – Identifying Occupiers' Preferences*. Accessed on 23 January 2016. Retrieved from [https://www.fig.net/resources/proceedings/fig\\_proceedings/fig2010/papers/ts09f/ts09f\\_luoma\\_niemi\\_et\\_al\\_4018.pdf](https://www.fig.net/resources/proceedings/fig_proceedings/fig2010/papers/ts09f/ts09f_luoma_niemi_et_al_4018.pdf)

Nenonen S., Hyrkkänen U., Rasila H., Hongisto V., Keränen J., Koskela H., & Sandberg E. 2012. Työterveyslaitos. *Toti Monitilatoimisto-ohjeita käyttöön ja suunnitteluun*. [Finnish Institute of Occupational Health. *Toti Multi-locational office instructions for use and design*.] Accessed on 18 March 2016. Retrieved from [http://www.ttl.fi/fi/tutkimus/hankkeet/toti/Documents/monitilatoimiston\\_suunnitteluohje\\_toti\\_03092012.pdf](http://www.ttl.fi/fi/tutkimus/hankkeet/toti/Documents/monitilatoimiston_suunnitteluohje_toti_03092012.pdf)

PREFE Project. 2010. Accessed on 23 January 2016. Retrieved from <http://www.prefeproject.com/content/employee-level-findings>

Rantanen, H. 2013. *Generational work environment preferences: Case Ovenia* (Bachelor's thesis). Laurea University of Applied Sciences, Degree Programme in Facility Management. Accessed on 23 January 2016. Retrieved from <https://www.theseus.fi/bitstream/handle/10024/69703/Hanna%20Rantanen%20-%20Generational%20work%20environment%20preferences%20Case%20Ovenia.pdf?sequence=1>

Ropo, A., Salovaara, P., Sauer, E., & De Paoli, D. 2015. Leadership in Spaces and Places: Chapter 1: *What can the coworking movement tell us about the future of*

- workplaces?* Accessed on 23 January 2016. Retrieved from <http://www.elgaronline.com/abstract/9781783477913.xml>
- Sale, J. E.M., Lohfeld, L. H., & Brazil, K. 2002. *Revisiting the Quantitative-Qualitative Debate: Implications for Mixed-Methods Research*. Accessed on 23 January 2016. Retrieved from <http://link.springer.com/article/10.1023%2FA%3A1014301607592>
- School of Health and Social Studies Brochure. 2015. Accessed on 3 March 2016. Retrieved from [https://www.jamk.fi/globalassets/yhteiset-lohkot-ja-tiedostot--global-blocks-and-files/esitteet/jamk\\_hyvi\\_kv-esite\\_2015.pdf](https://www.jamk.fi/globalassets/yhteiset-lohkot-ja-tiedostot--global-blocks-and-files/esitteet/jamk_hyvi_kv-esite_2015.pdf)
- Seresinhe C, I., Preis T., & Moat S. 2015. *Quantifying the Impact of Scenic Environments on Health*. Accessed on 17 February 2016. Retrieved from <http://www.nature.com/articles/srep16899#abstract>
- Tilastokeskus. 2015. *Kiinteistön ylläpidon kustannusindeksi. Statistics Finland. [Property maintenance cost indices]*. Accessed on 23 January 2016. Retrieved from [http://www.stat.fi/til/kyki/2015/03/kyki\\_2015\\_03\\_2015-11-19\\_fi.pdf](http://www.stat.fi/til/kyki/2015/03/kyki_2015_03_2015-11-19_fi.pdf)
- Työterveyslaitos. 2010. *Melun terveystvaikutukset. Finnish Institute of Occupational Health. [Health effects from noise.]* Accessed on 16 February 2016. Retrieved from [http://www.ttl.fi/fi/tyoymparisto/melu/melun\\_terveysvaikutukset/sivut/default.aspx](http://www.ttl.fi/fi/tyoymparisto/melu/melun_terveysvaikutukset/sivut/default.aspx)
- UK Higher Education Space Management Project: case studies. September 2006/41. Accessed on 25 February 2016. Retrieved from <http://www.smg.ac.uk/documents/casestudies.pdf>
- Vartiainen, M., Hakonen, M., Koivisto, S., Mannonen, P., Nieminen, M., Ruohomäki, V., & Vartola, A. 2007. *Distributed and mobile work – Places, people and technology*. Helsinki: University Press Finland. Accessed on 22 January 2016. Retrieved from [http://www.ttu.ee/public/m/mart-murdvee/dWork/Vartiainen\\_et\\_al\\_2007\\_Distributed\\_and\\_Mobile\\_Work-Places\\_People\\_and\\_Technology.pdf](http://www.ttu.ee/public/m/mart-murdvee/dWork/Vartiainen_et_al_2007_Distributed_and_Mobile_Work-Places_People_and_Technology.pdf)
- Vartiainen, M., Gersberg, N., Hyrkkänen, U., Kauttu, M., Nenonen, S., Palonen, T., Ruohomäki, V., Rasila, H., Sivunen, A., & Tuomela, A. 2006. *Workspace methodologies – studying communication, collaboration and workspaces*. Accessed on 22 February 2016. Retrieved from <https://aaltodoc.aalto.fi/bitstream/handle/123456789/854/isbn9512283018.pdf?sequence=1>
- Vischer, J. 2007. *The effects of the physical environment on job performance: towards a theoretical model of workspace stress*. Accessed on 23 January 2016. Retrieved from <http://www.choixdecariere.com/pdf/6573/2010/Vischer2007.pdf>
- Vischer, J. 2007. *The concept of workplace performance and its value to managers*. California Management Review 49 1-18. Accessed on 23 January 2016. Retrieved from [https://www.researchgate.net/publication/255648928\\_The\\_Concept\\_of\\_Workplace\\_Performance\\_and\\_Its\\_Value\\_to\\_Managers](https://www.researchgate.net/publication/255648928_The_Concept_of_Workplace_Performance_and_Its_Value_to_Managers)



