

Czech University of Life Sciences Prague

Faculty of Business and Administration

Department of Psychology



Bachelor Thesis

Psychological impacts of working from home.

**Comparison of the psycho-emotional state of a group of tested subjects
when working at home and in the office.**

Oleg Zabolotskikh

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BACHELOR THESIS ASSIGNMENT

abs. v. š. Oleg Zabolotskikh

Thesis title

Psychological impacts of working from home.

Comparison of the psycho-emotional state of a group of tested subjects when working at home and in the office

Objectives of thesis

The bachelor's thesis seeks to examine how the psycho-emotional and social states of the same employees at the home office differ in comparison with working in the usual conditions in the office. That is, comparing the psycho-emotional state and working conditions before and after quarantine, and identifying the pros and cons according to employees. By analyzing the specific statistics obtained and comparing them before and after the pandemic.

Methodology

1. Creating a questionnaire on the basis of existing qualitative data
2. Construction of a research sample
3. Data collection
4. Data analysis, interpretation, discussion

The proposed extent of the thesis

30 – 60 pages

Keywords

Home office, professional activity, psycho-emotional state, social factors, workplace, employees

Recommended information sources:

- Amy Novotney: The risks of social isolation. Vol 50, No. 5, page 32. May 2019.
 - Angelina R Sutin, Yannick Stephan, Martina Luchetti, Antonio Terracciano: Loneliness and Risk of Dementia. The Journals of Gerontology: Series B, Volume 75, Issue 7, Pages 1414–1422, September 2020.
 - Barbara Hanratty: Loneliness linked with an increased risk of heart disease and stroke. 26 April 2016.
 - Chiara Ghislieri, Monica Molino, Valentina Dolce, Domenico Sanseverino, Michele Presutti: Work-family conflict during the Covid-19 pandemic: teleworking of administrative and technical staff in healthcare. An Italian study. 2021.
 - Corporate Strategy Research Team: COVID-19 Bulletin: Executive Pulse, 3 April 2020.
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Declaration

I declare that I have composed my bachelor thesis titled "Comparison of the psycho-emotional state of a group of tested subjects when working at home and in the office" by myself and I have only used the sources mentioned in the "references" section. As the author of the bachelor thesis, I declare that the thesis does not break the copyrights of any other person.

In Prague on 15.01.2022

Zabolotskikh Oleg

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Psychological impacts of working from home.

Comparison of the psycho-emotional state of a group of tested subjects when working at home and in the office.

Abstract

This thesis concerns the study of changes in the psycho-emotional state of the interviewed employees due to the forced transition to the home office. The survey will be used to analyze the psycho-emotional state of employees, their social and financial situation, aimed at finding shortcomings and difficulties of the forced transition to the home office.

The corresponding analysis and comparison of the results of 2 surveys will allow us to classify the main problems. If any obvious shortcomings are found, an alternative approach to the implementation of the labor process in quarantine conditions will be proposed. We will consider a comparison of the convenience of using two working formats: the usual office and the home office.

As a result of the study, a conclusion will be made about how to minimize psycho-emotional disorders caused by the forced transition to a home office and which people are suitable for working in self-isolation.

Keywords: home office, professional activity, psycho-emotional state, social factors, workplace, employees

Psychologické dopady práce z domova.

Srovnání psycho-emocionálního stavu skupiny subjektů při práci doma i v kanceláři.

Abstrakt

Tato diplomová práce se týká zkoumání změn psychoemotického stavu dotázaných pracovníků kvůli nucenému přechodu na Home Office. Prostřednictvím ankety se bude konat analýza emočního stavu zaměstnanců, jejich sociální a finanční situaci je zaměřena na hledání nedokonalostí a problémů nuceného přechodu na home office.

Odpovídající analýza a porovnání výsledků průzkumů umožní klasifikovat hlavní problémy. V případě zjištění jakýchkoli zjevných nedostatků bude nabízen alternativní přístup k provádění pracovního procesu v karanténních podmínkách. Bude se zabývat porovnáním použitelnosti dvou pracovních formátů-obvyklé kanceláře a domácí kanceláře.

Výsledek studie bude učiněn závěr o tom, jak minimalizovat psychoemoticky poruchy způsobené povinností přechodu na home office a jak se lidem opravdu vyhovuje práce v podmínkách self-izolace.

Keywords: home office, profesní činnost, psycho-emocionální stav, sociální faktory, pracoviště, zaměstnanci

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1 INTRODUCTION

"No man is an island in itself."

- John Donne (English poet)

1.1 PREFACE

This section covers theoretical data concerning various manifestations of psycho-emotional disorders in a home office environment. Currently, there are many resources related to this topic, so this section combines and examines various scientific concepts, research, definitions, and statistics.

At the beginning of 2020 countries, one by one, began to introduce a self-isolation regime to prevent the spread of a new covid-19 infection, COronaVIrus, - potentially severe acute respiratory infection caused by the coronavirus SARS-CoV-2 (2019-nCoV). Many businesses have adopted a work-from-home policy, while others have been forced to close due to a decline in consumer activity. Since then, the working conditions have changed a lot. Physical distancing measures have caused a profound shift in workplace relationships. The organization of any conferences and meetings involving the participation of a large number of people has become impossible, and our usual life has come to a complete pause.

Can video communication completely replace face-to-face physical contact, and not contribute to misunderstandings between colleagues, especially in the long term? What are the psychological consequences of long-term remote work? What can we do to prepare for them? During this thesis, I will try to find answers to all the above questions.

Currently, many studies are being conducted on people's reactions to self-isolation, one of them is a large international study conducted by a team of psychologists from 24 countries (corona PSI [online], 2020), however, it is still difficult to find completed studies on this topical topic.

1.2 MOTIVATION

I found it important and interesting to study the changes in the psycho-emotional state of employees before and after the forced transition to a home office, for the following reasons:

1. The topic is new, and I believe that this topic will remain a relevant topic for the next few years and will forever change our view of how working conditions affect our psycho-emotional state and our social life.
2. The mental and physical health of employees is directly related to the success of the company for which they work. Changes in the environment and working conditions cannot but affect the quality of the work performed.
3. Emotions also determine the quality of the work performed and the quality of life in general. The psycho-emotional state of a person cannot but influence creativity, the ability to assimilate new material, general well-being, social and communicative qualities, the quality of sleep and, in general, human health.

2 OBJECTIVES AND METHODOLOGY

2.1 OBJECTIVES

The main purpose of this thesis is to study how the psycho-emotional and social factors of the same employees in a home office differ from working in a normal office environment. That is, by comparing specific statistical data on the psycho-emotional state and working conditions before and after quarantine, to identify the pros and cons and suggest possible measures leading to the elimination of the identified problems.

This thesis explores different phenomenon connected to a democratic form of government, its mechanisms of empowerment and related political fields, by comparing different statistical data, or events related to the web-based distribution of democratic services. Then the document researches the current state of distribution of services in Czech governmental portal and seeks to find any possible defects as in its structure, as in ways of implementation of those services.

Then the document examines the current state of the spread and relevance of the problem of forced transition to the home office and seeks to find any possible disadvantages and effects of the home office on mental and physical health.

In addition, the study will allow us to conclude whether it is possible to improve working conditions and reduce their impact on mental and physical health to a minimum.

2.2 METHODOLOGY

The exact company will be found whose employees have had an experience with switching to a home office. The questionnaire method will be used for the survey, also statistical processing methods in SAS Studio and Microsoft Excel will be used for storing, comparing and analyzing obtained data.

The estimated sample size, that is, the expected number of respondents is 100-150. More than 100 people will be interviewed so that the statistics can be created.

Identify widely differing statistics and propose solutions to these problems to eliminate the most common difficulties in the opinion of the respondents of the forced transition to the home office due to the beginning of quarantine.

The data will be collected from 2 surveys: the first is directed to work from the office and the second directed to work from home. Then the results of 2 surveys will be compared and interpreted, answering the types of questions about the psycho-emotional state of employees, their social life, the relationship with the people they live with, the fulfilling work obligations, the efficiency of work, its quality, learning new programs and getting used to them.

Based on the results obtained, at the end of the work, the psycho-emotional state and changes in the social life will be evaluated and possible solutions leading to the correction of the identified shortcomings of forced transition to the home office due to the beginning of quarantine will be proposed.

