

Job Satisfaction, Personality and Indicators of Anxiety and Depression in Remote Workers.

Maria Belen Villegas Revilla

Masters of Art in Human Resources Management

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ABSTRACT

The emergence of Covid-19 has sparked the interest of many researchers in the effects of remote work on job satisfaction and employee well-being. However, studies introducing the personality variable as a factor to be taken into account in the job satisfaction and well-being of remote employees are scarce. The aim of the present study was to determine the relationship between job satisfaction of remote workers and their levels of anxiety, depression and personality extroversion trait, as well as to determine the differences in these variables as a function of sociodemographic variables such as age, gender, marital status, way of living and time worked remotely. Thus, with a sample of 275 participants aged between 23 and 46 years, obtained from different social networks, and through a cross-sectional quantitative study, it was found that there is a relationship between job satisfaction and levels of anxiety, extraversion and depression. In addition, statistically significant differences were obtained between the modality of remote, face-to-face or partial work and the study variables of job satisfaction, anxiety, depression and extroversion, with high levels of anxiety and depression being related to remote workers and extroverted employees. Finally, a model has been obtained suggesting that anxiety, depression and remote work is a good predictor of low job satisfaction, and that extroversion and partial remote work is a good predictor of high job satisfaction.

Key Words: Remote work, Job Satisfaction, Well-being, Work From Home, Personality, Extroversion.

INTRODUCTION

In recent decades, the emergence of a new way of work has sparked researchers' interest in understanding the effects of remote work due to globalisation and the increased use of technology as a means of work (Carmela, 2017)(Cited in Schall, 2019). Although organisations have shown a consistent interest in remote work arrangements since the 1980s (Gajendran & Harrison, 2007), few pre-pandemic studies examined the relationship between personality and work outcomes in remote workers (Cited in Evans et al., 2021). These studies mainly focused on analysing the advantages and disadvantages of remote work and the levels of job satisfaction of remote employees, with various contradictions and different opinions on whether remote work is beneficial or detrimental to the employee.

The advent of Covid-19 meant the closure of offices and workplaces in all countries worldwide, significantly impacting society and changing the way of living and understanding work unknown to most workers globally. The government's mandatory preventive measure of "Work from Home" and its implementation by organisations during the pandemic has spurred research on the effects of remote work on employee health and well-being. However, the study of the influence or impact of personality traits and individual differences of remote employees is explored in the literature so far (Charalampous et al., 2021).

The influence of personality traits has not been taken into account. Therefore, with the current state of knowledge on remote work, this research aims to fill the gap in the existing literature by examining the relationship between remote workers' job satisfaction and their personality traits, precisely extroversion, as well as studying its effects on the levels of anxiety and depression in employees. The data from this study will be instrumental in the decision-making process of organisations when implementing remote working on a permanent or partial basis. It will also help the Human Resources department, and more specifically the Employee Relations team, to develop strategies to mitigate the possible adverse effects of remote work depending on the personality type of the employees.

In the following literature review, I will explain the concept of remote working and its evolution and implementation over the last decades, especially in the wake of Covid-19. I will then outline the advantages and disadvantages of remote working found so far, as well as

its impact on employee well-being. Furthermore, I will present recent findings related to remote workers' job satisfaction. Finally, I will briefly explain the concept of personality and its components and the importance of taking this variable into account when assessing workers' job satisfaction. Subsequently, I will explain the research methodology, including the design, sampling, instruments, study procedure and statistical analyses performed. Next, the results obtained will be explained and discussed. Finally, I will present the research's conclusions, limitations and future recommendations.

LITERATURE REVIEW

Remote work and Covid

Technological advances in recent decades have revolutionised how we understand the world, resulting in a society that is nothing like what we have known. Information and Communication Technology (ICT) has developed new forms of communication and social interaction thanks to social networks, new forms of entertainment thanks to streaming platforms, new ways of marketing, business and new jobs, and as a consequence, a new way of working, remote work.

Over the last decades, many definitions have been attributed to remote work, which is understood as “a flexible working arrangement between employer and employee, in which employees perform tasks and responsibilities within the workplace at a location agreed by the employer other than the office” (Kawakubo & Arata. 2022). Remote work, flexible workplace, work from home or telecommuting is thus a work mode option in which employees leave the central offices and perform their tasks anywhere through the use of technology to communicate with their supervisors, colleagues and clients (Salma Sultana et al., 2021). Remote work, therefore, gives employees flexibility to choose where they want to work or create the workplace they want, choosing from multiple locations including working at home (Richardson and McKenna, 2014; Vander Elst et al., 2017) or working in more crowded places such as coffee shops, restaurants, trains, hotels...etc (Charalampous et al., 2021).

This changing trend in the work environment is not only revolutionising the way organisations operate, but it is also changing the concept and expectations that employees have of work, as many employees are beginning to understand remote working as an important requirement when choosing a job. Corbin (2017) stated that employees need to have control over when and how they work, explaining that 51% of employees said they would change jobs if they were offered a flexible work schedule, and 37% said they would change jobs if they were offered work location flexibility (Charalampous et al., 2021).

This new way of working is relatively recent, with only 10% of the workforce reported working remotely in 2010 (Mateyka et al., 2012)(Cited in Evans et al., 2021). In recent years this mode of working has increased among European employees (Eurofound and ILO, 2017), with a 4% increase in the number of remote workers observed between 2012 and 2016 (Corbin, 2017) (Cited in Charalampous et al., 2021).

The advent of the Covid-19 pandemic has prompted organisations to make remote working mandatory worldwide, challenging employers and employees to demonstrate great flexibility and adaptability to the ‘new normal’ way of working. Data from the Office for National Statistics states that 46.6% of working adults are working remotely in April 2020 and that 86% of these workers adopted remote working due to Covid-19 (Office for National Statistics, 2020). In addition, data provided by Eurofound states that at least 4 in 10 workers started telecommuting in Europe during the onset of the pandemic (Eurofound, 2020). In the United States, 35% of employees were working remotely in May 2020 (Eurofound, 2020), and it is estimated that more than a third of jobs in the United States are now performed solely at home (Dingel & Neiman, 2020).