Äijälä, J. 2013. *Työpisteiden käyttöhavainnointi ja tilaratkaisujen haastekohtien tunnistaminen Jyväskylän ammattikorkeakoulun Lutakon kampuksella*. [Observation of workstation usage and detection of challenges in spatial designs at Lutakko kampus in JAMK University of Applied Sciences] (Bachelor's thesis). JAMK University of Applied Sciences, School of Business and Service Management, Degree Programme in Facility Management. Accessed on 23 January 2016. Retrieved from [https://www.theseus.fi/bitstream/handle/10024/68897/AJ\\_Tyopisteiden Kayttohavainnointi JAMK Lutakon kampus.pdf?sequence=1](https://www.theseus.fi/bitstream/handle/10024/68897/AJ_Tyopisteiden_Kayttohavainnointi_JAMK_Lutakon_kampus.pdf?sequence=1)

## Appendices

### Appendix 1. Theme interviews main questions

#### **Functionality of the premises and user orientation - JAMK Dynamo**

1. How user orientation, ergonomics and sustainability are realized in School of Health and Social Studies workspaces?
2. Are the current facilities suitable for student and customer meetings, classroom or for negotiations?
3. Does the work environment support the work process functionality?
4. Are School of Health and Social Studies employees satisfied with their working premises?

## Appendix 2. The e-mail message for the employees'

Hello!

I am a Facility Management student at Jyväskylä University of Applied Sciences and I am conducting thesis survey on the work environment of a Jyväskylä University of Applied Sciences in Dynamo building. The assignment came from Jyväskylä University of Applied Sciences Facility Services and the aim of this survey is to get information from School of Health and Social Studies employees situation of a wellbeing at work and thoughts how work environment is managed.

I would like you to participate and respond in this survey. The answers would be handled confidentially and the results from the survey cannot distinguish individual responses. Filling the multiple choice survey is easy and it takes only 10 minutes. The last day to answer this survey is 15.04.2016.

Here is the link to the survey.

<https://www.webropolsurveys.com/S/96117C8CF1A1EC15.par>

Thank you for participation!

Best Regards,

Margarita Sohlman

G6529

Student in Facility Management

JAMK University of Applied Sciences

Hei!

Olen Jyväskylän ammattikorkeakoulun restonomiopiskelija ja teen opinnäytetyössäni kyselytutkimuksen Jyväskylän ammattikorkeakoulun Hyvinvointiyksikön henkilöstölle työympäristöstä ja työhyvinvoinnista. Toimeksianto on tullut Jyväskylän ammattikorkeakoulun toimitilapalvelusta ja tutkimuksen tavoitteena on saada selville Hyvinvointiyksikön henkilöstön nykyinen tilanne työhyvinvoinnista, ja ajatuksia siitä miten työympäristön asioita on hoidettu.

Toivon teidän osallistuvan ja vastaavan kyselyyn. Vastaukset käsitellään luottamuksellisesti ja niistä koostetuista tuloksista ei voi erottaa yksittäisiä vastauksia. Monivalintakyselyn täyttäminen on helppoa, vastaaminen vie vain 10 minuuttia. Kyselyn viimeinen vastauspäivä on 15.4.2016.

Alla linkki kyselyyn

<https://www.webropolsurveys.com/S/E4588495D3D69470.par>

Kiitos osallistumisesta!

Ystävällisin terveisin,

Margarita Sohlman

G6529

Facility Management opiskelija

Jyväskylän ammattikorkeakoulu

Appendix 3. Survey in Webropol survey application

**Survey for the employees working in JAMK School of Health and Social Studies**

Physical work environment in Dynamo Jyväskylä University of Applied Sciences

**1. How many hours do you work at your workstation? \***

Estimated working time

- Under 5 h/week
- About 6-15 h/week
- None of these
- About 15-25 h/week
- About 25-40 h/week
- NO

**2. Mainly I am commuting between work and home.**

	I fully disagree	I partially disagree	I neither agree nor disagree	I partially agree	I fully agree	NO
Walking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Car	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public transportation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other, what? <input style="width: 150px;" type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**3. What type of office is assigned to you?**

- Own office
- Shared office
- Open plan office (marked place)
- Multifunctional office (various spaces from which to choose according to the task)
- Other, what?

