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Unit of Tourism

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Kaisa Valtakari

EFFECTS OF LIVING HABITS ON WELLBEING

Bachelor's Thesis 2012

Abstract

Kaisa Valtakari

Effects of Living Habits on Wellbeing

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Instructor: Mika Tonder, Principal Lecturer, Saimaa UAS

Effects of living habits on wellbeing are an issue that can touch many people. There have been a lot of studies on the influence of shift work on wellbeing. Yet living habits is something one can affect no matter where they are working, and this way supports their work efficiency and duration. In this thesis the emphasis of the study is on eating, sleeping and exercising habits of the people. The aim of the thesis is to see the connection between living habits and wellbeing.

The theoretical part concentrates on how people should eat, sleep and exercise. In the thesis there is information how these three areas of life are connected and how they influence on duration. Information was gathered to compare to the questionnaire results. The empirical part was done by quantitative research. I sent out questionnaires that map out people's living habits and the way they feel about them.

In my study I found out that people seem to know what they should do, but are not doing these things. It is also shown that there are no alarming results in the living habits and this means that duration at work is good. There are still quite many things to improve in people's living habits.

Keywords: Living habits, wellbeing, eating, sleeping, exercising, duration

Tiivistelmä

Kaisa Valtakari

Elämäntapojen vaikutus hyvinvointiin.

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Elämäntapojen vaikutus hyvinvointiin on aihe, joka koskettaa monia ihmisiä. On useita tutkimuksia, joissa tutkitaan vuorotyön vaikutuksia hyvinvointiin. Silti elämäntavat ovat ne asia, joihin ihminen pystyy itse vaikuttamaan riippumatta työpaikasta, ja tätä kautta voi vaikuttaa tyotehokkuuteen ja kestävyYTEEN. Tässä työssä painopiste tutkittavissa elämäntavoissa on syömisessä, nukkumisessa ja liikkumisessa. Opinnäytetyöni tarkoituksena on nähdä yhteys elintapojen ja hyvinvoinnin välillä.

Teoreettinen osuus keskittyy siihen, mitä ihmisten tulisi syödä, nukkua ja liikkua. Opinnäytetyössäni on informaatiota, kuinka nämä kolme elämän osa-alueita ovat kytköksissä ja kuinka ne vaikuttavat kestävyYTEEN. Keräsin tietoa, jota voin verrata kysely tuloksiin. Empiirisen osuuden tein kvantitatiivisessa muodossa. Lähetin ihmisille kyselyn joka hahmottaa ihmisten elämäntavat ja mitä he ajattelevat niistä.

Työssäni huomasin, että ihmiset tuntuvat tietävän mitä kuuluisi tehdä, mutta eivät toimi niin. Huomasin myös, että ei ole mitään hälyyttävää elintavoissa, tämä tarkoittanee sitä, että työ kestävyys on hyvä. Silti löytyy useita epäkohtia ihmisten elämäntavoissa, mitä tulisi parantaa.

Avainsanat: Elämäntavat, hyvinvointi, syöminen, nukkuminen, liikkuminen, kestävyys

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1 INTRODUCTION

The subject of my thesis is employees' wellness in tourism industry. I concentrate on the parts of people's lives that they can effect themselves. The areas that I have investigated are basic living habits. Westermarck (2007) refers straight to the vitality level of a human being. While he opens up the topic of vitality level, among the first few things he mentions are the length and quality of sleep and nutrition (Westermarck 2007, 9). Also Fogelholm (1999) gives great advice on how to live healthily. Eating, exercise and sleeping habits have great impact on people's lives in general but they affect a lot on the level of efficiency in the working environment.

I focus on jobs in tourism because that is my occupation, but also it has different types of shifts in different hours. With my study I can find a better understanding how and what affects employees' wellbeing. Also I would like to find out if there are habits, good and bad, that are connected to each other. There are many forms of jobs in tourism industry I am going to take samples from the common fields: travel agency, hotel and bar/restaurant. I concentrate on these fields because they have the variation of different shifts. Due to the different types of jobs and altering shift times, comparing them will be interesting.

The objective of this study is to create an overview of what kind of affect the living habits might have on the efficiency and well-being of employees. The research problem of this study is to see how living habits influence the vitality level at work and to find out if there are differences in living habits among employees from different fields of tourism industry. There are three research questions included in the main research problem: How do living habits differ among employees? Why do they differ? How do the living habits influence on the effectiveness?

I compare the habits among one job with the other two and try to make assumptions based on my findings and literature that I have read. Eating, sleeping and exercising are the three most important parts of human life and they influence the durance of any person's life. For example if a person does not

get enough sleep the body does not get rest and concentration suffers. Also without regular eating habits one won't get enough fuel to keep the body going.

The issue of this study is personal for me. Throughout my whole life I have put my body under physical stress almost every day. I have not always slept as many hours I should have or eaten what I should eat, but if there was something wrong the fault would be in sleeping, eating or physical activity level during the day. These three issues are very closely combined to each other. A person feels more vibrant if he or she takes care of him/herself.

2 THEORY

This chapter opens up some theoretical facts of living habits. It tells what people should do according to some specialists and try to give a norm what people should follow. It goes through separately all the sections: eating, sleeping and exercising. Some of them are from books and some from articles that are based on research. This chapter hopefully makes you think about the connection between these main three areas. Also at the end there is a paragraph that gives reasons why attention should be paid to these areas in life.

2.1 EATING

Different specialists have different opinions, everyone says that what they know and what they think is the best and only way. The hard thing about eating habits is that there is not one correct way to eat. There are probably as many right diets as there are human beings. Different factors in different stages of life regulate the needs of a body. Correct diet is defined by desires and special needs of a person. By eating right the body gets the needed tools to maintain good effectiveness level throughout the whole day and helps to get good night sleep.

The demand of a person depends on the stage of life. Babies' immunity is not high so they need specific and quite limited food. When they start to move more and get teeth, the demand changes. Until the children go to school parents have the most responsibility on the child's eating habits. After that part of the responsibility of eating well is divided with schools (at least that is the case in Finland). A teenager might explore boundaries and his/her own beliefs through different diets. When the teenager grows, moves out from home he/she has to take care of his/her own feeding, entirely. Fogelholm (1999, 216) points out that, when a person is introduced to working life the activity level usually goes down and gaining weight is predictable, especially among men. Pregnant women need more vitamins and food because they are in a special situation in life, they are also restricted to enjoy of certain ingredients

because of pregnancy. When a person retires and starts to get older the demand of a body is not as great as it used to be, so eating should decrease at the same phase. The type of a job a person does influences on the amount of energy they need during the day.

I concentrate on working people, but there are still differences in people's needs, even though they are in the same age range. A person who is more active burns more energy than a person who stays still most of the day, this affects the amount of food needed. There are only few jobs that require very physical tasks and many that tie a person to a desk. The eating habits are influenced also by the stress level of a job, that usually means that there is not a lot or no time at all to eat during a workday. Some people might have special needs e.g. people who have diabetes, their body depends on nutrition that others do not. The most important thing is: the wholeness makes the biggest difference. This means that the quality of a diet is defined by daily or at least repeating decisions, so a person cannot change the quality of a diet by only one meal but through the sum of them. When eating habits are in balance with the consumption, metabolism gets energy evenly throughout the day and energy level stays constant. (Fogelholm 1999, 38)

The stable relationship with eating and burning the same amount of calories is relevant, but also what the calories consist of. Of course the more a person moves, the more it can and has to eat, but to stay healthy, meals have to have good ingredients. The general ratio of food: half a plate of vegetables, one-quarter of carbs and one-quarter of protein and a few glasses of liquids (water or milk would be the best options). The eating rhythm does not have to be the same every day because of different schedules but there has to be a rhythm, meals should be 2-4 hours apart. According to Fogelholm (1999,23) during a normal day the consumption of a normal 70-80kg person is almost 2500kcal (excluding exercise). Snacking is not allowed all the time, only at meal times. The quality of the ingredients, the structure and the rhythm of the diet, and the amount of food are very important and Fogelholm(1999, 23) states they affect together the nutrition level . The worse the quality of a diet is, the more often a

person gets hungry. Ihanainen et al. (2004, 23) says that the best way to describe a healthy diet is: colourful, diverse, just right, enough and enjoyable.