3 THEORETICAL PART

3.1 PSYCHO-EMOTIONAL STATES

Psycho-emotional states are a special form of mental state of a person with a predominance of an emotional response of a person to some action, situation, or reaction of a person. Emotional states that arise in a person in the process of any activity also affect his mental state, his behavior in a particular situation, the way he responds and the general state of the body. An emotionally safe working environment should ensure that positive emotions are maximized, and negative ones are minimized.

And so, a new reality for people – the necessity of self-isolation for a long time, can lead to stress, based on the definition of this concept. Stress is defined as a state of tension and emotional disorder under special circumstances and in new conditions for a person. The first to introduce this term was the Canadian physiologist (Selye, 1936) when describing the syndrome of adaptation.

Based on the definition, we can conclude that the conditions of self-isolation are stress, since adaptation to new conditions, based on the definition, is a stressful situation. Moreover, the isolation of a person from society has always been considered a kind of punishment and was called exile or banishment.

Speaking more specifically about the problem of self-isolation due to a pandemic that negatively affects the human mentality and leads to stress: A group of scientists from Beijing found, using the example of the H1N1 virus, that quarantine is one of the factors for the development of acute stress disorder. (Wikipedia [online], 2021)

There are other studies whose results confirm the negative impact of self-isolation on the psycho-emotional state of people. In a research paper (Dagnino, Anguita Escobar, Cifuentes, 2020) on the topic "Psychological consequences of social isolation due to quarantine in Chile", it is stated that the most frequently reported feeling was anxiety, which was reported by 67% of people. Further, the second most frequently reported perceived impact was anxiety. The feeling of loss of control was the least noticeable felt impact, which was reported by only 9.5% of the survey participants. Thus, we see that the quarantine has had a strong impact on factors that in the future can lead to an increased level of anxiety, insomnia and emotional instability, psychosomatic manifestations, and depression.

The figure shows the percentage of data on various perceived psychological effects reported by the study participants:

	Does not report		Reports	
	f	%	f	%
Current impact				
Fear	2,648	67.6	1,271	32.4
Concern	1,288	32.9	2,631	67.1
Frustration	2,898	73.9	1,021	26.1
Boredom	2,556	65.2	1,363	34.8
Anxiety	1,556	39.7	2,363	60.3
Distress	2,324	59.3	1,595	40.7
Feeling trapped	2,991	76.3	928	23.7
Loss of control	3,546	90.5	373	9.5
Loneliness	3,283	83.8	636	16.2
Sleep problems	2,329	59.4	1,590	40.6
Inability to relax	2,962	75.6	957	24.4
Loss of freedom	2,716	69.3	1,203	30.7
Lack of concentration	2,476	63.2	1,443	36.8
Irritability	2,370	60.5	1,549	39.5
Restlessness	2,281	58.2	1,638	41.8
Future concern				
Employment	1,837	46.9	2,082	53.1
School	3,365	85.9	554	14.1
Financial issues	1,966	50.2	1,953	49.8
Policy	2,437	62.2	1,482	37.8
Mental health	2,654	67.7	1,265	32.3
Stigma	3,860	98.5	59	1.5
Overall health	1,751	44.7	2,168	55.3

Figure 1: Psychological Effects of Social Isolation Due to Quarantine in Chile

3.2 THE CONCEPT OF A HOME OFFICE

A home office is a space designated in a person's residence (home/flat) for official business purposes. Also, the Home office implies a format of work outside the usual office, in which the bosses and all subordinates are physically located in different places. The key difference between distant work and work in traditional conditions in the office is the separation of employees.

The home office, in turn, can affect the psycho-emotional state of employees. For such a format of work, strict self-discipline is necessary, and the result directly depends on the independence and consciousness of each individual employee. This requires significant self-control, including the ability to control your emotional state. Unfortunately, it is quite difficult to fit all the above qualities into yourself. Therefore, to feel comfortable in the new working conditions, most employees will have to carry out serious disciplinary and psychological work on themselves.

Thus, as the global self-isolation regime came into force, most companies were forced to transfer their employees to the home office and continue working remotely.

Moreover, according to a (Corporate Strategy Research Team, 2020) Gartner survey, the results of which were published in early April 2020, 74% of companies plan to permanently leave some of the employees transferred to this format of work due to the coronavirus pandemic. According to the survey, 27% of companies plan to keep 5% of the staff transferred to it on "remote". In 4% of the surveyed organizations, they said that half of the employees who were transferred to this format forcibly will continue to work in the remote format, and in another 2% they plan to leave more than half of the transferred employees at the home office after the end of the pandemic.

74% of Companies Plan to Permanently Shift To More Remote Work Post COVID

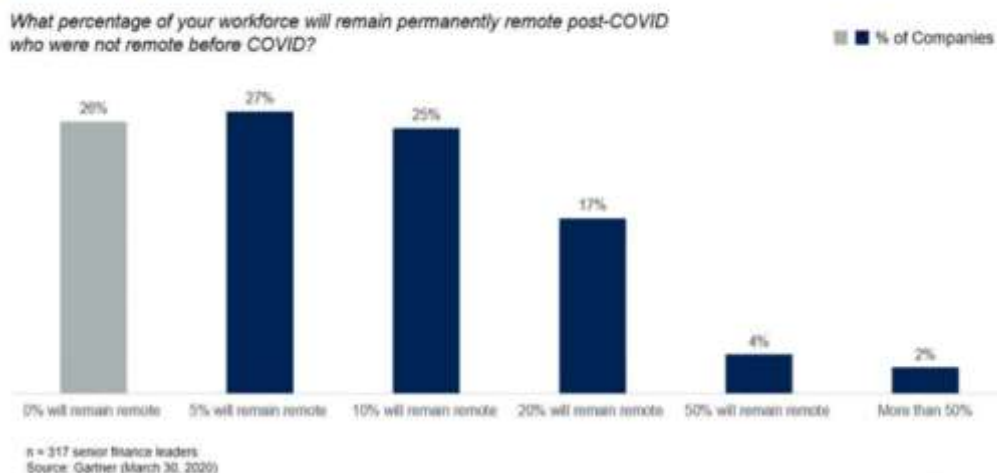


Figure 2. Gartner: COVID-19 Bulletin: Executive Pulse, 3 April 2020

The emergence of new technologies has revolutionized the workflow, allowing many employees to unite and work from anywhere. The concept of remote work has existed since the 1970s at that time, it existed on a smaller scale than it is now, during the pandemic.

The wide availability of technologies has made it possible to determine the location and terms of work with considerable flexibility, which gives advantages to both employers and employees. However, today there is no generally accepted definition of remote work.

The International Labour Organization (ILO) defines remote work as the use of information and communication technologies (ICTs), including smartphones, tablets, laptops, or desktop computers, for work performed outside the familiar office.

There is a concern that due to the lack of physical and organizational boundaries between work and home, can negatively affect a person's mental and physical health due to the lack or unclear distinction between work and home, as well as limited support from organizations.

Many of the millions of workers who now must work from home for endless months because of the COVID-19 pandemic may disagree. In fact, those who are unable to cope with the shocks caused by the virus in their lives may experience stress, loneliness, exhaustion and, possibly, depression - symptoms of what psychiatrists and psychologists sometimes call "home office syndrome".

Home office syndrome creates significant stress and anxiety due to the blurring of the boundaries between work and family life. A remote worker most often never really works and never really relaxes. He always divides his time between a work task that must be completed, frequent breaks from his partner and children, a dog that needs a walk, and household duties.

The unique problems of social isolation created by the current viral pandemic are added to the stress of the home office syndrome, including:

a) General uncertainty about the final impact of the pandemic on the health of a person and their loved ones, income and short-and long-term plans.

b) The feeling of loneliness caused by forced isolation, and the loss of social connection with colleagues in the office or with friends and other family members. People feel lonelier without the necessary support. A sudden lack of physical connection can lead to employees feeling that they have nowhere to turn when they are stressed or anxious. Thus, it becomes increasingly difficult to form a strong support network, which is very important for good mental health.

c) The line between work and family life is blurred for people who work in the same place where they sleep. The problem is that you can feel the pressure when you need to be turned on.

d) There is a new trend of holding virtual meetings, which would be impossible in a physical office. This problem concerns large video conferences when the speaker does not see individual faces. In a physical office, we can catch the reaction of employees. But in the conditions of video communication, this is impossible, and it can become a big problem for the leader. This can provoke a sudden increase in the psychological and emotional load on the employee.