Today it seems that the pandemic has finally passed into history, yet the data show that remote work has come to take hold in society. A statistical analysis developed by Owl labs (2021) indicates that 16% of companies are remote globally and that around 62% of workers aged 22-65 report working remotely at least occasionally (Findstack, 2022).

These data suggest that society is at the perfect historical moment to study the phenomenon of remote working, its implications for organisations, its effects on productivity, well-being and worker satisfaction, and, consequently, to explore its future permanent implementation in society.

Remote Working: Advantages and Disadvantages

Numerous researchers have taken advantage of the preventive measures governments and employers took during the pandemic of implementing “Work From Home” to conduct a wave of studies that provide information on the possible advantages and disadvantages of this new way of working. On the one hand, the latest findings highlight numerous benefits for both employers and employees, but on the other hand, innumerable disadvantages can also be highlighted, especially for workers.

Firstly, employers are undoubtedly the group that benefits the most from this type of work, as it reduces the fixed costs of office rent, office furniture and supplies, cleaning and maintenance staff, time, efficiency gains, reduced office politics, increased employee motivation, lower absenteeism and reduced burnout, among others (Salma Sultana et al., 2021).

Secondly, in terms of job performance, studies suggest that telecommuters are more productive (Bloom et al., 2015), perform more costly and demanding tasks better (Boell et al., 2016) (Cited in Charalampous et al., 2021) and experience greater concentration due to reduced social interactions with colleagues and typical office interruptions. However, contrary to some of the studies mentioned above, it is also confirmed that telecommuters are more exposed to electronic distractions (emails, calls) and distractions from domestic and personal affairs, enhancing cognitive fatigue and concentration difficulties (Charalampous et al., 2021).

Third, in terms of work-family balance, working from home gives workers the freedom to plan and coordinate their weekly schedule more efficiently and according to their preferences and needs (Salma Sultana et al., 2021). In addition, remote working optimises commuting time and costs (Bernarto et al., 2020) (Cited in Salma Sultana et al., 2021). However, it has also been found that remote workers have many difficulties in establishing boundaries between work and personal life, experiencing “technostress” caused by constant interaction with technology (Molino et al., 2020), leading to an increase in time spent at work and a decrease in time spent on leisure (Cropley and Millward, 2009) (Cited in Charalampous et al., 2021).

Finally, working from home could damage the economic stability of some families due to the additional costs of energy, internet and food (Nakrošienė et al., 2019)(Cited in Salma Sultana et al., 2021).

All of the above factors will be variables to consider that impact positively or negatively on the productivity, job satisfaction and well-being of remote workers, which will vary depending on each employee's individual and personal circumstances.

Remote Working and Well-being

In addition to all the advantages and disadvantages associated with remote work mentioned above that impact work performance, economy and work-life balance, it is vital to examine the extent to which remote work can improve or deteriorate our physical and mental health.

Many researchers have focused on studies that provide information about the possible relationship between flexible working and employee well-being, intending to develop techniques and strategies to mitigate possible associated symptoms.

Regarding well-being, some studies claim that people who work remotely have a lower degree of physical and mental well-being than when they work in the office (Xiao et al., 2021). However, other studies claim that working from home can positively and negatively impact people's well-being (Oakman et al., 2020), depending mainly on the self-care habits that employees develop and implement in their lives.

On the one hand, working from home significantly reduces movement. It leads to sedentary lifestyles, a phenomenon associated with physical illnesses such as heart disease (Petersen et al., 2014), obesity, increased mortality (Thorp et al., 2011) and associated physical pain. The risks of physical illness can be reduced if employees use their breaks and time off to exercise, implement healthy eating habits (Charalampous et al., 2021) and create an adequate space to work from home.

In addition, remote work can be costly and challenging for those who live alone or have no face-to-face social interaction, contributing to the development of mental health

problems, feelings of loneliness, heat stroke and depression (Mann and Holdsworth, 2003). Finally, it is difficult for many employees to establish clear boundaries between work and personal lives, increasing their anxiety and stress levels (Evanoff et al., 2020, cited in Xiao et al., 2021).

Remote Work and Job Satisfaction

Numerous authors have developed a definition of the meaning of Job Satisfaction, one of the first being Locke who in 1976 defined Job Satisfaction as a “pleasant and positive emotional state resulting from the employee’s evaluation of his or her own work” (Abilash and Nitha, 2021).

Numerous research lines attempting to explain remote work’s impact on employee job satisfaction have emerged in recent decades, with varying results and different opinions. Some research confirms the relationship between remote work and job satisfaction, stating that employees who work remotely have higher job satisfaction (Dubrin, 1991; Guimaraes, 1999) and those who do not work remotely have lower job satisfaction (Pinsonneault, 2001; Cooper, 2002). According to Golden and Veiga (2005), workers who start working remotely have a more social connection with their colleagues and higher job satisfaction, but as the time spent working remotely increases, workers experience isolation, which leads to lower job satisfaction (Abilash and Nitha, 2021). However, Golden (2006) specifies that remote workers’ job satisfaction tends to increase only up to a certain point, after which it tends to decrease.

Personality: A Forgotten Variable

Research to date on the new “work-from-home” phenomenon has yielded valuable information regarding those variables related to remote work that influence employee well-being and job satisfaction. All this information seems to indicate that remote work brings many advantages, such as increased productivity, greater flexibility and freedom to plan the day, time optimisation and, ultimately, a better work-life balance. It seems as if, by taking control over those negative aspects, reducing environmental stressors, learning to disconnect from work and technology, installing an adequate workspace at home, implementing healthy

lifestyle habits and increasing social interactions in personal life, remote work is a win-win situation for both employers and employees.