Brains are fat tissue and it needs a lot of water, a person should drink 2-2.5 liters of water during the day. Drinking liquids, even without feeling thirsty, is good because the feeling of thirst means that the body is dehydrated already. Because of the heat and sweating during summer body needs even more liquids during the day. High seasons and high peaks in a work place might also cause the same result because the workers might not remember to drink enough; this causes lack of concentration and tiredness. Consequences of the problems mentioned before can lead to repetition of mistakes, which can lead to injuries depending on the environment. Alcohol is something that increases dehydration and lowers the quality of sleep. Specially used in big amounts alcohol can influence damage. It slows heart rate and makes a person feel sleepy, even pass out sometimes, but the quality of sleep is not good. Dehydration because of alcohol can be felt as head-ache.

Irregularity is something that influences work efficiency and increases snacking. When person does not get regular meals one's blood sugar levels decrease and concentration gets poorer. This might lead to errors, durability and injuries at work. Constant nutrition influences also the quality of sleep and activity level outside of work. Adding to this there might be limitations on where and what to get to eat, during the work shift or even outside the work place. Atkinson, Fullick, Grindey and Maclaren (2008) mentioned that the amount of the food eaten in 24 hours is quite the same but the shift work influences what and when the worker eats it, basically people in the morning shift eat more than people in the evening shift. The insulin secretion decreases during night time which can be a risk factor which develops diabetes according to Atkinson et al. (2008). They also state that deprivation in sleep is many times connected to decrease in insulin level. Adding to this nocturnal eating might disturb gastrointestinal activity.

Persson and Mårtenson (2005) made good findings in their research among nurses in night shifts. They state that people working during night time have

lower intake of energy and nutrients lower, but people who work at that time have high body weight. One conclusion could be that the content of the food is not ideal, so more thought should be put into the diet because of these factors. 27 randomly chosen nurses worked in pairs during the study, taking part voluntarily. According to the study of Persson and Mårtenson, the colleague might have good or bad influence on the other. Sometimes nurses felt like eating junk food because the other nurse was doing so (9/27 nurses). On some occasions the nurses were discussing losing weight or diets, and this way they themselves were influenced to eat healthier (5/27 nurses). Even though everyone in the studied group knows what is good for each one of them, the company might influence which decision the individual makes. When it comes to the difficulty of the job environment many of the nurses eat fast food because it is easier (10/27 nurses). During the night shift the staff starts to crave for unhealthy food, either because they feel it keeps them awake or because of the crave itself (17/27 nurses). Some of the workers chose healthy food for better digestion and alertness (13/27 nurses). Outside of work many of the workers ate something sweet when hungry or stated that they did not have the time to prepare proper food, mostly because they needed that time to sleep (13/27 nurses).

According to this article factors that influence the eating habits of the 27 nurses is company, cravings and lack of time. Good motivators for eating healthy are colleagues, losing weight and staying alert. Persson and Mårtenson(2005) made a good point when they noted that some people who live healthy might not realize that because they are so used to it. This influences the self-assessment results used in this study. They also realized that people who were eating healthily had good exercising habits also, and the other way around. This finding indicates that good or bad living habits are a way of life and not only a part of one aspect of life. At the end of the article was noted that one factor that affected the motivation of living healthy, was age. During the night shifts the connection between stress and fast food was very strong, even the people who were trying to maintain a healthy diet ate junk food during stressful periods. Is it possible that unhealthy food is a sign of unhealthy lifestyle?

According to Atkinson et al. (2008) changing the content of food from 56% of carbohydrate and 28% of fat to 46% of carbohydrate and 43% of fat (assuming fat is the source of protein, in the form of animal or vegetable fat) improved scores, in subjective alertness during night shift, significantly. Also eating during day hours must be emphasised because of the study results and possible risks mentioned earlier.

These two last studies indicate that the eating habits and ingredients do affect the level of efficiency at work. Eating less short-term energy sources and eating more high quality, long-term energy sources is very vital to maintain stable efficiency level at work. Junk food is very often related to stress and indicates bad quality of life.

Meals should not be more than 2-4 hours apart. A person should drink 2-2.5 liters of water per day (can consist of other liquids, also. Meals should consist of around 46% of carbohydrate and 43% of fat.) and around 2500 kcl /70-80kg. A Person should not feel much hunger or thirst during the day and cravings should be almost non-existent, because of the constant energy gain.

2.2 EXERCISE

There are many ways to exercise physically. Different people like different levels of stress, phase and time of exercise, some do not care for it at all. No matter how you do it, it will still affect positively vitality level (Westermarck 2007, 13). Often people feel good, less anxious and more self-confident after doing exercises. Nowadays physical movement is less and less in the daily routines, because of the evolution of work tasks, so it becomes something one should add to their schedule.

People have different goals for exercising. Some work out, because they need to lose weight, some practice because it is more than a hobby maybe for professional reasons and any reasons in between these two. The reason “why” a person does exercise is crucial information when it comes to choosing the

type of exercises. E.g. hard workouts that train muscles to grow is not for people who want to lose weight, because muscles weigh more than fat, the scale might show same number even after months of working out hard (Fogelholm 1999, 242). People who are used to working out can basically eat more carbs because they burn more than those who do not exercise regularly. Many people like to go somewhere to work out, because specific environment enables you to concentrate better, it might give opportunities or equipment not available anywhere else, or maybe the social need to be around similar people helps. When one works out, one has to think when and what to eat before and after exercise. This should make people think more about the quality of the food. Different life styles and timetables might be a problem when a person wants to exercise. Options are slimmer in the evening and at night, than during the day. Work schedule might cross out some of the hobbies people might want to do. Still there are many alternatives, even though none of the facilities are open.

The fact is that the human body is made for moving, bones and muscles need exertion to stay in shape. Nowadays most of the people's lives are getting passive and moving around is more of an added occasion than mingled inside the routines. Exercise is also important because it will increase the metabolism and burn more calories. The recommended amount of exercising is 30 minutes per day (Haskell 2007). During the 30 minutes pulse should get higher, sweating start and the person gets out of breath. This kind of exercise burns more energy and can be called an exercise. It does not matter if a person goes to the gym, practice or outdoors, one has to get the heart rate up and muscles working.

Three aspects that affect the consumption level of the body are activity level's output, weight of the body and the economy of the activity. Measuring the consumption of a body is measured by MET (= metabolic equivalent). With MET the usage of energy is always compared to the basic usage of metabolism which is the energy used while sleeping or laying down. For a normal person the usage is 0.9 MET = 63kcal/h, making a bed is 2 MET = 141kcal/h, playing a football match is 10 MET = 703kcal/h, running 18km/h is 18 MET = 1,265kcal/h (Ber, Fogelholm & Hiilloskorpi 2007, 317). Of course these are

averages and the real usage of energy depends on the factors mentioned above (Ber 2007, 26).

Being active during the day helps falling asleep because the extra energy has been used, body needs recovery and rest. When one works out the duration of body gets better and it is easier to work during the day. When muscles get more strength on the core they have more power to hold the body up. If a person has to stand up or walk the whole day, legs do not feel tired during the day because they have more power. Working out and keeping good care of the body by exercising affects that the body does not get tired as easily, metabolism gets faster and person feels more alert. Studies have shown that physical activity on regular bases helps on breathing problems during the night (Luenda, B, 2007).

Due to the different types of shifts in tourism field maintaining social and physical well-being is challenging compared to regular office hour workers. There might be many reasons why night shift workers exercise less than day shift workers. They might be tired because of the irregular sleep, eating or they desire for team or social exercise and it is difficult due to the fact that no one is available. Some think that night shift leaves more options to work out; going out in day light and no rush-hour workouts at a gym. Over all physical exercise has been proven to improve the quality of sleep, and this is why exercise is crucial especially for people with irregular and “abnormal” sleeping rhythm. For brain restoration, slow wave sleep has been proven to be important and this kind of sleep is increased by physical activity. According to exciting evidence exercise can help a person to advance or delay circadian rhythm to adjust to different types of shifts. A relationship has been found between habitual physical activity and clinical sleep disturbance alleviation. Concrete improvements from worksite-based physical activity decreased weight by 1-2%, blood pressure by 2-10mmHg and total cholesterol by 15% on average. It has been studied that stress resistance increases through regular exercise. Among the tested group, after exercising regularly, alertness was decreased and length of sleep increased. (Atkinson et al. 2008.)