Many are teleworking full-time for the first time, isolated from co-workers, friends and family. Our daily living routines are disrupted causing added strain—physically, mentally, and financially. It is completely natural for this disruption and uncertainty to lead to anxiety and stress.

So, based on the study *The Psychological impact of teleworking* (Holdsworth, Mann, 2003), which examines the psychological impact of teleworking compared to office work, it is possible to identify several main advantages and disadvantages of switching to a remote mode of work.

Advantages. Most of them refer to practical benefits and include:

a) The opportunity to create an individual balance of home and work for yourself. The time that employees would spend, for example, on the way to the office, they can spend on family, household duties or on themselves. (Holdsworth, Mann, 2003)

b) Increased flexibility. Employees can often (but not always) choose the hours of work, that is, they simply work at the time when it is most suitable for them or when they are more productive.

c) Reduced commuting. Reducing the number of trips to work has a potentially positive effect on the financial factor and reduces the likelihood of stress.

d) Reduction of the employer's overhead costs. For example, in a home office environment, there is no need to rent office space, pay for business trips and there are no overhead costs, such as office utilities, electricity and replacement of damaged equipment with a new one.

e) Increased skill base for the employer. Organizations that use remote work schemes can take advantage of the online labor market, where you can find a qualified employee who will not necessarily work full-time. It also gives an opportunity to get a job for disabled people and people caring for children (maternity leave). (Holdsworth, Mann, 2003)

f) Higher productivity. According to (Montreuil Lippel, 2003), in the conditions of temporary work at home, there is an increased productivity among remote workers compared to other workers. This is due to fewer breaks, longer working hours and flexibility in planning the work schedule. Moreover, when a person voluntarily chooses remote work, he tends to be more motivated to prove that this alternative way of working is suitable for him.

Disadvantages. Several problems associated with remote work include:

a) Social isolation is the most frequently mentioned disadvantage of remote work.

b) Presenteeism is not only overtime work, but also work during illness. While this may be something that managers will consider an advantage, it is clearly not in the employee's best interest to work through illness or not take enough time to recover properly when tired. This problem of "presentism", when people feel unable to take sick leave, is, of course, a prevailing problem for all workers in the modern world. Moreover, no one can see how sick they are and advise them to take a sick leave. Many workers can also continue to work even when they are ill, which can quickly lead to burnout. It is likely that when people work in a state of illness, the quality of work also suffers. (Holdsworth, Mann, 2003)

c) Lack of support. Technical support issues are of serious concern to remote workers. It is quite difficult to provide the necessary level of technical support for personal computers and other equipment in conditions when all employees are located in different places. For many people, an electrical breakdown is more catastrophic in a home office environment. (Holdsworth, Mann, 2003)

d) Career growth. Live observation and communication related to work processes are key factors for career growth. This has long been recognized as a problem for homeworkers.

e) People are social beings. Many people have big problems with isolation. The best results are obtained by live interaction between people. Feedback about our actions is necessary in the conditions of long-term work on the remote site. The lack of such feedback can cause fatigue and dissatisfaction. (Holdsworth, Mann, 2003)

Thus, we see that negative and positive emotions flow from work into family life, and they cannot but influence it. Studies of traditional workers have shown problems of conflict between work and family, which arise due to the juggling of the roles of an employee and a parent. The conflict between work and family is a cause of stress and is associated with negative consequences such as mental and physical ill health.

3.3 WORK-FAMILY CONFLICT (WFC)

In the research (Ghislieri, Molino, Dolce, Sanseverino, Presutti, 2021) on the topic "Work-family conflict during the Covid-19 pandemic in healthcare", the home environment was studied as an intermediary between Working At Home (WAH) and health-related outcomes. A work-family conflict occurs when work requirements conflict with home and family obligations. A study of employees of computer companies who were WAH for a longer period than in the office revealed a high level of exhaustion combined with a high level of WFC. When the WFC was low, the same employees experienced a low level of exhaustion significantly less often, compared to those who worked with WAH.

The conflict between work and family (WFC) remains a central theme due to the difficulties in separating different spheres of life, the ubiquity of technology and the reduction of opportunities for recovery.

Multiple regression analysis showed a positive relationship between WFC and perceived stress from ICT, non-technology assisted job demands and cognitive requirements, as well as a negative relationship with recovery.

The results confirm the role of cognitive requirements, technological overload and invasiveness as factors potentially leading to WFC. The results also indicate the possibility of a relatively quick recovery, even despite the long and forced experience of remote work.

Thus, I conclude that the conflict between work and family and the quality of work performed are interrelated concepts. And I suppose that this factor will be one of the most strongly influencing the workflow.

3.4 THE SOCIAL ISOLATION AND THE PHENOMENON OF LONELINESS

Since the world took unprecedented security measures during the COVID-19 pandemic, physical distancing has become a crucial factor in slowing the spread of infection.

Although our need for communication is innate, many of us often feel lonely. Even people who are surrounded by other people during the day or are in a long-term relationship, marriage, can still experience a deep sense of loneliness.

Loneliness can be described in many ways. The UCLA Loneliness Scale is the most widely used method for diagnosing a person's subjective feeling of loneliness and social isolation. It is commonly used to measure loneliness, asks people questions about a number of feelings or a lack of connection, including how often they:

- a) they feel that they lack communication ;
- b) they feel deprived ;
- c) feel "in harmony" with the people around them ;
- d) feel sociable and friendly ;
- e) I feel that there are people to whom they can turn.

Also, when checking various versions of the loneliness scale, self-esteem indices were used, directly asking about loneliness.

Working at home implies social isolation and loneliness, so let's consider these 2 concepts in more detail, because it is directly related to working in a home office. It also directly contributes to the occurrence and aggravation of psycho-emotional disorders.

When studying the causes and consequences of isolation, experts distinguish between social isolation and loneliness:

Social isolation - is the objective absence of social relations or the rarity of social contacts.

Loneliness - is a subjective feeling of isolation.

A person can be socially isolated, but not feel lonely. Also, a person can feel lonely surrounded by people.

Nevertheless, isolation and loneliness are largely connected. Research on the causes, symptoms and effects of loneliness helps to identify the potential negative consequences of social isolation.

Isolation in social psychology involves a forced long-term stay of a person in a limited social and communicative space or even the absence of social contacts. After long social isolation, it may be difficult for employees to join the team again, which will cause additional stress.

Perhaps the employee will stop showing communicative qualities, such as sociability, adaptation, perseverance, self-confidence, resistance to stress, readiness for communicative interaction and teamwork, responsibility. This may prevent the employee from adequately perceiving the socio-psychological reality, effectively interacting with others, and being an active participant in the workflow.

According to the national survey (CIGNA U.S. LONELINESS INDEX, 2018), 9,000 out of 20,000 adults in the United States report that they sometimes or always feel lonely. 43 percent of the survey participants also reported that they sometimes or always feel that their relationship does not make sense and that they feel isolated, which, in turn, is a sign of depression and other disorders. Such numbers are alarming because of the health and mental health risks associated with loneliness.

Loneliness is an experience that each of us faces from time to time. It can occur during life transitions, such as the death of a loved one, divorce or moving to a new place. This type of loneliness is called reactive loneliness.

However, when the experience of loneliness becomes chronic, for example with the current mode of social distancing, it can harm mental and physical health. After all, in a home office environment, there may be a shortage of live communication, which can lead to psycho-emotional disorders and social problems.

In my thesis, I focused on the feeling of loneliness as a result of self-isolation, so I did not strongly distinguish between these 2 concepts.

The phenomenon that influenced my preliminary opinion is the phenomenon of loneliness. Loneliness - is a subjective phenomenon generated exclusively by the individual's consciousness and experienced by him in the form of a negative psycho-emotional state. The phenomenon of loneliness is quite well studied and has always implied a negative impact on the psycho-emotional state of a person.