However, not all variables that impact remote workers' well-being and job satisfaction can be easily controlled and manipulated to work in our favour. There is one variable that is more or less stable, permanent and precedes all the other variables mentioned above, which is intrinsic and unique to human beings: Personality. The employee cannot be different from his condition as a human being; therefore, he cannot function continuously in incoherence with his personality traits, desires and needs. For this reason, it is to be expected that employees will have different preferences as to which way of work they wish to adopt based on which mode best fits their personality variables.

The American Psychological Association (APA, 2022) defines personality as individual differences in characteristic stable patterns of thinking, feeling and behaving. The different traits that make up personality have been widely debated by other authors but are generally grouped in terms of the Big Five or the HEXACO model (Ashton et al., 2014), which consists of 6 traits: Honesty-Humility, Emotionality, Extroversion, Agreeableness, Conscientiousness and Openness to Experience (Evans et al., 2021).

According to Evans et al. (2021), the possible relationship between personality and work outcomes is based on three key concepts: On the one hand, personality traits predispose workers' perceptions, emotions, thoughts and behaviour at work (Bowling et al., 2005; Judge et al., 2002). Moreover, personality traits influence the jobs that workers select (Emmons et al., 1985; Larsen, 2001). Finally, personality traits determine how workers respond to job change (Judge and Larsen, 2001; O'Brien and Delongis, 1996).

A qualitative study by Charalampous et al. (2021) states that individual differences and specific personality traits influence the way workers enjoy remote work. Those who described themselves as "introverted" reported that they handled heat stroke better during remote work. In contrast, those who described themselves as "sociable" and "extroverted" reported that they consciously tried to keep in touch with their colleagues to avoid damaging their friendships. However, Charalampous et al. (2021) stated in their study that personality remains an unexplored variable in relation to remote work.

In his study, Anderson (2015) stated that workers experience positive emotions when they work remotely, are more open to the experience, ruminate less and have more friendships outside of work. On the other hand, Virick et al. (2010) found that workaholics are more satisfied when working remotely. These results suggest that personality traits influence how employees benefit from remote work and that one way of working does not fit all equally (Charalampous et al., 2018).

Furthermore, in a study by Bellman and Hübler (2021) on the job satisfaction of employees working from home, a significant influence is found between personality types and job satisfaction, with the personality variables extraversion, conscientiousness and agreeableness being positively associated with remote work job satisfaction.

Finally, Nag (2021) draws on self-determination theory (Deci and Ryan, 2008) to explain that giving people the freedom to choose the physical characteristics of their workplace based on their personality traits will increase employees' intrinsic motivation and productivity. Nag (2021) believes that the increased productivity of remote employees during Covid-19 indicates that organisations should adapt the workplace to the personal characteristics of workers in order to achieve better performance. Furthermore, Nag (2021) argues that extroverted workers can be more productive in a stimulating office environment and that introverted workers can be more productive when allowed to work from home.

Based on the literature and conclusions drawn by other authors, it appears that the most introverted employees are the ones who truly enjoy telecommuting. This conclusion is based on the assumption that introverted employees have little need to socialize but there are hardly any studies to confirm this. It is for this reason that the need arises to clarify the way in which personality influences the work performance of employees, and to resolve doubts as to which types of personalities are more suited to one work modality or another.

RESEARCH QUESTION

The main objective of the present research is to explore the job satisfaction of workers concerning their work mode (remote, face-to-face or part-time), the personality trait of extraversion of workers, and the indicators of anxiety and depression of workers. Also, we

will explore the socio-demographic characteristics of gender, age, marital status, residence, and time worked remotely. Based on this primary objective and more specifically, the following research questions are posed:

Objective 1: What is the relationship between the job satisfaction, the extroversion trait of personality and anxiety and depression indicators?

Based on this research question, the following hypotheses are proposed:

- Hypothesis 1: it is expected that there is a statistically significant relationship between employees' job satisfaction and their levels of anxiety, depression and extroversion personality trait.
- Hypothesis 2: employees with high job satisfaction scores are expected to have low levels of anxiety and depression.
- Hypothesis 3: employees who score high on job satisfaction are also expected to have high levels of personality trait extroversion.
- Hypothesis 4: employees who score high on anxiety and depression are expected to score low on the personality trait extroversion.

Objective 2: Are there statistically significant differences in the study variables job satisfaction, personality extroversion trait and indicators of anxiety and depression as a function of the modality of remote work, face-to-face or part-time, and as a function of the socio-demographic variables of gender, age, marital status, residence and time worked remotely?

Based on this research question, the following hypotheses are proposed:

- Hypothesis 5: statistically significant differences are expected to exist between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of remote, partial or face-to-face work mode.
- Hypothesis 6: remote workers are expected to experience higher levels of anxiety than face-to-face workers.

- Hypothesis 7: remote workers are expected to experience higher levels of depression than face-to-face workers.
- Hypothesis 8: remote workers are expected to have lower scores on the extroversion personality trait.
- Hypothesis 9: remote workers are expected to have lower scores on job satisfaction than workers working in a face-to-face or part-time mode.
- Hypothesis 10: it is expected that there are statistically significant differences between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of gender.
- Hypothesis 11: it is expected that there are statistically significant differences between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of age.
- Hypothesis 12: statistically significant differences are expected to exist between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of the way they live.
- Hypothesis 13: statistically significant differences are expected to exist between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of time worked remotely.

Objective 3: Are there relationships between the remote, on-site or part-time work mode variable and the socio-demographic variables of gender, age and marital status?

Based on this research question, the following hypotheses are proposed:

- Hypothesis 14: Statistically significant differences are expected to be obtained between the type of work modality (remote, face-to-face or partial) and the sociodemographic variables of gender, age, marital status and residence.

Objective 4: Can a model be generated to predict job satisfaction as a function of the personality trait of extroversion, the variable of remote, face-to-face or part-time work, the indicators of anxiety and depression and the socio-demographic variables of gender, age, marital status, residence and time worked remotely?