Physical fitness helps to reduce problems that work might bring to an individual. A person should exercise at least 3 times a week for 30 minutes so that the heart rate gets higher; one is sweating and gets out of breath. The more exhausting the exercise is, the better the effect. The cycle should be evened out throughout the week and repeated every week.

2.3 SLEEPING

Good night sleep influences a lot the vitality and the energy level during the day. The length, quality and rhythm of the sleep affect how a person feels after waking up. While sleeping, the body recharges its strength, recovers and rests. If one cannot get enough sleep, consequences can be quite horrific. Short sleeping periods or poor sleep quality are often associated with obesity and being awake straight for 24 hours equals to 1 permille intoxication. Snoring is one way to realize that there is something wrong with persons living habits.

Nowadays in many professions people have to work in shifts. Most of the time it is not about what the job is that influences the health of the person but whether it is shift work or daytime job. There was a study made among Buffalo police men about how working in shifts affects sleeping habits (Luenda, A, 2007). The study found out that the policemen who work in shifts have great amount of snoring and shorter sleeping periods. Snoring is often related to sleepiness during daytime, headaches, lack of concentration, apnoea and difficulty of learning new tasks. Apnoea could not be measured because there was not anyone monitoring if the breathing stops during the night, but snoring is a very strong indicator of it. The study found out that 20% of the policemen could not handle night shifts. They also found that there was 44% higher occurrence in night workers than others of getting less than seven hours of sleep. 16% more of the policemen in night shift were snoring than in day shift. Melatonin is a substance that seeps only at night time and helps a person to sleep. It can be stated that irregular sleeping rhythm can cause apnoea and snoring.

Shift-work disorder is a state where person's daily rhythm is not in sync with one's sleep-awake clock rhythm. According to the studies of Drake (2005) the disorders have influenced the test group's mental health, happiness, social life and physical conditions. People state that their family relationships have decreased because their rhythm is different; also they feel frustrated, angry, irritated, drained and anxious. 72% of the shift-workers who answered to the questionnaire assume that being tired is just part of the job and do not think it is a symptom of the job.

For the people who work on rotating shifts, the analysis of data clearly indicates that day-time sleep while working on night shift is shorter than the nighttime sleep while working on morning and afternoon shifts. The night-shift-workers may have poor day-time sleep due to unfavorable sleeping environment during day-time, such as noisy surroundings, excessively high temperature during summer, over-crowded room etc. (Luenda, A, 2007)

A random controlled study was made among shift workers about using Armodafinil (150mg) before every night shift. The study proved that the drug improved significantly measures of subject sleepiness, sleep propensity, memory and attention during the working hours without disturbing the day time sleep. Although the results were significant it is not suitable for everyone. This could be one solution for shift workers, but it was tested only on night-shift workers who have been in that rhythm for a long time. The results on alternative shift workers have not been tested. (Czeisler 2009)

When a person cannot get enough sleep, it can lead to obesity that most likely causes snoring. Snoring and obesity then again affect the quality of sleep. This is a circle where people can end up because of lack of sleep. There is a scientific explanation: when a person gets enough sleep, it drives down leptin levels (hormone that increases appetite), this way one will feel satisfied after a meal. When a person does not get enough sleep, one will crave for food more than usual. (Luenda, A, 2007) Problem with getting no sleep is that it can lead to insomnia, which can be chronic or acute. Acute insomnia can be treated by

sleeping the debts away but chronic is more of a mental problem, which requires help. Some say that six to seven hours is the optimum level of sleep, less than 4.5 hours of sleep or more than 9 hours of sleep is not good for people (Anonymous 2012). Of course the amounts are averages, and the number depends on the person. Buffalo state police study has found out that the policemen who have sleeping problems have also lower activity level.

Obesity is associated with short sleep duration according to Atkins et al.(2008) and the relations between shift workers and over weight is not surprising. Atkins et al. (2008) has also stated that the severity of sleep apnoea was related to the hours of physical exercise during a week. Slow wave sleep has been proven to be important for brain restoration and it is associated with physical activity level.

Just like in eating and doing exercise, it is important that one knows what the best solution is for that specific individual. When body is tired it means that it needs to rest, when it is hungry it needs food, when one is thirsty one needs to drink, and when energy level is too high, concentrating might be hard, one needs to exercise. One needs regulars sleep, at least 5-8 hours and slow wave sleep is required for brains to get needed rest. The time of the sleep can be different due to the fact that tourism industry has different shifts but the length and quality of sleep are the most important things.

2.4 BETTER LIVING HABITS – BETTER STAMINA

Old habits die hard. But understanding the reason to change those habits might make it easier. Also nowadays the environment effects the decision and makes it harder: commercials, availability of food, pricing, lack of knowledge, friends, family and beliefs (Ihanainen et al. 2004, 9). Specially the fact that real knowledge gets mixed into the jungle of commercials is misleading and confusing. When a person has gotten used to eating the same amount of food on every meal, it is not easy to change it. The person might not feel full before the amount of the regular amount of food is reached. This is more about habits and routines than actually feeling full.

A little bit of over weight is usually harmless. It depends where the fat is. If the fat is inside of the stomach and around the intestines, it is dangerous. Middle body's fat tissue might send a lot fatty acid to intestines and confuse the function of them. With long (around one hour) exercises with low (but still higher than normal pulse) phase of exercise and eating more plant kingdom grease, a person can avoid or get rid of this kind of fat. (Fogelhom 1999.)

Good quality food and diet helps in person's vitality level. Food that has a lot of carbohydrate will get the energy level high fast, but the level drops down soon after and makes a person want to eat again (Westermack 2007, 99). This is partly the cause of diabetes on older people. People should think also about the quality of individual pieces in their diet, like wholegrain/rye bread instead of white bread. The previous choice also abeles people to eat fewer calories.

According to Atkinson et al. (2008) 20%-75% of night shift workers have stated that they have disturbances of appetite, constipation, irregularity of bowl movements, heartburn, dyspepsia, stomach grumbling, abdomen pains and flatulence. Compared to the numbers of day shift workers that have complained: 10%-25%.

“It is well documented that better general health of a workforce is related to lower costs, higher productivity and lower rates of employee absenteeism or resignation.” Atkinson et al. (2008, 680.)

If a day starts with bad night of sleep, it means that the person is tired already when coming to work. Then the same person eats poorly and does not remember to drink enough water during the day, this leads to the fact that one does not have enough energy, gets tired and the risk of making mistakes gets greater. If we add the stress of high season into the picture, the person is in a hurry all the time with no energy. Brain function is poor, the worker forgets small things and might have to go back and forth instead of being effective and productive. The level of customer service goes down because the nerves of this employee get tighter and one is in a bad mood as a sum of all the variables that have happened during the day.

3 QUANTITATIVE RESEARCH

In this research has been used quantitative research method to gather information. Quantitative research means that the results can be measured by numbers. The questionnaire is just one way of gathering numerical information (Vilkka 2007, 14). This makes it easier to analyse a big amount of answers. I chose this method because I want an overview of what people do and think. This method gives more comparable answers. The answers and specially differences in them will be easier to perceive in numeric form, this serves me better. Quantitative research method helps me to put opinions and habits into same form which makes them comparable. My goal is to get an understanding if and how the living habits are affecting working durance and this was the best option to measure, in my opinion. The challenge is to ask the right questions in the right form so that they can be analysed in numerical form, and then again to open up the package of answers in numerical form into writing the meanings and conclusions.

Quantitative research is numerical. It asks questions like: how many, how much or how often. Results come in numerical form and they are then opened up with words so they are easier to analyse. Quantitative research could be done through questionnaire, interview or by systematic observation. I used questionnaire, and everyone got the same questions in the same order. In quantitative research the researcher needs many answers and that is why in my case I sent hundreds of questionnaires all around Finland to different types of tourism firms. (Vilkka 2007, 13–14.)