**4. In my opinion, following factor plays a vital role in a physical work environment. \***

(Continues)

	Not important at all	Not important	None of these	Important	Very important	NO
A. Lighting	jn	jn	jn	jn	jn	jn
B. Temperature	jn	jn	jn	jn	jn	jn
C. Ergonomic furniture	jn	jn	jn	jn	jn	jn
D. Visual environment (colors, etc.)	jn	jn	jn	jn	jn	jn
E. A possibility to change workspace flexibly	jn	jn	jn	jn	jn	jn

**5. Is your current workstation in JAMK ergonomic? \***

jn Yes

jn No, why?

**6. Evaluate your working station and tools that you use in your workspace. \***

Select the most suitable option.

	I fully disagree	I partially disagree	I neither agree nor disagree	I partially agree	I fully agree	NO
Shelves for the materials	jn	jn	jn	jn	jn	jn
Convenience in most used computer program	jn	jn	jn	jn	jn	jn
The screen size of the computer	jn	jn	jn	jn	jn	jn
The visibility of a characters on the screen	jn	jn	jn	jn	jn	jn
Location of a keyboard	jn	jn	jn	jn	jn	jn
Functionality of a keyboard	jn	jn	jn	jn	jn	jn
The place of a computer	jn	jn	jn	jn	jn	jn
The size of an office	jn	jn	jn	jn	jn	jn
Work surfaces	jn	jn	jn	jn	jn	jn
The location of a workstation	jn	jn	jn	jn	jn	jn
Office chair	jn	jn	jn	jn	jn	jn
Alternative mouse solutions e.g Roller Mouse	jn	jn	jn	jn	jn	jn
<b>The place of single- handed feeder (e.g. mouse)</b>	jn	jn	jn	jn	jn	jn
<b>General lighting</b>	jn	jn	jn	jn	jn	jn
<b>Table lighting</b>	jn	jn	jn	jn	jn	jn

(Continues)

**7. Evaluate your workstation. \***

	I fully disagree	I partially disagree	I neither agree nor disagree	I partially agree	I fully agree	NO
There are disturbing noises at my workstation	jn	jn	jn	jn	jn	jn
Heating and ventilation are working working in a desired way in my workstation	jn	jn	jn	jn	jn	jn
I can you effect on the adjustments of an air condition and temperature in my work office	jn	jn	jn	jn	jn	jn
My workstation supports my wellbeing	jn	jn	jn	jn	jn	jn

**8. I am satisfied with my current work environment in JAMK. \***

b Yes

b No, why?

**Social work environment in JAMK**

**9. How often do you work with your colleagues? \***

NO = no opinion

jn Never jn Almost never jn None of these jn Often jn Everyday jn NO

**10. What kind of is your current social work environment? \***

	Very bad	Bad	None of these	Good	Very good	NO
Social interaction	jn	jn	jn	jn	jn	jn
Communication between colleagues and management	jn	jn	jn	jn	jn	jn

(Continues)

**11. Social interaction is supported very well in my workplace. \***

Yes

No, why?

**12. Communication could be developed as follows.**

Choose one or more options

- Creating social meeting places
- Expanding the possibilities of virtual interaction
- Offering facilities that offers a possibility for interaction
- Social facilities (e.g. Kitchen, social and living areas)
- Developing team spirit

Other, what?

**13. Does your work environment support your social wellbeing? \***

- I fully disagree
- I partially disagree
- I neither agree nor disagree
- I partially agree
- I fully agree
- NO

**14. I am satisfied with my current social work environment. \***

Yes

No, why?

**Virtual work environment in JAMK**

Virtual work environment refers to the paperless office, for example. Intranet, Elmo, webmail and the opportunity to work remotely

**15. How often do you work in a virtual work environment? \***

NO = no opinion

- Never  Almost never  None of these  Often  Everyday  NO

(Continues)

**16. In my opinion a possibility to work from home would be necessary**

\*

- I fully disagree
- I partially disagree
- I neither agree nor disagree
- I partially agree
- I fully agree
- NO

**17. The following aspects would improve my virtual work efficiency and motivation**

	I fully disagree	I partially disagree	I neither agree nor disagree	I partially agree	I fully agree	NO
A. Development of a virtual work environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. The functionality of a virtual work environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Increasing training in virtual working skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Developing flexible working time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Freedom from a workstation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Feedback from superiors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Getting support for virtual work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Other? <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**18. Does your work environment support your virtual wellbeing? \***

- I fully disagree
- I partially disagree
- I neither agree nor disagree
- I partially agree
- I fully agree
- NO

**19. I am satisfied with my current virtual work environment in JAMK. \***

- Yes
- No, why?

(Continues)



**20. Would you like to tell something else about work environment?**

400 characters remaining

**Background information****21. Gender** Female Male**22. I have been working in Jamk** ≤ 1 year 1-3 years 4-6 years 7-9 years ≥ 10 years**23. I belong to the following group** Teaching staff R&D/ Project staff Other