1. Loneliness as a specific experience of an individual is studied from a psychological point of view in the works of R. Weiss, K. Horney, D. Meyers, S. Freud, K. Jung and others.
2. Based on the analysis of empirical data, the phenomenon of loneliness is described in the works of D. Russell, K. Rogers, J. Young and others.
3. Through the prism of social processes, loneliness is understood by K. Bowman, E. Durkheim, R. Merton, A. Maslow, D. Risman, A.D. Elyakov, A. Camus, J. Lipovetsky, E. Fromm.

Loneliness, a sense of rejection affects health in the same way as stress, overweight, high blood pressure or nicotine and alcohol consumption. And the advanced stages of loneliness lead people to severe psychological states, after which it is difficult for people to recover and return to their former life.

According to a meta-analysis (Holt-Lunstad, 2015) conducted in collaboration with professor of psychology and neuroscience, lack of social connections increases health risks in the same way as smoking 15 cigarettes a day or an alcohol-related disorder. She also found that loneliness and social isolation are twice as dangerous for physical and mental health as obesity. (Perspectives on Psychological Science, 2015).

Social isolation usually refers to privacy. Socially isolated people may miss friends or close employees, and they often feel lonely or depressed. They may suffer from low self-esteem or anxiety.

Social isolation can include emotional isolation - unwillingness or inability to share your feelings with others. When socially isolated people lack emotional interaction and support, they can become emotionally numb - disconnected from their own feelings.

Socially isolated people lack emotional interaction and support. At work at a remote location, where all employees are not in the same office and cannot discuss every little thing live, there is a lack of discussion of work processes, respectively, the quality of work and teamwork suffers.

There is strong evidence that social isolation and loneliness significantly increase the risk of premature mortality, and the risk scale exceeds many leading health indicators.

The adverse health effects of social isolation range from insomnia to decreased immune function. Loneliness is associated with higher levels of anxiety, depression, and suicide. Isolation and loneliness are also associated with poor cardiovascular health and cognitive functions, which is described in the following scientific papers (National Academies of Sciences, Engineering, and Medicine, 2020):

a) A study conducted by an epidemiologist from the University of Newcastle (Hanratty, 2016) found that deficiencies in social relationships are associated with a higher risk of coronary heart disease and stroke. Coronary heart disease (CHD) is a disease caused by an insufficient supply of oxygen and nutrients to the heart (myocardium).

b) A study published in *The Journals of Gerontology* (Sutin, Stephan, Luchetti, Terracciano, Volume 75, Pages 1414–1422, 2020) concluded that loneliness is associated with a 40 percent increase in the risk of dementia. Dementia - is a syndrome, usually chronic or progressive, in which there is a degradation of cognitive function - the ability to think - faster than expected with normal aging, for example. Dementia does not affect consciousness. A violation of cognitive function often leads to a deterioration of control over the emotional state, as well

as to the degradation of social behavior or motivation. There is a degradation of memory, thinking, understanding, eloquence and the ability to navigate in space, count, learn and reason.

c) A study published in the American Journal of Epidemiology (Novotney, No. 5, page 32, 2019) links social isolation with a higher risk of premature mortality. The Centers for Disease Control and Prevention (CDC) points to loneliness and isolation as serious risks to public health.

3.5 THE CONNECTION BETWEEN LONELINESS AND TECHNOLOGY.

Speaking about the current forced work at home, many struggled with the sudden need to adapt to housework and change their daily habits and daily routine.

The personal characteristics available for this vary. One person finds it easy; another person develops adaptation disorders. These include sleep disorders and loss of concentration, and, moreover, they can occur with a time delay. All this can lead to burnout or even a change in personality.

The complexity of the work, the independence and responsibility of the management-all this can affect the well-being and job satisfaction of home office workers. Not all employees are motivated, own the latest IT technologies and gadgets, and like to work alone. In addition, employees are now responsible for the entire structure of their working day and for the work processes that were previously compiled together with colleagues.

All flexible work models, including the home office, require a high degree of digitalization. Many companies have implemented flexible work, completely unprepared due to the sudden onset of the pandemic, with an emphasis on technical implementation, data security and IT. Accelerated digitalization, in turn, can also lead to an increase in the psychological burden on employees.

According to the research by the University of St. Gallen, (Beam, 2017), digitalization increases emotional exhaustion by about 15%. Therefore, a high-quality relationship between an employee and a manager is important since they can reduce emotional exhaustion by up to 11%.

For example, one study involving almost 600 elderly people, (Chopik 2016) conducted by a psychologist from the University of Michigan, William Chopik, PhD, showed that the use of social technologies, including email, Facebook, online video services such as Skype and other applications, was associated with a lower level of loneliness.

However, another study conducted among young people aged 18 to 22 years gives a completely different result. According to a study (Hunt, Marx, Lipson, Young 2018) conducted by Melissa Hunt, a psychologist at the University of Pennsylvania, reducing the time spent on social networks can reduce the feeling of loneliness.

From which we can conclude that technologies are changing the way we interact in society. The difference in the effects of using these technologies depends on how often and for what purposes these technologies are used. Those who replace real relationships and communication with online relationships and communication experience a feeling of loneliness much more often than people who use online interactions to complement their personal relationships.

But for older people who use video calls to talk to their grandchildren living on the other side of the country, for example, technology can really save them from feeling lonely.

Many people believe that working from home makes it easier to concentrate, saves time on commuting to work and offers a quiet place to work. At home, we organize our daily routine and can choose for ourselves when to work and when to rest.

The experience of working at home is unique for each person and is determined by factors that do not play a special role in the business environment of the office. such as:

- a) Availability of space for a fixed workplace or a computer workstation.
- b) Whether a person lives with children, older relatives, or active pets.

For example: Theoretically, working from home provides opportunities for a healthy diet and more exercise. However, until now, more and more people tend to eat unhealthy food, exercise less and gain weight, which causes less satisfaction and well-being. Thus, freedom in making a daily routine can negatively affect the speed and quality of the work performed, as well as due to possible stimuli, the degree of involvement in the work may decrease.

This shows how important it is to continue research on the topic of «psychological impacts of working from home» and prepare people for flexible work in the long term. People need the ability to self-organize and self-regulate, and their employer should support them as they introduce a remote mode of work. The same applies to organizational conditions, such as the workplace and technical equipment in the home office.

Apparently remote work without regular meetings and social interaction can be suitable only for a small part of the workforce. For the company to work successfully and continue to maintain an optimal work rate, it is too important to use the power of our social instincts.

4 PRACTICAL PART

4.1 PURPOSE

We Humans are social beings, and we need live communication with other people, so the negative consequences of self-isolation are obvious to me. It is interesting to study exactly how this can affect the mental health of employees, the situation within the team and the workflow itself and the quality of work. As well as how self-isolation can affect their social and personal life.

It is no secret that with the beginning of quarantine, people have become more concerned about their mental health. For example, during the period of self-isolation, the demand for the services of psychotherapists, psychologists, including family psychologists, increased almost 2 times. The demand for these specialists has increased by 42%. Moreover, the percentage of men using the services of a psychologist increased by 28%. Members of psychological communities predict that after the end of the epidemic, the number of referrals to psychologists will grow even more, since the circumstances in which we are now caught — the real threat of the virus, lack of control, uncertainty, social isolation, changes in the usual rhythm of life — all this creates ideal conditions for the development and strengthening of anxiety and depression. It may also become a catalyst for mental disorders already existing in people.

Of course, not everyone will have psycho-emotional disorders when faced with such serious changes. It depends on many factors: character traits, psycho-emotional status, financial well-being, social support, etc. Some factors play against a person- we call them «risk factors». For example, the presence of a history of anxiety disorder or depression in a particular person increases the risk that during self-isolation, he will have exacerbations. Other factors, on the contrary, protect - we call them protective factors. For example, an introverted programmer who has already worked from home may practically not notice significant

changes in his lifestyle and psychological state in connection with the pandemic.

In connection with the above, the study of the psycho-emotional state of employees working at home, in comparison with work in a familiar office, and the identification of factors that negatively affect their psycho-emotional state is relevant.

4.2 SURVEY CONDITIONS

A company (or several) will be found whose employees have had experience of switching from usual office to home office environment.

A specially designed list of questions in the form of questionnaires will be used as a means for collecting data from the respondent:

1) The Spielberg-Hanin Scale of Anxiety and Depression (STAI). This questionnaire will be filled out twice: once in the conditions of a familiar office, and the second time in the conditions of working at home.