The instructions and questions are done as specific as possible, so it makes the answering process easier (Hirsijärvi, Remes&Saarivaara, 1997). It is more like a questionnaire where person answers questions in a scale or with yes-no-answers, e.g. how many hours they have slept, when and what they have eaten, when and what they have done if they have done exercises. The goal of the questionnaire is to get as many answers as possible. The focus of the project is on sleeping, eating, sport activities (which are all activities that are

done in addition to getting around) and also how much they work and how they actually feel during the time spent awake.

The questionnaire consists of three parts. The first part is concentrating on people's basic information. There are questions about their age, gender, field of work, etc. With this knowledge it is possible to find common factors, from the general side, that might lead to same feelings and results. The second part is based on the factors of the studying fields. There are going to be e.g. questions about how many hours they sleep, what they eat, and how many times they exercise. The third part asks how the people feel, what they think about their living habits. The first part gives the bases for the needs the person has, the second part shows how they are living and the third part shows how they feel about their lifestyle. The last part might give hints already by itself, without looking at the other two parts if there is something to be corrected or not. It was mentioned earlier that the answers will be compared with the results, mainly based on the first section's answers but also the second sector might give similar comparability.

The sample of the people who answer my questionnaire is random. I sent a list of companies within my target group and the questionnaire to my supervisor and he sent it forward. The only requirement for my sample is that everyone has to be working on tourism industry. People will get the link to my questionnaire by e-mail and the answers will be gathered into Webropol.

4 RESULT ANALYSIS

The answers to the first part of the questionnaire, which concentrates on basic information, are summed up below. Of the people who answered 95(82%) were women and 21(18%) men. The people were all ages, from 18 till 59 and above. Most of them were between 35-42 years, 27%. The questionnaire covered 47 cities and towns, 31% people were from Helsinki. Occupations differed in all of the categories as seen in the Figure 1: hotel (27), restaurant/coffee shop (21), nightclub/bar(7), travelling agency/and such (29) and others(38) were also listed by the participants. The others consist mostly of cultural employees, event planners, transportation and other office jobs. Most of them worked in hotel or travel agency. 64% have worked in tourism field more than 10 years and 54% have worked less than 6 years in the current occupation. Almost half (48%) have gone through University of Applied Sciences as their highest education and only 10/115 went to university.

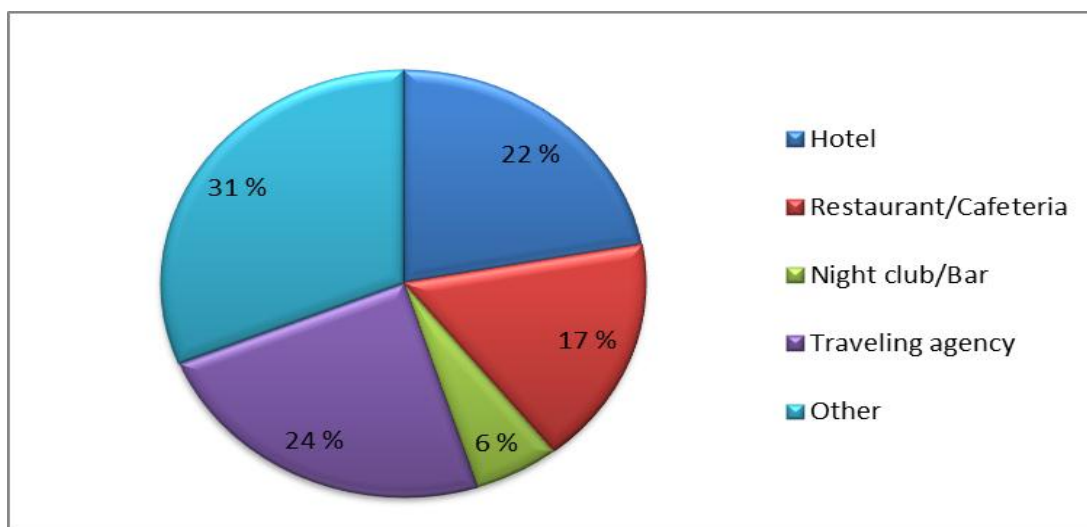


Figure 1. Shares of the fields of industry among participants.

Almost all of the participants have morning shifts in their jobs, 30% has evening shifts and 11% has night shifts like is seen in the Figure 2. The numbers stay around the same when I asked which shifts are the most common. 42% of the participants have children which is also one variable.

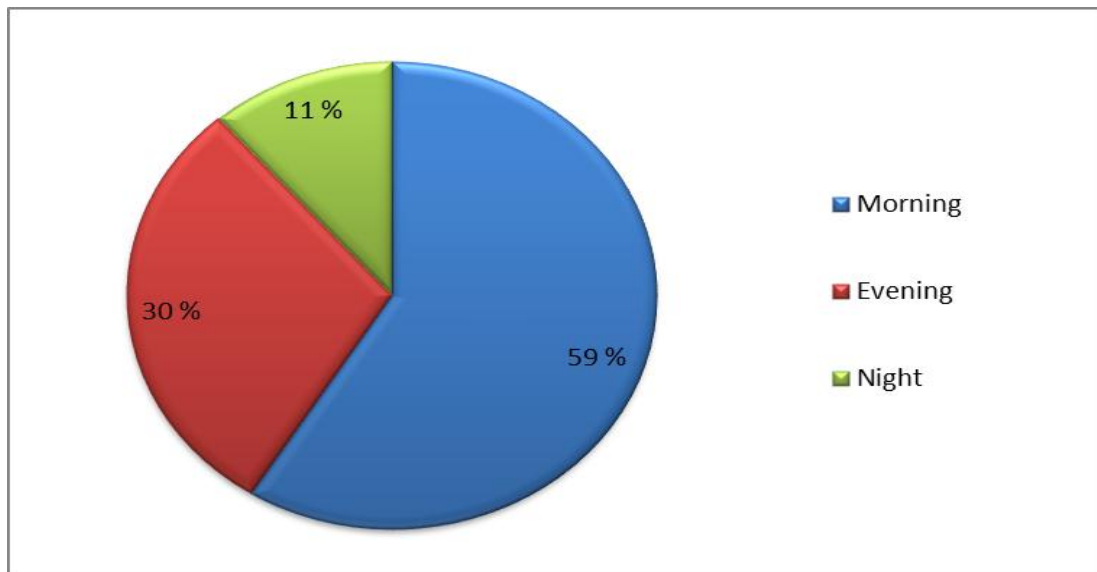


Figure 2. Shares of the morning, evening and night shifts of the employees.

To sum these people up a little bit without the numbers: Most of the people who answered are middle aged and from all around Finland, but the centre of the gravity is in the Helsinki area and especially in south Finland. The educational level mostly stays on University of Applied sciences or even on a High School level. The length of career has been mostly over 10 years but still the length in one job is mostly less than two years. Almost everyone has morning shifts and quite little night shifts, that is probably explained with all the touristic office workers.

4.1 EATING

Quite shocking 54% of the participants answered that they eat, on average, only 1 hot meal during a day. Good news is that 64% of all of them eat breakfast. The most popular things to eat or drink during breakfast is coffee and bread. With breakfast included in the meals half of the people seem to eat only two times per day, which is quite shocking. The interpretation of a meal and snack can be different among different people. 28% of the participants eat only two meals/snacks per day and 29% eat three times, the statistics you can see in Figure 3. Different concepts of meals and snacks might explain why

people eat so few meals during a day. Meals and snacks combined together it seems that the quantity of food reaches the recommended amount.