Based on this research question, the following hypotheses are proposed:

- Hypothesis 15: It is expected to create a model that confirms that anxiety is a good predictor of low employee job satisfaction.
- Hypothesis 16: It is expected to create a model that confirms that depression is a good predictor of low employee job satisfaction.
- Hypothesis 17: it is expected to create a model that confirms that the extroversion personality trait is a good predictor of high employee job satisfaction.
- Hypothesis 18: it is expected to create a model that confirms that remote work is a good predictor of low employee job satisfaction.
- Hypothesis 19: It is expected to create a model that confirms that partial work is a good predictor of high employee job satisfaction.

METHODOLOGY

Design

In numerous research related to the well-being and job satisfaction of employees performing WFH during the Covid-19 pandemic, both quantitative and qualitative methods have been used. In this case, we will use a cross-sectional and quantitative research method as the aim is not only to explain and describe the phenomenon of telecommuting in employees but also to study the relationship between job satisfaction and employees' personality trait of extroversion, anxiety, depression and all socio-demographic variables. Also, we would like to create a model to predict job satisfaction as a function of extroversion personality traits, anxiety and depression indicators, work mode variables, and the rest of the socio-demographic variables so that we can accept or discard our hypotheses.

The use of the cross-sectional research method has been chosen because it allows quick, low-cost studies to be carried out and variables to be observed momentarily. However, the main disadvantage of this method is that we cannot determine causality between variables and a reliable prognosis cannot be made. The use of the quantitative research method has been chosen because it allows the results to be generalized to the general population, provides greater reliability of the information and allows predictions to be made of the variables studied. However, with this type of research method we obtain less detail and depth of information.

Sampling

To carry out the present research, a sample of N=275 participants has been collected, of which N=138 are men (50.18%) and N=137 are women (49.82%) between 23 and 46 years of age. This aforementioned sample has been selected through a non-probabilistic convenience sampling method, as those working individuals to whom the researcher has had direct access have been selected. The researcher ensured that the selected sample met certain participation requirements such as being currently working, age, including participants with an age range from 20 to 50 years old, and gender, excluding from the research the 3 participants who selected the option "Other" in the gender variable, as it did not represent a statistically representative sample of this gender typology. The sample includes employees from several multinational companies spread across Ireland and Spain, from a variety of countries of origin and with a wide range of jobs related to human resources, customer service, sales, marketing and law, among others.

Instruments

Four evaluation instruments were used for the present study, grouped in a single survey.

Firstly, a questionnaire composed of 8 items was created and applied in order to evaluate the primary socio-demographic data of the participants, such as gender, age, marital status, nationality, residence, the type of work performed, the existence of optimal working space at home, as well as the time worked remotely, intending to analyse these variables and

obtain descriptive data. Depending on the item, research participants answered the items directly (age and nationality), dichotomously (Yes/No), or by selecting the option that best suited their situation and their person.

Secondly, the Brayfield-Rothe Job Satisfaction Index (Baryfield & Rother, 1951) has been applied; in this way, we will know the job satisfaction of the employees participating in the research. Responses were made on a Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). This scale is composed of 5 items, 3 of them positively worded in relation to job satisfaction and 2 of them negatively worded. The responses of the study participants were calculated in such a way that those who scored higher had higher job satisfaction than those who scored lower. Some examples of the items asked in this questionnaire are the following: I am quite satisfied with my current job; Every working day seems like it will never end; and I really enjoy my work. In terms of psychometric validity, Cronbach's alpha confirmed that the test has high reliability ($\alpha = .84$).

Thirdly, the anxiety and depression subscales of the Depression, Anxiety and Stress Scale 21 – DASS-21 (Lovibond & Lovibond, 1995) were administered to the participants; in this way, we will know the levels of anxiety and depression of the workers participating in this study, both of which are predictors of workers' well-being. The questionnaire is composed of 21 items divided into seven items on the anxiety scale, seven items on the depression scale and the remaining seven items on the stress scale. In this questionnaire, participants are asked to respond by reflecting on the frequency with which workers have experienced the symptomatology described in the item during the last week, selecting those answers that most closely match their experience from a Likert-type scale from 1 (Never) to 4 (Almost always).

Some examples of the items asked in this questionnaire are the following: I couldn't seem to experience any positive feeling at all; I experienced breathing difficulty (eg, excessively rapid breathing ,breathlessness in the absence of physical exertion); and I felt that life was meaningless. Both subscales have high reliability, with an $\alpha = .87$ for the depression scale and $\alpha = .85$ for the anxiety scale.

Finally, the extraversion subscale of the short version of the Eysenck Personality Questionnaire (EPQ-R) (Eysenck et al., 1985) was administered to the participants; in this way, we will know the degree of extraversion of the workers participating in our study. This

48-item questionnaire assesses three basic personality dimensions in three different subscales: Extraversion/Introversion Scale, Neuroticism Scale and Psychoticism Scale. The Extraversion scale is composed of 12 items, ten positively worded items in relation to the extraversion trait and two items negatively worded items. The responses of the study participants were dichotomous, with Yes/No response options, and were calculated in such a way that the higher scorers scored higher on the extraversion trait than the lower scorers. Some examples of the items asked in this questionnaire are the following: Do you usually take the initiative in making new friends?; Are you mostly quiet when you are with other people?; and Can you usually let yourself go and enjoy yourself at a lively party?. In terms of psychometric validity, the questionnaire presents satisfactory reliability and validity data, obtaining reliability of $\alpha = .86$ on the Extraversion scale, $\alpha = .82$ on the Neuroticism scale and $\alpha = .72$ on the Psychoticism scale.

Procedure

First, a specific questionnaire was elaborated on related to socio-demographic data such as age, marital status, nationality, residence and those variables that could influence remote work, such as how long the employee has been working remotely and whether the employee has an adequate workspace at home.