2) The second specially developed questionnaire aimed at studying the factors that could affect the psycho-emotional state of employees in the home office. It will include questions such as: family composition, economic, household problems, data regarding leisure time, quality of work, quality of sleep, the amount of time spent working at a computer, social life, relationships with people with whom they live. As well as questions about the difficulties in learning new programs, the effectiveness of new ways of communication and getting used to them. At the same time, this Questionnaire, aimed at studying the psycho-emotional state of employees, will include the following questions:

1. Identification of negative and positive emotions:

Positive: joy, satisfaction, interest, acceptance, pleasure, serenity.

Negative: sadness, anxiety, fear, alertness, discontent, disappointment.

2. The study of intellectual well-being, that is: the ability of a person to assimilate and use new information for optimal actions in new circumstances.

3. The study of mental well-being, that is: the ability of a person to determine meaningful, constructive life goals and strive for them, optimism.

(See all the questionnaires in the section Appendix)

Then the results of the 2 surveys will be compared and interpreted using statistical processing methods in Statistika 13 and Microsoft Excel programs. I will also use Microsoft Excel to store, compare and analyze data from surveys. For the interpretation of the processed data, for visualization, graphs and figures will be used.

Statistical analysis was carried out using Microsoft Excel software package for Windows 10 and Statistics 13. The McNemar criterion was applied, the data were compared using the criterion χ^2 . Pearson. The values of $\chi^2 > 3.845$ ($p < 0.05$) were assumed as reliable.

The estimated sample size, that is, the expected number of respondents, is 100-150.

Based on the results obtained, at the end of the work, an assessment of changes in the psycho-emotional state will be carried out, as well as an assessment of changes in social life, and possible solutions will be proposed leading to correcting the identified shortcomings of the forced transition to the home office due to the beginning of quarantine.

As I indicated above, the questionnaire method that will be used for the survey is a psychological verbal-communicative method. The method is anonymous - the respondent's identity is not recorded, only answers are recorded. Questionnaires and questionnaires will be available in online and offline modes (by offline mode, I mean sending out forms to fill out by mail directly to the office or any other workplace/address).

I chose this method for the survey because it will minimize contact with the respondent during the survey and save a lot of time, unlike interviewing, for example. Also, this method will allow you to follow the planned research plan most accurately, since the "question-answer" procedure is strictly regulated. With the help of the questionnaire method, it is possible to obtain a high level of mass research at the lowest cost. The survey will allow you to collect the opinion of a large number of people and do it in a short time.

4.3 STRUCTURE OF QUESTIONNAIRES

- 1) The first one is an example of a specially developed social questionnaire.
- 2) The second one is a The Spielberg-Hanin Scale of Anxiety and Depression (STAI).

Both surveys will be filled out twice - the first time the questions will relate to working in a familiar office (about the past). And the second time the questions will relate to working on a remote mode (about the present).

In the course of this study, the psycho-emotional state of employees when working at home and in the office was compared.

Thus, I'm going to find the answer to the question - are there any differences in the psycho-emotional state of employees before and after the transition from a regular office to a home office?

The data was collected by means of a questionnaire on the Spielberger–Hanin Anxiety Scale (STAI - State-Trait Anxiety Inventory), as well as on a social questionnaire compiled by me.

In the period from 15/11/2021 to 15/02/2022, 88 employees from 4 offices were interviewed with survey, as well as 22 volunteers who also had experience with switching to a home office due to the entry into force of restrictive measures in connection with the pandemic.

A total of 110 people were interviewed - 48 men and 62 women.

5 Hypotheses and Testing

5.1 STAI

The assessment was conducted without the use of statistical apparatus, based on numerical values of proportions.

On the basis of the STAI scale scores, people were put into appropriate categories according to their level of stress.

Then, based on this data, the proportions of people in the different categories were calculated according to gender and age. And then the numerical values were compared without the use of statistical tools.

For a detailed description of the results, see the section Results and discussion.

- 1) Level of personal anxiety in points in the Spielberger-Hanin Self-assessment and Anxiety Assessment Scale (STAI), depending on age and gender

Category	Usual Office			Home office		
	Low Level	Average Level	High Level	Low level	Average Level	High Level
Respondents aged 19-28	27,8	39,3	51,5	–	40,8	50,7
Respondents aged over 29	27,4	38,9	52,6	–	40,3	50,5
Men	26,7	38,8	51,4	–	40,2	49
Women	27,9	39,2	52,6	–	40,8	51,3

Figure 3 Level of personal anxiety (STAI) in points, depending on age and gender

- 2) The level of the STAI alert in points, depending on age and gender

Category	Usual Office			Home office		
	Low Level	Average Level	High Level	Low level	Average Level	High Level
Respondents aged 19-28	19,6	34,3	46	18,2	35,8	55,5
Respondents aged over 29	19,6	36	49	17,7	35,9	52,2
Men	19,3	34,3	52	16,9	34,5	–
Women	19,8	35,9	48,3	18,7	36,3	53,1

Figure 4 The level of the STAI alert in points, depending on age and gender

5.2 Social survey

In the course of this study:

- 1) the time spend by employees in front of the computer screen, when working at home and in the usual office was compared;
- 2) night sleep duration of employees when working at home and in the usual office was compared;
- 3) The time spent outdoors when working at home and in the usual office was compared.

Thus, I'm going to find the answer to the questions –

- 1) Is there any difference in proportions of employees with the different periods of time spend in front of the computer screen before and after the transition from a usual office to a home office? More specifically, we will be comparing the following categories: 1-3 hours, 3-6 hours, 6-9 hours and more than 9 hours a day.
- 2) Is there any difference in proportions of employees with the different periods of night sleep before and after the transition from a usual office to a home office? More specifically, we will be comparing the following categories: less than 6 hours, 6-8 hours, 8-10 hours, more than 10 hours.

3) Is there any difference in proportions of employees with the different periods of the time spent outdoors before and after the transition from a usual office to a home office? More specifically, we will be comparing the following categories: less than 1 hour a day, 1-3 hours a day, more than 3 hours a day, not every day.

So that is how we choose McNemar's test. Which can be used on paired nominal data as we got in this study. This test is appropriate for my study, because we are comparing the performance of the same group before and after the influence of the factor under study. In our case, the factor is transition to the home office.

Well, we have three questions with four categories in each. Further, in order to calculate the difference in proportions, 12 hypotheses were made, one hypothesis for each category. As an illustrative example 3 different hypotheses were presented: one for each of the questions. Results with $\chi^2 > 3.84$ were considered statistically significant (it is a critical value for significance level $\alpha = 0.05$).

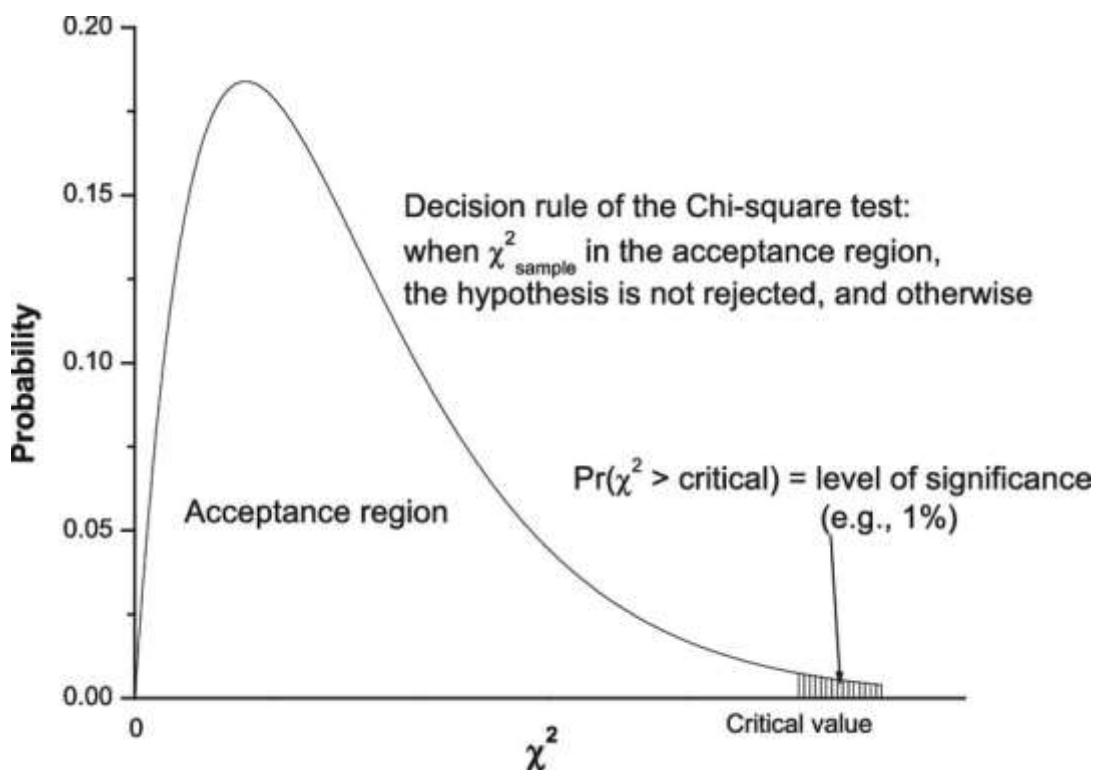


Figure 5 Schematic diagram showing the essence of the chi-square test

The following hypotheses were formulated for social survey, where:

- a) p – specified proportion
- b) index u – usual office
- c) index h – home office

$$\chi^2 = \frac{(b - c)^2}{b + c}$$

Figure 6 The McNemar test statistic

This test statistics follows χ^2 distribution with 1 degree of freedom.

H0: $p_u = p_h$ (there is no difference in proportions of people with 3-6 hours spend in front of the computer screen daily)	H0: $p_u = p_h$ (there is no difference in proportions of people with 8-10 hours of night sleep)	H0: $p_u = p_h$ (there is no difference in proportions of people with 1-3 hours of time spend outdoors)
H1: $p_u \neq p_h$ (there is a difference in proportions of people with 3-6 hours spend in front of the computer screen daily)	H1: $p_u \neq p_h$ (there is a difference in proportions of people with 8-10 hours of night sleep)	H1: $p_u \neq p_h$ (there is a difference in proportions of people with 1-3 hours of time spend outdoors)
$\alpha = 0,05$	$\alpha = 0,05$	$\alpha = 0,05$
$\chi^2 = 5,08$	$\chi^2 = 4,64$	$\chi^2 = 4,13$
Verdict: reject H0; there is a difference in proportions of people with 3-6 hours spend in front of the computer screen daily.	Verdict: reject H0; there is a difference in proportions of people with 8-10 hours of night sleep	Verdict: reject H0; there is a difference in proportions of people with 1-3 hours of time spend outdoors

In the other categories, an identical statistical framework was used. A more detailed result summary will be available in the Results and discussion section.

6 RESULTS AND DISCUSSION

6.1 STAI

The STAI (State-Trait Anxiety Inventory) measures two types of anxiety – **state anxiety**, or anxiety about an event, and **trait anxiety**, or anxiety level as a personal characteristic. Higher scores are positively correlated with higher levels of anxiety.

State anxiety (S-anxiety) can be defined as fear, nervousness, discomfort, etc. It is considered temporary and refers more to how a person is feeling at the time of a perceived threat.

Trait anxiety (T-anxiety) can be defined as feelings of stress, worry, discomfort, etc. That one experiences on a day-to-day basis.

6.2 USUAL OFFICE (STAI)

Most respondents had a low level of state anxiety while working in the office (83.9% of respondents). Moderate state anxiety was detected in 14.9% of respondents, a high level of state anxiety - in 1.2% of respondents. The level of state anxiety did not depend on gender or age.

The level of trait anxiety also practically did not depend on gender, age and field of activity. At the same time, the majority of employees revealed moderate trait anxiety – 59.0%. A high level of trait anxiety was detected in 33.3%, a low level of trait anxiety - in 7.7%.

The level of state anxiety among respondents of different age groups did not significantly differ: 87.8% of respondents aged 19-28 and 82.7% of respondents aged over 29 had a low level of state anxiety, 11.8% of respondents aged 19-28 and 15.7% of respondents aged over 29 had a moderate level of state anxiety. 0.4% of respondents aged 19-28 and 1.6% over the age of 29 had a high level of state anxiety.

The level of trait anxiety also literally did not differ in the two age groups, meanwhile a larger number of respondents had a moderate level of trait anxiety – 62.4% of respondents aged 19-28 and 58.2% of older employees. A high level of trait anxiety was detected in 32.6% of younger respondents and 34.0% of older respondents. A low level of trait anxiety was detected in 5.0% of younger respondents and in 7.7% of older employees.

Low-level state anxiety was detected in 80.1% of women and 90.9% of men, an average level of state anxiety in 18.1% of women and 8.8% of men, a high level of state anxiety in 1.8% of women and 0.3% of men, respectively. Moderate trait anxiety was detected in 51.7% of women and 71.3% of men, high in 40.6% and 23.3%, low in 7.75% and 5.4%, respectively.

6.3 HOME OFFICE (STAI)

A low level of state anxiety was detected in 86.0% of respondents. Moderate state anxiety was detected in 13.0% of respondents, a high level of state anxiety - in 1.0%. The level of trait anxiety also practically did not differ on gender, age and type of activity, while the majority of respondents revealed moderate trait anxiety - 59.0%. A high level of trait anxiety was detected in 41.0%. A low level of trait anxiety was not detected.

The level of state anxiety among workers of different age groups did not significantly differ – 83.0% of younger respondents (under 26) and 84.0% of older respondents (over 26) had a low level of state anxiety. 15.0% of younger employees and 14.0% of older employees had a moderate level of state anxiety, and 1.0% of younger employees and 1.0% of older employees had a high level of state anxiety. A moderate level of trait anxiety was observed in 55.0% of younger employees and in 61.0% of older employees; a high level of trait anxiety was detected in 45.0% of younger respondents and 39.0% of older employees. Low level of trait anxiety was not detected.

Low-level state anxiety was detected in 79.0% of women and in 92.0% of men, the average level of state anxiety in 19.0% and 8.0% and a high level of state anxiety in 2.0% and 0%, respectively. Moderate trait anxiety was detected in 53.0% of women and 67.0% of men, high - in 47.0% and 33.0%, respectively.

I think it is possible to draw intermediate conclusions here. Both during the period of work in the office (before quarantine) and during remote work, all respondents revealed a predominantly moderate and high level of personal anxiety, which indicates a tendency to perceive most situations as threatening and, with insufficient self-confidence, respond to such situations with a state of psychological stress.

At the same time, during the period of work at home, employees were not in a stressful situation since the level of reactive anxiety was low. The level of anxiety practically does not depend on the type of activity, gender or age, but moderate personal anxiety prevailed among men, high - among women, both in the period before quarantine and during remote work. Thus, women may be more sensitive in terms of psycho-emotional disorders in stressful situations compared to male employees.

I have conducted a study of the psycho-emotional state of office workers while working from the usual office and when working at home. One of the variants of psycho-emotional disorders is anxiety, which is defined as an individual psychological feature that manifests itself in a person's tendency to often experience strong anxiety for relatively unimportant reasons, associated with weakness of nervous processes or being a feature of temperament.

6.4 SOCIAL SURVEY

According to the results of the survey analysis, when working in the office, no significant differences were found in relation to the type of activity – the majority revealed the highest indicator - 63%. The average indicator was found in 34%, low in 3%. This indicator reflects the subjective feeling of well-being and quality of life of the respondents.

Also, in order to identify changes in social and psychological factors, a social questionnaire created by me was introduced.

88 employees from 4 offices took part in this survey, as well as 22 volunteers who also had experience with the transition to a home office.

A total of 110 people were participated - 48 men and 62 women.

I think it is important to pay attention to some of the results of the survey on the social questionnaire:

1) During remote work, the time spent by employees in front of the computer screen increased, and employees also needed more time to concentrate on work. This means that for some of employees it is difficult to distinguish between work and personal life.

Thus, the share of employees with a duration of 3-6 hours in front of the computer screen increased from 23% before quarantine to 44.6% ($p < 0.05$). The share of employees with a duration of 6-9 hours at the computer increased from 0.7% before quarantine to 23.7% ($p < 0.05$) at work at home and more than 9 hours - from 0% to 21.6%, respectively ($p < 0.05$).