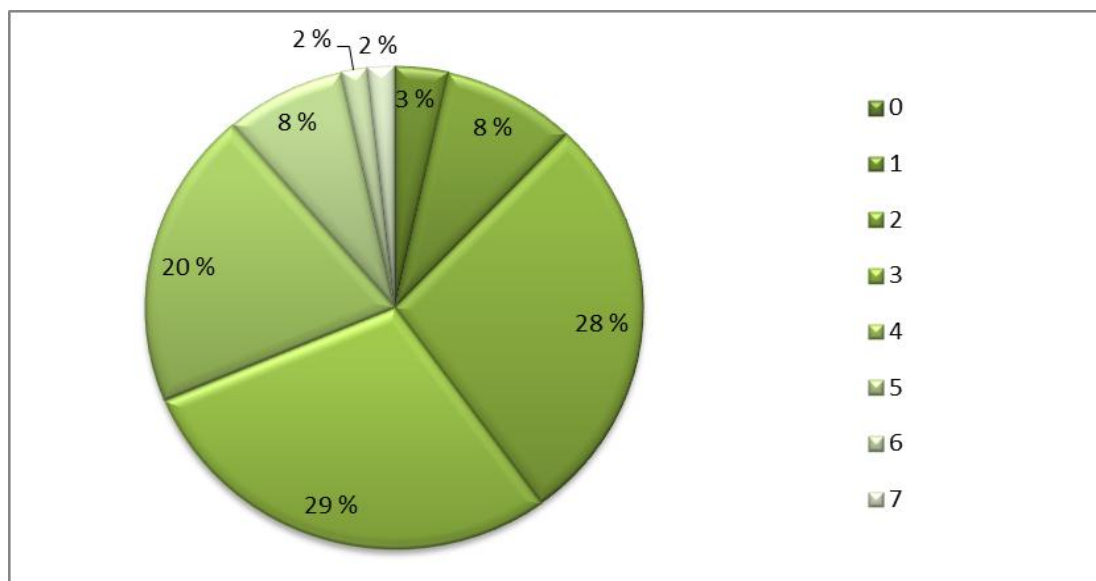


Figure 3. The amount a person eats meals and snacks per day.

A good thing is that only 5% of the people say that they do not have time to eat at work and 65% say they do, because I expected it to be the other way around. 69% have time to eat snacks at work, which is good because of the low amount of lunches among people. 68% claims to eat fruits, vegetables or berries every day, I did not ask the amount but these types of foods are always a plus. 23% of the participants eat at home seven days a week. There are 24% who eat outside of home only three or less days per week. Home-made meals can be ground breaking for a diet; they can be over greasy and salty or a lot healthier than eating out, at least when the food is prepared at home one knows what is in them. Many people would like to eat more at home, less in restaurants and most of the participants think that they eat healthily.

33/115 people in the study eat sweets during three days of week, rest of the people are eating even more or less. It is shown in the Figure 4 that people think that time (in 28% of the cases) is the most limiting matter when it comes to eating, second is preferences (26%) and third is the job (20%). In estimating the times of alcohol used in a month is mostly two (19%) or four (17%) times, and the amount of alcohol used, in average, per one time is mostly two

servings (27%) and second highest is with 14% only one portion. Almost everyone (91%) feel that they eat enough, and they say also that they feel full after eating (88%). Most of the people do not feel hunger during days (51%) nor replace warm meals with snacks or sweets (65%), this indicates that people gain energy evenly throughout the day. Eating sweets and snacks instead of a lunch gives one only an energy rush but does not maintain the energy level for a long time.

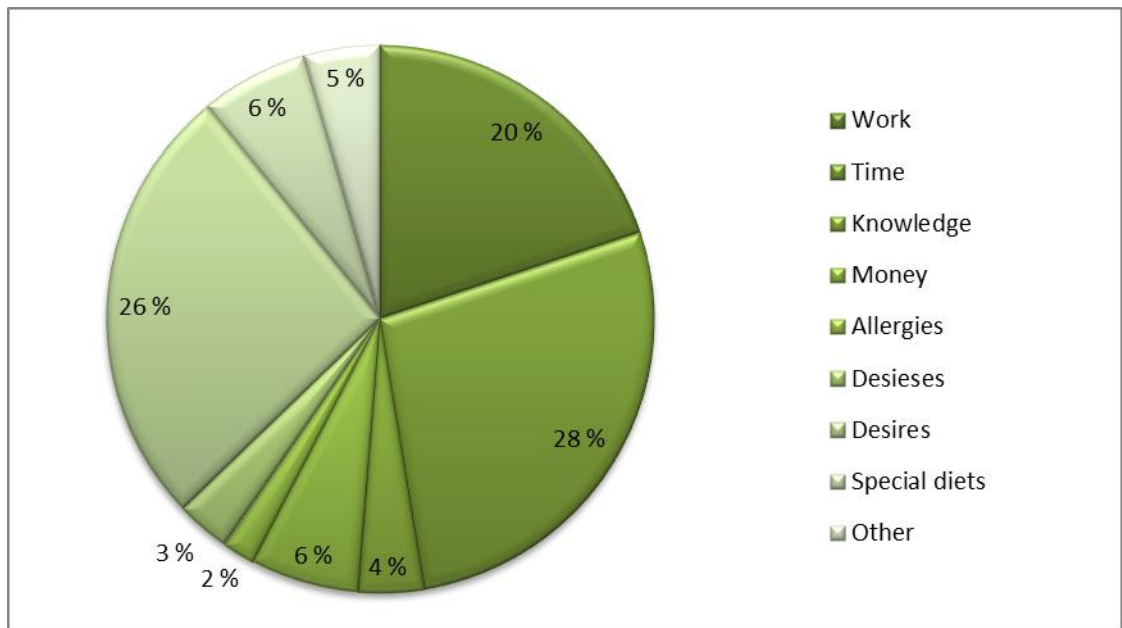


Figure 4. Shares of affecting factors on eating habits among the employees.

Even though people said that they think that they eat healthily, slightly less than half (47%) think that they eat too much sweets. Maybe in this case, like with food, the amount of candy eaten at once is a lot, and that is why people feel they could eat less candy. Participants do not blame surroundings or situations for their eating habits if there is something wrong with them. Quite a few people (61%) feel like they want to lose some weight but still almost half of them (47%) are satisfied with how they look. This is odd but maybe it is just how the question is asked and people do not understand that they are not consistent.

4.2 EXERCISE

44% of the participants estimate that they exercise 2-4 hours per week. Most of the people do hard exercise 2-4 times a week, like seen in the figure 5. When it is divided into 30 minutes, it would be 4-6 times in a week of the minimum time of exercise per day. The same amount of people (44%) exercises one or two times a week so that their heart rate rises and sweating starts. This answer does not tell if the heart rate stays up for the whole 2-4 hours they exercise and the amount should be at least three times a week, like mentioned in the theoretical part. 10% admits that they do not have stressing exercise in their schedule at all. When I asked again if the people are sweating while exercising, most of them said yes (54%). The answers do tell how many hours the people do exercise but not the amount of sweaty exercising in hours. If the real answer is that half of the people exercise heard enough, it is not a bad result.

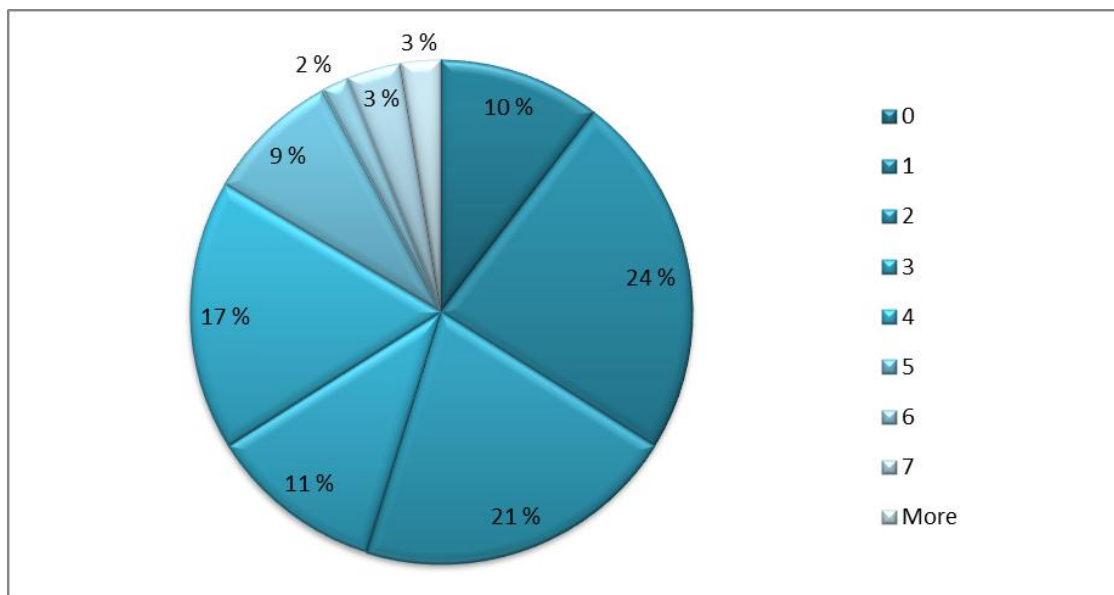


Figure 5. Shares of times the employees do hard exercise per week.