Subsequently, two forms entitled “Remote work, Office Work and Personality” were developed on the Google Forms platform, one in English and the other in Spanish. The forms consist of the socio-demographic data questionnaire, the Brayfield-Rothe Job Satisfaction Index, the Anxiety and Depression subscales of the DASS-21 and the Extraversion subscale of the Eysenck Personality Questionnaire (EPQ-R). On the main page of the form, the researcher explained the objective of the study, the confidentiality of the data obtained, the approximate duration of the response (10 minutes), the instructions for each of the questionnaires, and finally, the anonymous nature of the research to the participant. The test was then administered to a small group of 6 employees to check that all questions measured the desired construct and to make any necessary adjustments.

Finally, the two forms “Remote Work, Office Work and Personality” were administered to different participants from numerous organisations and distributed through the main known social networks such as Facebook, Instagram, WhatsApp and LinkedIn to

reach the most significant number of participants. The form was available for completion online for 30 days and was aimed at people who currently had a job, regardless of the position, the type of job, and whether it was on-site, remote or part-time.

Statistical analysis

The data obtained from this research were statistically analysed using the SPSS version 25.0 statistical package.

Initially, the descriptive statistics of the socio-demographic variables studied were analysed. For this purpose, frequency distributions were calculated for the qualitative variables, and frequency histograms were obtained for the quantitative variables, using the mean as a measure of central tendency, the standard deviation as a measure of variability, and the skewness and kurtosis as measures of shape. Finally, Cronbach's alpha was calculated to analyse the reliability of our sample in the questionnaires applied.

Secondly, Pearson's correlation coefficient was used to analyse the relationships between the quantitative variables in our study, i.e. the relationship between the variables Anxiety, Depression, Extroversion and Job Satisfaction.

Thirdly, a one-factor Anova test was used to analyse the relationship between the different types of work arrangements and the quantitative variables of Anxiety, Depression, Extroversion and Job Satisfaction. Welch's correction was used in the case of non-homocedasticity and Games-Howell was used as a posteriori test.

Fourthly, Student's t-test for two independent samples was used to analyse the relationship between the variable gender and the quantitative study variables Anxiety, Depression, Extroversion and Job Satisfaction.

Fifth, Pearson's r test was used to analyse the relationship between the age variable and the quantitative study variables Anxiety, Depression, Extroversion and Job Satisfaction.

Sixth, the chi-square test was used to analyse the relationship between the work mode and the qualitative socio-demographic variables, and ANOVA for the age variable.

Finally, a multiple linear regression model was used to predict the job satisfaction variable as a function of the explanatory variables of personality trait extroversion, anxiety, depression, way of work and sociodemographic variables of gender, age, marital status, residence and time worked remotely.

RESULTS

Descriptive analysis of the socio-demographic variables of the study

Analysing the descriptive statistics, it is observed that the study sample consists of N=275 participants, of which N=138 (50.18%) are male and of which N=137 (49.82%) are female (See Table 1).

As for the marital status of the participants, it is observed that N=101 (36.73%) participants are currently in a couple relationship, a number of N=98 (35.64%) subjects are single, a number of N=64 (23.27%) of the respondents are married and lastly, the figure of N=12 (4.36%) are divorced. (See Table 1).

Analysing the way in which the workers live and reside, it is observed that N=101 (36.73%) participants currently live with their partner, a number of N=55 (20%) of the respondents live alone, a number of N=47 (17.09%) of the participants live with their own family (children with or without partner), subjects living with friends are N=44 (16%) participants, respondents living at home with their parents are N=23 (8.36%), and lastly, a smaller number of N=5 (1.82%) of the participants live in other conditions. (See Table 1)

In terms of the type of work adopted by each participant, the sample is made up of N=99 (36%) participants who do not work remotely and work in person, N=92 (33.45%) participants who work partially, combining remote work and office work, and finally, N=84 (30.55%) participants from the selected sample work remotely (see Table 1). (See Table 1).

Analysing the length of time the workers have been working remotely, it is observed that N=89 (32.36%) of the subjects in our sample have been working remotely for more than eight months, and the participants who have been working remotely for 12 to 18 months are

N=34 (12.36%). Also, a number of N=32 (11.64%) participants have been working remotely for 6 to 12 months and the subjects who have been working remotely for less time are N=31 (7.64) with a time interval between 0 and 6 months. It is also observed that N=99 (36%) participants work face-to-face (see Table 1).

Table 1: *Descriptive analysis of socio-demographic variables.*

Gender	n	%
	138	50,18
Men		
Women	137	49.82
Marital Status		
	98	35.64
Single		
In a Relationship	101	36.73
Married	64	23.27
Divorced	12	4.36
Residence		
	55	20.00
Alone		
Living with Parents	23	8.36
Living with Friends	44	16.00
Living with Partner	101	36.73
Living with own Family	47	17.09
Other	5	1.82
Remote Work		
	84	30.55
Yes		
No	99	36.00
Partial	92	33.45
Time		
	21	7.64
0- 6 months		
6-12 months	32	11.64
12-18 months	34	12.36
More 24an 19 months	89	32.36
No Remote Work	99	36.00

Note. n = Sample; % = Percentage

Descriptive analysis of the quantitative study variables.

Analysing the age variable, it is observed that the average age of men is 34.40 ± 5.38 years and the average age of women is 33.39 ± 5.584 . (See Table 2)

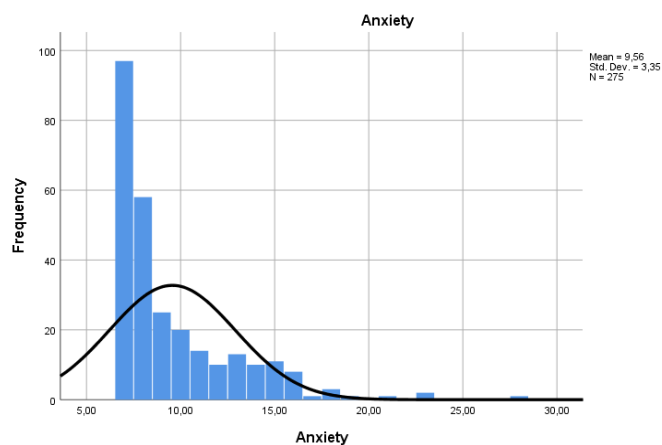
Table 2: *Descriptive analysis of Age*

Age	M	S.D.
Men	34,40	5,38
Women	33,39	5,58

Note. M = Mean; SD = Standard Deviation

An analysis of the variable anxiety shows that it obtained a mean score of 9.560 with a standard deviation of 3.350 (see Table 3). Regarding the shape of the distribution, a positive skewness (as=1.889) was obtained, indicating that the observations are more concentrated in lower values of the variable, and a positive kurtosis (Cu=4.613), indicating that the distribution is sharper than normal (see Table 3 and Figure 3).