2) There is a statistically significant decrease in the proportion of employees with a night sleep duration of less than 6 hours (61.9% and 43.9%, respectively ($p < 0.05$)) and an increase in the proportion of employees with a sleep duration of 8-10 hours (29.5% before quarantine and 45.3% ($p < 0.05$) – working at home).

3) The time spent outdoors also decreased – the proportion of employees at the time interval "1-3 hours a day" statistically significantly decreased by 13.7% ($p < 0.05$) during quarantine, but statistically significantly increased at the time interval "not every day" by 12.9% ($p < 0.05$).

Thus, while working at home, the time spent by employees at the computer increased, the respondents spent less time outdoors, but at the same time there is more opportunity to rest – the duration of night sleep increased.

At the home office, employees can independently determine the sequence of actions, work in a comfortable place, at an individual speed, and in some cases at a suitable time.

At the same time, remote work requires strict self-discipline of each individual employee, and his result directly depends on his independence and interest in the overall success.

Most authors note low emotional stress and minimal stressful situations as the advantages of a home office. The results I have obtained are consistent with these data.

Despite the increase in the time spent by employees at the computer, which I identified based on the results of testing, employees have the opportunity to devote more time to entertainment, recreation, and increased the duration of night sleep. The results show that people's emotional stress decreases while working at home, stressful situations are minimized, which has a positive effect on their psycho-emotional status.

7 Discussion

The practical part of this thesis was devoted to the study of changes in the psycho-emotional state of the interviewed employees in connection with the forced transition to home office. With the help of the survey the analysis of psycho-emotional state of employees, their social and financial status, aimed at identifying the disadvantages and difficulties of the forced transition to home office was conducted. Appropriate analysis and comparison of the results of the two surveys allowed to classify the main problems.

Oddly enough, the consequences of the forced transition to home office described in the theoretical part (figure 1: Psychological Effects of Social Isolation Due to Quarantine in Chile) were confirmed by the tests carried out. To be more specific:

- 1) This study found that home office employees need more time to concentrate on their work, which results in them spending more time at the computer. The possible consequences are fatigue, dissatisfaction with the work they do, and may indirectly affect relationships within the family or the people employees live with.
- 2) One of the psycho-emotional disorders identified is anxiety (Dagnino, Anguita Escobar, Cifuentes, 2020). It is defined as an individual psychological peculiarity, which is manifested in the propensity of the person to feel strong anxiety for relatively insignificant reasons - it speaks about weakness of nervous processes. This is consistent with findings that there has been an increase in family conflicts, which means that for some employees it has become difficult to distinguish between work and personal life. (As the results of the survey show, conflicts at home began to occur more frequently)

Thus, the statement that the vast majority of people experience difficulties, and not only psychological, with the transition to the home office is also fully confirmed by this research.

The results of this study bring to mind the numerous changes that will have to be applied to work processes. Every office, every company should allocate time in the work schedule to eliminate negative changes in the psycho-emotional state of employees, to discuss possible solutions that will be aimed at minimizing negative emotions. It is necessary to find ways to prevent misunderstandings arising from the lack of face-to-face communication.

I want to believe that the lessons learned during this pandemic will ultimately help create a better workplace for all.

8 CONCLUSION

By analyzing the specific statistics obtained and comparing them before and after the pandemic, the pros and cons of the remote format of work can be identified and the following conclusions can be drawn:

At first glance, working from home is a convenient format, because it gives the opportunity to organize things around as one wants, as suits a person. And there is no need to adjust to the workplace prepared in the office, and sometimes it is even possible to manage your own work schedule. Obviously, the remote format of work saves the company a lot of money, which previously was spent on renting space, utilities, business trips, etc. Probably these funds should be spent on office psychologists and psychotherapists, who will take care of the socio-psychological state of employees.

On the other hand, it has already led to irreversible changes in the work process, and I think it is important to accept this as a fact and keep changing with the world around, because it is highly unlikely that Covid-19 will soon disappear from our lives and take all the changes with it. Obviously, many employees will continue to work remotely. I believe that companies need to become more proactive in studying and understanding the factors that disrupt employee comfort in one way or another.

But how might the changes associated with the Covid-19 pandemic affect the quality of work performed and, even more importantly, the social and psychological well-being of employees in the long run? This is still quite difficult to predict. I am of the widely held opinion that working in a home office can hinder the full satisfaction of employees' social needs as well as negatively affect their communication skills. The data from the statistical analysis is consistent with the predictions mentioned in the theoretical part.

What became crystal clear to me is that the psycho-emotional factor cannot be ignored, because the moral health of employees directly affects the success of the company they work for. Meanwhile, remote work requires strict self-discipline from each individual employee, and its result depends directly on his autonomy and interest in the overall success.

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10 APPENDICES

When answering, rely solely on your own opinion!
if you want, you can choose more than 1 option.

USUAL OFFICE

1) Your Age: _____

2) How long have you been working for this company?

3) Are you satisfied with working in the usual office?
a) Yes
b) no

4) 3 Negative aspects of working in the usual office:

5) 3 Positive aspects of working in the usual office:

6) Are you satisfied with your financial condition?
a) Yes
b) No
c) Other _____

7) How much time do you devote to your hobby?
a) everyday
b) 3 times a week
c) 2-4 times a month
d) once a month
e) it so hard for me to allocate time for this
f) no hobbies

8) Physical activity (gym, classes at home, sections):
a) daily
b) 3 times a week
c) several times a month
d) extremely rare

9) How much time do you spend with your friends?
a) I see them every day
b) 1-3 times a week
c) several times a month
d) extremely rare, almost never
e) other _____

10) How often do you visit relatives?
a) Every week
b) Once a month
c) Every 3 months
d) Several times a year

11) Who do you live with:
a) I live by myself
b) I live with my husband/wife
c) I live with a friend
d) other _____

12) Do conflicts ever occur at home?
a) every day
b) 1-3 times a week
c) Several times a month
d) extremely rare, almost never

13) How many hours a day do you devote to your family (wife/husband/children)?
Specify the hours per day:

14) Sleep duration:
a) less than 6 hours
b) 6-8 hours
c) 8-10 hours
d) more than 10 hours

15) Sleep disorder:
a) there are no violations
b) it is difficult to fall asleep
c) I often wake up at night
d) I wake up early then cannot fall asleep
e) sometimes I can't sleep all night
f) other _____

16) How many hours a day do I spend outdoors:
a) less than 1 hour
b) 1-3 hours
c) more than 3 hours
d) not every day

17) The regularity of eating:
a) 3 times a day
b) 3-5 times a day
c) less than 3 times a day
d) uncontrolled eating

18) Bad habits:
a) smoking (including vape, snus)
b) alcohol
c) no bad habits
d) other

19) The presence of stress factors causes by:
a) conflicts at home
b) conflicts at work
c) conflicts with friends/partner
d) no conflicts

20) Concentration of attention in case of working at home:
a) I can concentrate completely without much difficulty.
b) to focus, I need to put a lot of effort.
c) it's extremely hard for me to concentrate.
d) I can't concentrate at all.

21) the quality of the work performed:
a) I cope with my work easily
b) sometimes I ask for help
c) I should train my professional skills
d) I find it difficult to solve work tasks

22) How many hours a day do you spend in front of computer screen:
a) 1-3 hours
b) 3-6 hours
c) 6-9 hours
d) more than 9 hours

23) Underline positive emotions that you experience during work:
joy, satisfaction, interest,
acceptance, pleasure, serenity.

Underline negative emotions that you experience during work:
sadness, anxiety, fear, alertness,
discontent, disappointment.

Other _____

Figure 7 Social survey Usual Office

When answering, rely solely on your own opinion!
If you want, you can choose more than 1 option.

1) Your Age:

2) How long have you been working for this company?