Less than half feel unwilling before exercising, but still almost everyone acknowledges that they feel great after doing sport activities (93%). Almost everyone enjoys doing exercise and has found a sport that fits one, some use it as a social event, but most of them (42%) feel like they are not doing it enough as seen in Figure 6. Motivating oneself to do exercise is important, it

helps one to get over the negative feelings before starting and actually doing exercise. Quite a few people (61%) feel like they want to lose some weight but still most of them (47%) are satisfied with how they look. Like I stated before, this is not consistent but doing had enough exercises might help to lose weight.

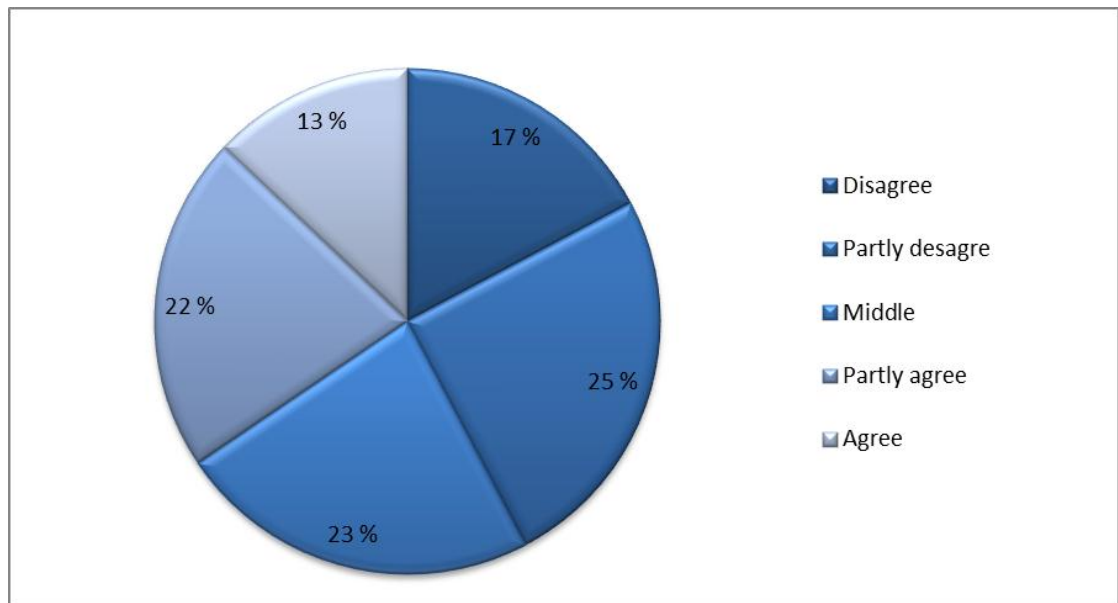


Figure 6. Shares of agreement level with the statement "I do enough exercise".

4.3 SLEEPING

43% says that they sleep 7 hours and 29% sleeps 8 hours as you can see in the Figure 7. This goes into the marginal mentioned of optimum sleep per night. When I asked about napping, 50% states that they do not take naps and 25% that they take naps only once a week, the length of the nap is mostly 30-45 minutes like presented in the Figure 8. There was no theoretical part about this, but it is interesting to see if many people in tourism industry take naps. One out of three (33%) knows that they snore while sleeping, which is an indicator of problems in sleeping quality for oneself but also for a possible partner.

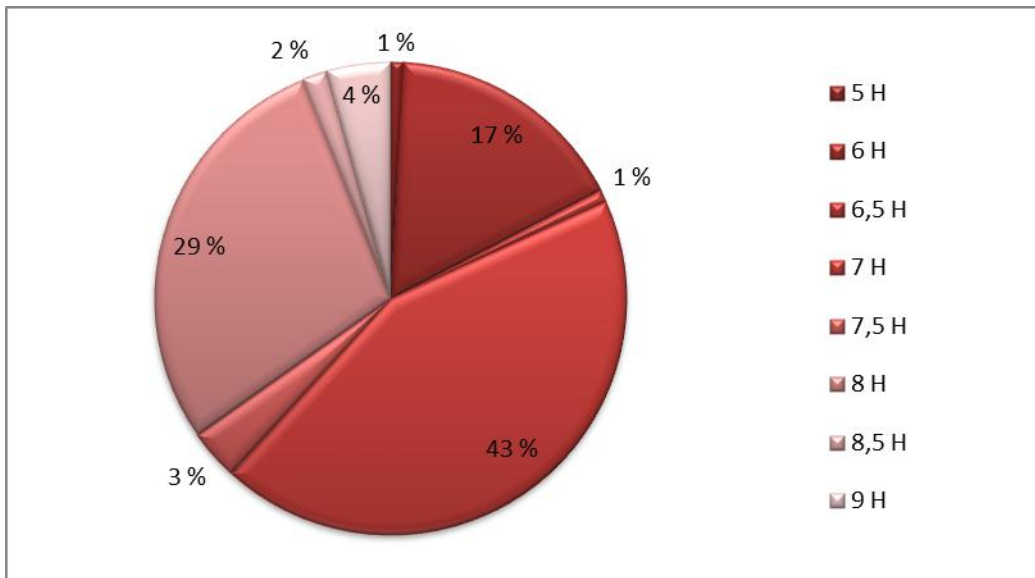


Figure 7. Shares of hours employees sleep on average per night.

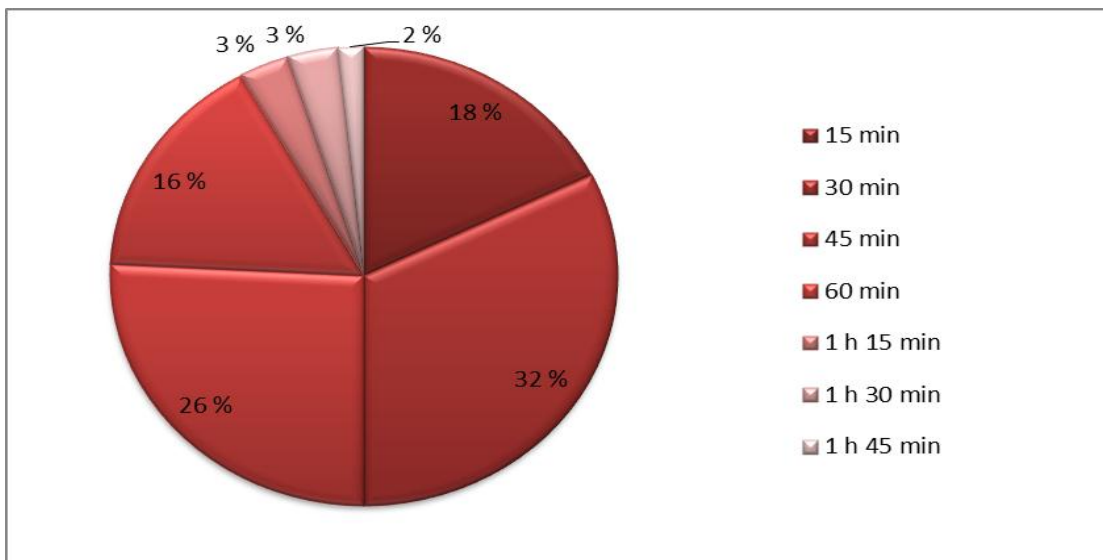


Figure 8. Shares of the length of the employees' naps on average.