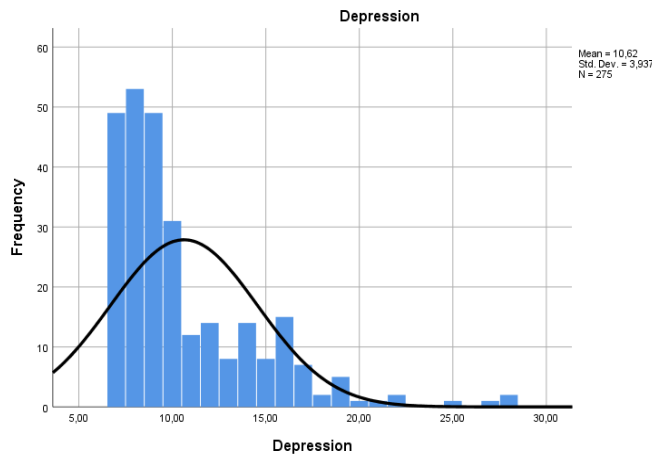
Figure 3



Analysing the variable depression, a mean score of 10.622 with a standard deviation of 3.937 was obtained (see Table 3). Regarding the shape of the distribution, a positive skewness (as=1.717) was obtained, indicating that the observations are more concentrated in

the lower values of the variable, and a positive kurtosis ($Cu=3.505$), indicating that the distribution is sharper than normal (see Table 3 and Figure 4).

Figure 4



Analysing the Job Satisfaction variable, it is observed that it obtained a mean score of 18.349 with a standard deviation of 4.293 (See Table 3). Regarding the shape of the distribution, a negative skewness ($as=1.889$) was obtained, which indicates that the observations are more concentrated in higher values of the variable, and a positive kurtosis ($Cu=4.613$), which suggests that the distribution is sharper than normal. A Cronbach's alpha of 0.907 was obtained (see Table 3 and Figure 5).

Figure 5



Finally, an analysis of the variable extroversion shows that it obtained a mean score of 8.422 with a standard deviation of 3.901 (see Table 3). As for the shape of the distribution, a negative skewness (as=0.723) was obtained, which indicates that the observations are more concentrated in higher values of the variable, and a negative kurtosis (Cu=0.939), which suggests that the distribution is flatter than normal. A Cronbach's alpha of 0.922 was obtained (See Table 3 and Figure 6).

Figure 6

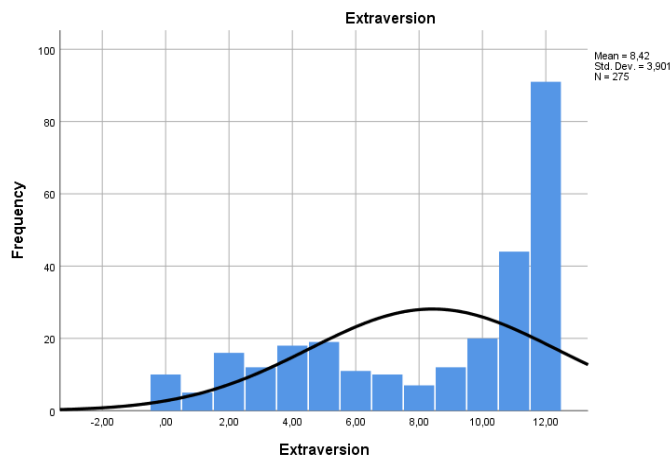


Table 3: Descriptive statistics

	M	SD	S	K	α
Anxiety	9,560	3,350	1,889	4,613	0,878
Depression	10,622	3,937	1,717	3,505	0,921
Job Satisfaction	18,349	4,293	-0,852	0,191	0,907
Extroversion	8,422	3,901	-0,723	-0,939	0,922

M = Mean; SD = Standard Deviation; S = Skewness; K = Kurtosis; α = Alpha-Cronbach

Correlation Analysis

To answer the first research question about the possible relationships between job satisfaction with the extroversion personality trait variables and the anxiety and depression indicators, Pearson correlation coefficients were calculated and statistically significant correlations were obtained between the variables Job Satisfaction and Anxiety ($r = -0.664$; $p < 0.001$), with the variable depression ($r = -0.716$; $p < 0.001$), and with the variable

extroversion ($r = 0.374$; $p < 0.001$). Furthermore, statistically significant correlations were found between the variables Anxiety and Depression ($r = -0.813$; $p < 0.001$) and with the variable Extroversion ($r = -0.295$; $p < 0.001$), and finally, between the variables Depression and Extroversion ($r = -0.301$; $p < 0.001$) (See table 4).

Table 4: *Correlation matrix of the study variables*

Correlations		Anxiety	Depression	Extraversion
Job Satisfaction	r	-,664**	-,716**	,347**
Anxiety	r		,813**	-,295**
Depression	r			-,301**

*Note. **p < .01; *p < .05; r = Pearson's correlation coefficient.*

Secondly, to answer the second research question related to the analysis of the possible differences between the study variables Job Satisfaction, personality trait extraversion and indicators of anxiety and depression depending on the modality of remote, face-to-face or partial work, a one-factor ANOVA with Welch's correlation was used due to the lack of homoscedasticity and statistically significant differences were obtained in all the study variables, anxiety ($w(2,171.082) = 4,493$; $p = 0.013$), Depression ($w(2,171.694) = 6,192$; $p = 0.003$), Extroversion ($w(2,176.800) = 4,283$; $p = 0.015$) and Job Satisfaction ($w(2,169.378) = 7,737$; $p = 0.001$).