3) Are you satisfied with working at home?
a) Yes
b) no

4) 3 Negative aspects of working at home:

5) 3 Positive aspects of working at home:

6) Are you satisfied with your financial condition?
a) Yes
b) No
c) Other _____

7) How much time do you devote to your hobby?
a) everyday
b) 3 times a week
c) 2-4 times a month
d) once a month
e) it so hard for me to allocate time for this
f) no hobbies

8) Physical activity (gym, classes at home, sections):
a) daily
b) 3 times a week
c) several times a month
d) extremely rare

9) How much time do you spend with your friends?
a) I see them every day
b) 1-3 times a week
c) several times a month
d) extremely rare, almost never
e) other _____

HOME OFFICE

10) How often do you visit relatives?
a) Every week
b) Once a month
c) Every 3 months
d) Several times a year

11) Who do you live with:
a) I live by myself
b) I live with my husband/wife
c) I live with a friend
d) other _____

12) Do conflicts ever occur at home?
a) Every day
b) 1-3 times a week
c) Several times a month
d) Extremely rare, almost never

13) How many hours a day do you devote to your family (wife/husband/children)?
Specify the hours per day:

14) Sleep duration:
a) less than 6 hours
b) 6-8 hours
c) 8-10 hours
d) more than 10 hours

15) Sleep disorder:
a) there are no violations
b) it is difficult to fall asleep
c) I often wake up at night
d) I wake up early then cannot fall asleep
e) sometimes I can't sleep all night
f) other _____

16) How many hours a day do I spend outdoors:
a) less than 1 hour
b) 1-3 hours
c) more than 3 hours
d) not every day

17) The regularity of eating:
a) 3 times a day
b) 3-5 times a day
c) less than 3 times a day
d) uncontrolled eating

18) Bad habits:
a) smoking (including vape, snus)
b) alcohol
c) no bad habits
d) other _____

19) The presence of stress factors causes by:
a) conflicts at home
b) conflicts at work
c) conflicts with friends/partner
d) no conflicts

20) Concentration of attention in case of working at home:
a) I can concentrate completely without much difficulty.
b) to focus, I need to put a lot of effort.
c) it's extremely hard for me to concentrate.
d) I can't concentrate at all.

21) the quality of the work performed:
a) I cope with my work easily
b) sometimes I ask for help
c) I should train my professional skills
d) I find it difficult to solve work tasks

22) How many hours a day do you spend in front of computer screen:
a) 1-3 hours
b) 3-6 hours
c) 6-9 hours
d) more than 9 hours

23) Have you experienced any difficulties getting used to new work conditions/computer programs that are necessary for working remotely?
a) Yes,
b) No,
c) at the beginning only
d) other _____

24) Underline positive emotions that you experience during work (or provide):
joy, satisfaction, interest,
acceptance, pleasure, serenity.

Underline negative emotions that you experience during work:
sadness, anxiety, fear, alertness,
discontent, disappointment.

other _____

Figure 8 Social survey Home Office

SELF-EVALUATION QUESTIONNAIRE STAI Form Y-1

Please provide the following information:

Name _____ Date _____ S _____
 Age _____ Gender (Circle) **M** **F** T _____

DIRECTIONS:

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel *right now*, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

VERY MUCH SO
 MODERATELY SO
 SOMEWHAT
 NOT AT ALL

- | | | | | |
|--|---|---|---|---|
| 1. I feel calm..... | 1 | 2 | 3 | 4 |
| 2. I feel secure | 1 | 2 | 3 | 4 |
| 3. I am tense | 1 | 2 | 3 | 4 |
| 4. I feel strained | 1 | 2 | 3 | 4 |
| 5. I feel at ease | 1 | 2 | 3 | 4 |
| 6. I feel upset | 1 | 2 | 3 | 4 |
| 7. I am presently worrying over possible misfortunes | 1 | 2 | 3 | 4 |
| 8. I feel satisfied | 1 | 2 | 3 | 4 |
| 9. I feel frightened | 1 | 2 | 3 | 4 |
| 10. I feel comfortable | 1 | 2 | 3 | 4 |
| 11. I feel self-confident..... | 1 | 2 | 3 | 4 |
| 12. I feel nervous | 1 | 2 | 3 | 4 |
| 13. I am jittery | 1 | 2 | 3 | 4 |
| 14. I feel indecisive..... | 1 | 2 | 3 | 4 |
| 15. I am relaxed | 1 | 2 | 3 | 4 |
| 16. I feel content | 1 | 2 | 3 | 4 |
| 17. I am worried | 1 | 2 | 3 | 4 |
| 18. I feel confused..... | 1 | 2 | 3 | 4 |
| 19. I feel steady..... | 1 | 2 | 3 | 4 |
| 20. I feel pleasant..... | 1 | 2 | 3 | 4 |

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STAI-AD Test Form Y
 www.mindgarden.com

Figure 9 STAI questionnaire form Y-1

SELF-EVALUATION QUESTIONNAIRE

STAI Form Y-2

Name _____ Date _____

DIRECTIONS

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you generally feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

ALMOST NEVER
SOMETIMES
OFTEN
ALMOST ALWAYS

- | | | | | |
|---|---|---|---|---|
| 21. I feel pleasant..... | 1 | 2 | 3 | 4 |
| 22. I feel nervous and restless | 1 | 2 | 3 | 4 |
| 23. I feel satisfied with myself..... | 1 | 2 | 3 | 4 |
| 24. I wish I could be as happy as others seem to be | 1 | 2 | 3 | 4 |
| 25. I feel like a failure | 1 | 2 | 3 | 4 |
| 26. I feel rested | 1 | 2 | 3 | 4 |
| 27. I am "calm, cool, and collected"..... | 1 | 2 | 3 | 4 |
| 28. I feel that difficulties are piling up so that I cannot overcome them..... | 1 | 2 | 3 | 4 |
| 29. I worry too much over something that really doesn't matter..... | 1 | 2 | 3 | 4 |
| 30. I am happy | 1 | 2 | 3 | 4 |
| 31. I have disturbing thoughts | 1 | 2 | 3 | 4 |
| 32. I lack self-confidence..... | 1 | 2 | 3 | 4 |
| 33. I feel secure | 1 | 2 | 3 | 4 |
| 34. I make decisions easily | 1 | 2 | 3 | 4 |
| 35. I feel inadequate..... | 1 | 2 | 3 | 4 |
| 36. I am content | 1 | 2 | 3 | 4 |
| 37. Some unimportant thought runs through my mind and bothers me | 1 | 2 | 3 | 4 |
| 38. I take disappointments so keenly that I can't put them out of my mind | 1 | 2 | 3 | 4 |
| 39. I am a steady person..... | 1 | 2 | 3 | 4 |
| 40. I get in a state of tension or turmoil as I think over my recent concerns and interests | 1 | 2 | 3 | 4 |

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STAI-P-AD Test Form Y
www.mindgarden.com

Figure 10 STAI questionnaire form Y-2

State-Trait Anxiety Inventory for Adults Scoring Key (Form Y-1, Y-2)

Developed by Charles D. Spielberger in collaboration with R.L. Gorsuch, R. Lushene, P.R. Vagg, and G.A. Jacobs

To use this stencil, fold this sheet in half and line up with the appropriate test side, either Form Y-1 or Form Y-2. Simply total the scoring **weights** shown on the stencil for each response category. For example, for question # 1, if the respondent marked 3, then the **weight** would be 2. Refer to the manual for appropriate normative data.

Form Y-1	NOT AT ALL SOMEWHAT MODERATELY SO VERY MUCH SO	Form Y-2	ALMOST NEVER SOMETIMES OFTEN ALMOST ALWAYS
1.	4 3 2 1	21.	4 3 2 1
2.	4 3 2 1	22.	1 2 3 4
3.	1 2 3 4	23.	4 3 2 1
4.	1 2 3 4	24.	1 2 3 4
5.	4 3 2 1	25.	1 2 3 4
6.	1 2 3 4	26.	4 3 2 1
7.	1 2 3 4	27.	4 3 2 1
8.	4 3 2 1	28.	1 2 3 4
9.	1 2 3 4	29.	1 2 3 4
10.	4 3 2 1	30.	4 3 2 1
11.	4 3 2 1	31.	1 2 3 4
12.	1 2 3 4	32.	1 2 3 4
13.	1 2 3 4	33.	4 3 2 1
14.	1 2 3 4	34.	4 3 2 1
15.	4 3 2 1	35.	1 2 3 4
16.	4 3 2 1	36.	4 3 2 1
17.	1 2 3 4	37.	1 2 3 4
18.	1 2 3 4	38.	1 2 3 4
19.	4 3 2 1	39.	4 3 2 1
20.	4 3 2 1	40.	1 2 3 4

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STAIP-AD Scoring Key
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Figure 11 STAI Scoring Key