11% of the people agree with the argument that one goes to sleep before midnight almost every night and 48% says that they go to sleep hardly ever before midnight. It was not asked if this is due to shifts or because of their own will. It is positive that most of the people go to sleep at a decent time. Most of the people feel rested after long night sleep (52%) and also falling asleep is easy(68%), going to bed before midnight always helps to get enough rest. 37% of the participants feel rested and that it is easy to fall asleep during 7 days in a week. 20% completely agree and 30% partly agree that they get enough rest, like presented on the Figure 9 below. Even though 52% of the

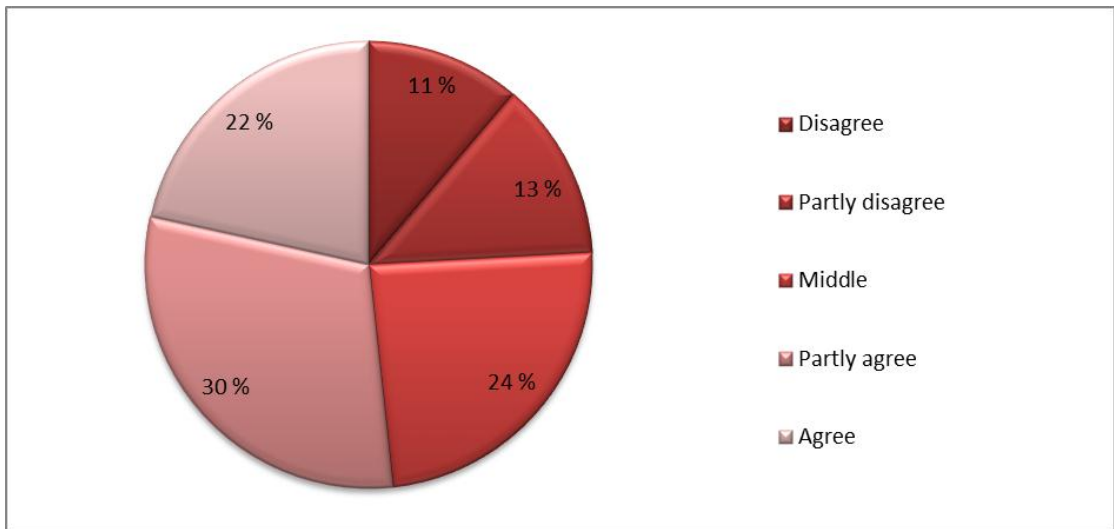


Figure 9. Shares of agreement level with the argument “I get enough sleep during a week.”

people feel that they get enough sleep during night time, still 16% say that they wake up every night. This can be an indicator that they fall asleep easily or they do not need so long night sleeps to feel rested. Most of the people feel like the day rhythm that they live suits them well (64%), because of this they do not suffer shift work syndrome, fall asleep easier and sleep deeply.

5 CONCLUSIONS

Conclusion part concentrates on comparing the theoretical part and the questionnaire results and trying to give some explanation why it is that way. I give my opinions based on the things I have read and reason why people act the way they do. In this part I sum the results I have found before.

5.1 FOOD

Most of the people (54%) eat warm food only one time per day, some eat two, and at the same time most of them eat two or three meals/snacks per day. A good thing is that 74% say that they eat breakfast every morning. I assume that this is not included in the answers, when I asked how many meals/snacks one eats during a day. Even if breakfast is included on top of the meals people claim they eat per day that gives them only 3-4 meals per day. This is not enough, according to the literature, and yet most of the people think they could eat less during a day. I think people should eat less during one meal. In my opinion this would be more natural; the people would not be hungry at any point if they would increase the amount of meals at the same time. Of course I cannot say if they are the same people, but even so, that is not consistent. Two or three meals during one day is regular amount of meals. 71/116 say that they feel like they are eating enough and 67/116 say that they feel full after every meal. These previous points might be indicators that they are not eating healthily, and that is why the quantity on one meal is big and why they feel full.

Like I have mentioned before the rhythm and content of the diet has to be in good shape in order to keep durance throughout the day (Fogelholm 1999, 23). These results show that people are not completely executing that model. If a person eats even 4 meals, which includes breakfast, per day (a day=16 hours, left after night sleep) that leaves around 5 hours in between meals. Recommended amount is 2-4 hours apart. Quality and quantity of food would help on durance and on controlling hunger.

Another observation is that only 6 people out of 113 say that they do not have time to eat at work, but the rest say they do (73/113) or that they do sometimes (34/113) have time to eat at work. This is completely opposite result than I thought I would find. My previous experience in restaurant business is, at least, that it is very hectic and there is hardly any time for breaks or eating. Almost the same number of people says that they have time for snacks during a work day. When I stated a claim that surroundings set the eating habits and not themselves 70% disagreed. Still 44 people claim that time and 31 people claim that job is a limiting factor when it comes to eating. These seem to be indicators to the quality and the quantity of the food: if people have a chance to eat at work but still the work influences their food. Also not having time might lead people to take the easy choices, and go for convenience food or fast food. Time issue also might lead to eating bigger portions, because the number of meals eaten per day does not reach the level of body's needs. If the portions are big, it would also be in sync with the fact that people say they feel full after a meal and they feel that they eat enough.

When I asked about the quality of the food, 78/115 say that they eat vegetables, berries or fruits at least once a day. This is a good amount, but the form of the veggies, berries and fruits might vary, and not be the healthiest. Veggies cooked in butter are totally different from fresh ones. 29% say that they eat sweets during three days in a week and 9% say that seven times a week. I am not aware of the amount of sweets eaten per day. Almost half (47%) eat sweets only during 2-3 days a week. Again I do not know how much they eat, but at least many people do not compensate real food with candies or something similar. I asked about eating homemade food and 69% would rather eat more or less more homemade food. Restaurants are losing popularity. This is quite interesting, but if people have less time they might feel forced to go to restaurants even though they would like to eat homemade food and this leads to the decrease in the popularity of eating out in restaurants.

Alcohol usage seems to be pretty decent with only few extremes. 62% think that they eat mostly healthily and according to the answers it is quite true even

though the cycle of meals is not dense enough (only few meals per day). Although I do not know the exact amounts of the ingredients, the diets cannot be too bad if only 18% feel hunger often during the day, greens are eaten almost every day, sweets eaten only during 2-3 days a week and alcohol usage stops most of the time after two alcohol servings.

47% of the people seem to be quite happy about their appearance. Most of the answers for that are in the middle, so their opinions to this might vary a little. Of course this is normal. Almost most of the participants are females, so change of opinion is expected. Of the people who answered to this questionnaire 60% people would like to lose weight. In this part 40/115 agree completely and 30/115 mostly agree with the statement, the rest of the people are spread evenly out the scale. It was stated before that people who are overweight work mostly during night time. In this study I did not ask their weight, but only 20 people have night shifts in their job. Wanting to lose weight might be also an obsession in present culture rather than a health issue. The thought of possible weight loss might also vary on day to day basis, but it is not consistent with the answers given to "I am happy with my appearance" – part or what Persson and Mårtenson (2005) stated about night-time-working and heavy people. Of course appearance consists of many different elements but weight is one of the biggest issues these days.

Many people do not realize that it is the diet that helps people lose or gain weight, and not so much the amount of exercise. Naturally, working out helps because one burns more calories by moving around than sitting still. Then again, it does not matter how much one moves if he/she still eats unhealthily all the time. Sometimes when one feels tired, a sip of water makes you feel better, because of the dehydration in your brain. Good thing about water is also that it does not have any extra calories: it does not give you sugar rush. Dehydration leaves a worker with lack of concentration and tiredness.

5.2 EXERCISE

A closer look had to be taken at the results of the relationship between the times and the hours of exercise used per week. Some claim that they move once a week but five hours per week. This indicates that people have different understandings on what is exercise. Just moving around is not enough e.g. going for a walk with a friend is better than sitting around but it is not considered as exercise. Like mentioned in the theoretical part, sweating needs to start, breathing and heart rate need to get faster at least for half an hour, then it is beneficial for the person, one's duration and then it is called exercise. Staying in the comfort zone does not give enough stress for the body. Then there is the other extreme, when it comes to athletes. They may not rate all their exercise the same way. They are used to moving around and pushing their body in physical exercise. This is why they may not include short or lighter practices as exercise.

Among the people who answered to the questionnaire 4.9 hours were spent exercising during a week. Out of people who took part in the questionnaire, 23% work out only once a week and 21% twice a week so that the heart rate rises. I can only guess how many hours a week these people in question use during these one or two times per week. If a person exercises only during one day, that is not enough. The body does not get consistent stress; one high peak does not help to gain or maintain long term physical strength. Good thing is that 45% say that they exercise 3 times or more during one week. Still over half do not move enough above the required 1.5 hours of exercise per week. I did not ask why people do not exercise more, but if the excuse is time, it is not good enough. Then they have to manage their time better, do things more efficiently. Regular exercise gives duration and then people will have more energy to use their time efficiently.