The statistical differences found in the variable Anxiety were between the Remote Work (mean= 10.452; S.D = 3.668) and Non-Remote Work (mean= 9.010; S.D = 2.678) groups. The statistical differences found in the variable depression were between the Remote Work (mean=11.750; S.D=4.048) and Non-Remote Work (mean=9.838; S.D=3.132) groups. In addition, the statistical differences found in the Extroversion variable were between the Remote Work (mean=7.560; S.D=4.152) and Non-Remote Work (mean=9.232; S.D=3.588) groups. Finally, the statistical differences found in the Job Satisfaction variable were between the Remote Work (mean=16.643; S.D=5.187) and Non-Remote Work (mean=19.020; S.D=3.326) groups and between the Remote Work (mean=16.643; S.D=5.187) and Partial Remote Work (mean=19.185; S.D=3.894) groups (See Table 5).

Table 5: Significant differences with the G-H test

	Yes		No		MD	p
	M	S.D	M	S.D		
Anxiety	10,452	3,668	9,010	2,678	1,442	0,009
Depression	11,750	4,048	9,838	3,132	1,912	0,002
Extraversion	7,560	4,152	9,232	3,588	-1,673	0,012
Job Satisfaction	16,643	5,187	19,020	3,326	-2,377	0,001

	Yes		Partial		MD	p-value
	Mean	S.D	Mean	S.D		
Job Satisfaction	16,643	5,187	19,185	3,894	-2,542	0,001

Note. M = Mean; SD = Standard Deviation

In order to analyse the possible relationships between the variable gender and the variables analysed in the study Anxiety, Depression, Extroversion and Job Satisfaction, the Student's t-test was used for two independent samples, finding statistically significant differences only in anxiety ($t(270,314) = -2.517$; $p=0.012$), with anxiety being higher in women (mean = 10.066; D.S.=3.469) than in men (mean = 10.066; D.S.=3.469). No statistically significant differences were found as a function of the variable Gender in the other variables Depression ($t(273,000) = -1.097$; $p=0.273$), Job Satisfaction ($t(273,000) = 0.753$; $p=0.452$) and Extroversion ($t(273,000) = 0.395$; $p=0.593$) (See Table 6).

Table 6: Student's t-test for variables according to gender.

	Men n=138		Women n=137		t	df	p
	M	SD	M	SD			
Anxiety	9,058	3,162	10,066	3,469	-2,517	270,314	0,012
Depression	10,362	3,974	10,883	3,896	-1,097	273,000	0,273
Job Satisfaction	18,543	4,022	18,153	4,557	0,753	273,000	0,452
Extraversion	8,514	4,015	8,328	3,795	0,395	273,000	0,693

M = Mean; SD = Standard Deviation; t = Student's t; df = Degrees of freedom; p = p – value

In order to analyse the possible relationships between the variable age and the quantitative study variables Anxiety, Depression, Extroversion and Job Satisfaction, Pearson's correlation test was carried out. The results show no statistically significant correlation between Age and the quantitative study variables Anxiety ($r=0.087;p=0.148$), Depression ($r=0.064;p=0.292$), Extroversion ($r=0.043;p=0.0.476$) and Job Satisfaction ($r=0.073;p=0.230$). (See Table 7)

Table 7: *Pearson's correlation test for variables according to age*

Correlations		Job Satisfaction	Anxiety	Depression	Extroversion
Age	r	-0,073	0,087	0,064	-0,043
	p	0,230	0,148	0,292	0,476

Note. r = r – pearson ; p = p – value

To analyse whether the variable residence could be related to the study variables Anxiety, Depression, Extroversion and Job Satisfaction, we used one-factor ANOVA in the case of normality of the data, and otherwise, the non-parametric Kruskal-Walis test. We observed that for the variable Job Satisfaction, the assumption of normality was met in all the groups, and a statistic was obtained by Welch's correction (since homoscedasticity was not met) that did not show evidence of statistically significant differences ($w(5,38,911) = 1.310; p=0.280$). For the variables Anxiety, Depression and Extroversion, we used the Kruskal-Walis non-parametric test, obtaining no significant differences in Anxiety ($H(5)=10.655; p=0.059$) and Extraversion ($H(5)=2.343; p=0.800$), but significant differences in Depression ($H(5)=16.659; p=0.005$). When the pairwise comparison of the different categories of the variable residence was carried out using the adjusted significance, no statistically significant differences were detected in any of them.

To analyse the relationship between the quantitative variables of the study with respect to the time spent working at remote, Spearman's r test was used, and no statistically significant association was found, as shown in table 8.

Table 8: *Spearman's correlation test for variables according to time*

Correlations	Anxiety	Depression	Job Satisfaction	Extroversion
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Time	r	0,103	0,052	0,011	0,091
	p	0,172	0,491	0,882	0,230
	N	176	176	176	176

Note. p = p – value; r = Spearman’s r

To answer the third research question of analysing the possible relationships between the variable modality of remote, on-site or partial work and the socio-demographic variables of gender, age and marital status, the chi-square test was used, and no statistically significant relationships were found with gender ($\chi(2)=3.393$; $p=0.183$), with marital status ($\chi(5)=9.816$; $p=0.081$) and with residence ($\chi(10)=13.311$; $p=0.207$). For the relationship of the modality variable with age, we used a one-factor ANOVA and did not obtain statistically significant differences either ($F(2,272) = 2.633$; $p\text{-value} = 0.074$).

Multivariate Analysis of Multiple Linear Regression

Once the bivariate relationships were analysed, with the aim of answering the fourth research question, which contemplates the possibility of creating a model to predict job satisfaction as a function of the extroversion personality trait, the anxiety and depression indicators and the variables of the work modality and the rest of the sociodemographic variables, a multiple linear regression model was developed with the intention of estimating the job satisfaction of a worker as a function of the quantitative variables of our study, Anxiety, Depression and Extroversion, and also with the qualitative variable of Distance Work.