When I asked how people feel about exercising, 40% of the people claim that they enjoy exercising and 32% partly agree with that. But 46% agreed fully or partly with the argument that they feel reluctant before starting to move.

Astonishing 77/116 (66%) fully agree that they feel good after exercising. These numbers seem to point out that people have trouble in starting to move, but after they do it they feel good. This is understandable in present society but it is not acceptable. Technology, facilities, accessibility of food, less physical work, all these might be reasons why people move so little, but because those issues belong to everyday life people need to understand that they have a responsibility to take care of their body and to maintain good quality of life through stressing their body.

Also 61% agree fully or partly that they want to lose weight. Exercising is not the only thing that can help with that, but at least a big part of it. Adding more exercising hours per week most of the workers could improve duration at work but also lose some weight in the process. Regular exercise speeds up metabolism which will increase consumption. When I asked if the people think that they do enough exercise the answers were spread quite evenly. In the scale of 1-5 (1 being I agree completely and 5 being I do not agree at all), 17% agreed, 25% partially agreed, 23% are in the half way, 22% disagreed partially and 13% agreed completely. There is still knowledge people are lacking or choose not to do so. I think that nowadays anything that needs a little bit more effort and is not seen beneficial right away is given up on by people. Too often people want to stay in their comfort zone and come up with excuses. Also people do not seem to have enough patience: everyone wants to see results right away, sooner than later.

Even though people do not feel willing to exercise as much as they should they feel good after the exercise. Also they know they should use more time to exercise than they do. Knowing this is good but I am wondering why they are not doing anything about it. To take the first step seems to be difficult but why does not the feeling afterwards motivate them do it more. 65% say that they have found a way to move, a sport that pleases them, so that is not an issue in most cases. Many people stated that they find moving as a social event at the same time, this is positive. People with same interests motivate each other and the other person/people might make the initiative even though one feels reluctant. This might make one feel obligated to go and does not have to self-

motivate. People might not understand the consequences a little exercise or the lack of it can do. They seem to be comfortable where they are and might think that because they cannot see instant change in appearance or duration, after exercise, they are not motivated to continue. Too often people make changes when it is too late, or something tragic happens.

5.3 SLEEP

The recommended amount of sleep is between 6 to 8 hours. 75% of the answerers sleep during that time. Hardly anyone takes a nap which also indicates that the people sleep enough. This is great, the high percentage might be because most of the people have day shifts and they get long night of sleep. 27% know that they snore and 24% cannot be sure if they do. Snoring might be an indicator of bigger problems, not only for possible partners but for the snorer himself. Snoring seems to be quite common and people should look into it and find out why it happens. If it could be erased also possible partner's sleeping quality would improve. Alcohol seems to have influence on snoring but many people who took part in this questionnaire use reasonable amounts of alcohol, it does not seem to be the reason for constant snoring. I have experienced also that many people snore heavily only after using alcohol and not at all otherwise.

Participants claim to feel rested after a night of sleep almost every day. This is important concerning duration at work. People can be focused and concentrate. They do not seem to need naps during the day. Also falling asleep does not seem to be a problem for 67% of the people during most of the nights. When I asked if they feel that they are getting enough sleep, answers were spread more evenly but still the average was above middle with 3.38 (out of five). Most of the people say that they wake up some times during the night but 18/115 say every night. The most common reasons for waking up is the need to go to bathroom, a child wakes up and stress or work. There are also occasional reasons like spouse snores, too hot or cold, animals and nightmares. For people who stress about work and cannot sleep because of it,

there can be many reasons. It can be that the amount of work is too much for them, or one participant mentioned that his/her body is not comfortable with the rhythm one is in. The option mentioned at first can be temporary and hopefully is. But the latter one might be because of shift work, which is required all the time. This way the problem does not go away and the problem gets bigger, the so called snow ball effect. Thankfully only 15% of the people disagree with the statement that their daily rhythm suits them. In comparison 64% fully or partly agree with the statement mentioned just before. A Weird thing is that if people wake up many times during the week, why do they not feel tired? I would assume if the long night sleep is disturbed, the person would not feel rested the next morning. If a person cannot sleep properly, it influences concentration, durance and mood swings. Motivation might lower continuingly and quality of work that has been done lowers.

For the people who do not feel positively about sleeping, there might be connection with exercising and eating habits. If the body does not get good ingredients through eating and enough activity, its metabolism slows down and brain activity with it. This means that there are not clear distinctions between wanting to fall asleep, staying awake or sometimes even hunger. In this mode people seem to live on the same gear all the time. Quality of every aspect of life decreases. When one does not get enough sleep or works night shifts, it has been shown that quality of food decreases. Tiredness is not always the sign of too little of sleep but also lack of nutrition or water. People should be more aware of what and when they do something, so they will know how to fix it, and not just stand it and live with it. Personally I think in most of the cases when people are lacking durance, feel tired or cannot cogenerate, the reason lies in living habits and one does not need any extra substances to make the change.

6 EVALUATION

The hardest part was to visualize what questions to ask and how to get comparable answers. I had to think how to make the questions simple enough for people to understand but also specific enough for the analysis. I realized afterwards that I should have thought of more questions, the forms of the questions and also the order of the questions. Also because of the order, analyzing the questions is more complicated, when I have to flip back and forth the sheets. It would have been interesting to know reasons why people feel or live the way they do, and also why they do not make the little changes they could do easily.

A positive thing about the questionnaire is that after some time I got enough answers. Analysing them was quite interesting. I realized that many people know what is wrong in their lives and it is mostly in their own power to change it for better than blame the circumstances. The changes that need to be done in the living habits seem to be small.

REFERENCES

- Anonymous. How much sleep do we really need? <http://www.sleepfoundation.org/article/how-sleep-works/how-much-sleep-do-we-really-need>. National Sleep Foundation. (Accessed 20 July 2012)
- Ber. Patrik. Fogelholm, Mikael. Hiilloskorpi, Hannele. 2007. Liikkujan ravitsemus –teoriasta käytäntöön. Helsinki. Edita Publishing Oy.
- Czeisler. 2009. Armodafinil for Treatment of Excessive Sleepiness Associated With Shift Work Disorder: A Random Controlled Study. <http://www.sciencedirect.com/science/article/pii/S0025619611606666>. (Accessed July 2 2012)
- Drake. 2005. Shift work and sleep. The New England journal of Medicine. <http://www.nejm.org/doi/full/10.1056/nejmoa041292#t=article>. (Accessed July 3 2012)
- Fogelhol. 1999. Syö ja liiku mielelläsi. Helsinki. WSOY.
- Ihanainen, Lehto, Lehtovaara, Toponen. 2008. Ravitsemustieto osaksi ammattitaitoa. WSOY. Helsinki.
- Helbesleben. 2009. The influence of shift work on emotional exhaustion in firefighters: The role of work-family conflict and social support. <http://www.emeraldinsight.com/journals.htm?articleid=1796054&show=abstract>. (Accessed July 2 2012)
- Hirsijärvi, Remes, Sajavaara. 2009. Tutki ja kirjoita. Helsinki. Tammi.
- Luenda, Charles. 2007. A. Shift work and sleep: the Buffalo Police health study. <http://www.emeraldinsight.com>. (Accessed June 16 2012)

- Luenda, Charles. 2007. B. Obesity and sleep: the Buffalo Police health study. <http://www.emeraldinsight.com>. (Accessed June 16 2012)
- Persson, Mårtemsson. 2005. Situations influencing habits in diet and exercise among nurses working night shift. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2934.2006.00601.x/full>. (Accessed 20 May 2012)
- Reeves. 2004. The effect of shift-work on food and eating habits. <http://www.emeraldinsight.com/journals.htm?articleid=866248&show=abstract>. (Accessed June 16 2012)
- Vilka, 2007. Tutki ja mittaa. Jyväskylä. Gummerus.
- Westermarck. 2007. Vireyden lähde: vitamiinit, hivenaineet, luontaistuotteet. Klaukkala. Recallmed.
- Haskell, William, Lee, Russell. 2007. Physical Activity and Public Health. Stanford, CA. American College of Sports Medicine. United States.