The resulting model meets the assumptions required in multiple linear regression models, linearity between the predictor variables and the criterion variables, as well as homoscedasticity and normal distribution of the residuals. The Durbin-Watson values obtained were adequate, being between 1.5 and 2.5, thus fulfilling the assumption of independence of the residuals. The values of the tolerance index and variance inflation were adequate.

Table 9: *Multivariate Analysis of Multiple Linear Regression*

Variable criteria	r-squ.	D-W	Predictor Variables	Beta	t	p	T	VIF
Job Satisf.	0,558	1,797	(Constant)	25,428	31,549	< 0.001		
			Anxiety	-0,275	-3,092	0,002	0,336	2,975
			Depression	-0,530	-6,987	<0.001	0,333	3,003
			Extroversion	0,139	2,963	0,003	0,888	1,127
			Remote work	-0,735	-1,688	0,093	0,737	1,357
			Partial work	0,695	1,672	0,096	0,770	1,299

Note. r-square; D-W= Durbin-Watson; Beta = coefficients; t = t-student; p = p-value; T = Tolerance; FIV =Variance Inflation Factor

As seen in Table 9, the variables in the model are anxiety ($b = -0.275$; $t = -3.092$; $p = 0.002$), depression ($b = -0.530$; $t = -6.987$; $p < 0.001$), extroversion ($b = 0.139$; $t = 2.963$; $p = 0.003$), remote work ($b = -0.735$; $t = -1.688$; $p = 0.093$), and partial work ($b = -0.270$; $t = -3.063$; $p = 0.002$), which would indicate that for each unit increase in anxiety, Job Satisfaction decreases by 0.275 points, holding all other variables constant, for each unit that depression increases, Job Satisfaction decreases by 0.530 points, holding all other variables constant, for each unit that extroversion increases, Job Satisfaction increases by 0.139 points, holding all other variables constant, for working full remote, Job Satisfaction decreases by 0.735 points and for working partial remote job satisfaction increases by 0.695. This model has an adjusted r-squared of 0.478 indicating that this model would explain the variability of job satisfaction by 55.8%.

DISCUSSION

Objective 1: Relationship between the job satisfaction and the extroversion variables of personality and anxiety and depression indicators

- Hypothesis 1: it is expected that there is a statistically significant relationship between employees' job satisfaction and their levels of anxiety, depression and extroversion personality trait.

In answer to the first research question and based on the statistical analysis and the results obtained, it can be suggested that there is a statistically significant relationship between employees' job satisfaction and their levels of extroversion, anxiety and depression, and therefore, hypothesis 1 of our research is accepted.

It can be said that employees' job satisfaction is associated with and influences employees' levels of extroversion, anxiety and depression, finding that high levels of employees' job satisfaction are related to low levels of anxiety and depression and high levels of extroversion, i.e., that employees who are satisfied with their jobs enjoy good mental health due to their low levels of anxiety and depression and that employees who have a high extraversion personality trait enjoy higher job satisfaction. These results indicate that job satisfaction has a significant impact on employees' lives and is a decisive factor.

The findings seem to be in line with what has been known so far in relation to job satisfaction and levels of anxiety and depression. A study by Faragher et al. (2005) confirms that employees who score low levels of job satisfaction tend to experience emotional overload, poorer self-esteem and high levels of anxiety and depression. It stands to reason that if people spend most of their time at work and are not satisfied and are exposed to this situation on a daily basis, they will eventually develop mood and anxiety disorders, burnout and general worsening of their mental health and well-being. On the contrary, if the employee enjoys good levels of job satisfaction, his or her mental health levels will increase, with lower levels of stress, anxiety, burnout and greater psychological well-being (Faragher et al., 2013) (Cited in Pujol-Cols and Foutel, 2019).

- Hypothesis 2: employees with high job satisfaction scores are expected to have low levels of anxiety and depression.

- Hypothesis 3: employees who score high on job satisfaction are also expected to have high levels of personality trait extroversion.

Answering the first research question and based on the statistical analyses carried out and the results obtained, it can be suggested that there is a statistically significant relationship between the anxiety variable and the depression and extraversion variables, finding that employees with higher anxiety scores also have higher depression scores and a lower degree

of extraversion personality trait, i.e., they are more introverted. Based on the results obtained, hypotheses 2 and 3 of our research are accepted.

These statements obtained in our study have been widely studied in the field of psychology over the years, explaining the high comorbidity in the suffering of anxiety disorders and depression, specifically that the anxiety disorder is prior to the suffering of depression. Servant and Parquet (1994) confirmed that stressful life events are risk factors for developing depression following anxiety. Goodwin (2002) concluded that people with anxiety disorders have an increased risk of developing depressive disorders within 12 months. Furthermore, Wittchen et al. (2000) add that comorbidity between anxiety and depression is high, with anxiety disorders appearing earlier and depressive disorders later, and adds that the relationship between both pathologies is complex (Oliván Blazquez et al., 2011).

- Hypothesis 4: employees who score high on anxiety and depression are expected to score low on the personality trait extroversion.

It can also be suggested that there is a statistically significant relationship between the depression variable and the extroversion variable, finding that employees with higher levels of depression also have lower extroversion scores, i.e. they are more introverted. Based on the results obtained, hypothesis 4 of our research is accepted.

These findings are in line with what is known so far about the relationship between depression and the introversion personality trait. Many authors agree that some personality traits tend to be more vulnerable than others to experiencing mental disorders and that the promotion and acceptability of some personality traits and not others may reduce the mental health of those who do not feel unaccepted by their personality (Cheng & Furnham, 2002; Cohen, Ross, Badgy, Farvolden & Kennedy, 2004; Myers & Myers, 1995; Cohen, Ross, Badgy, Farvolden & Kennedy, 2004; Myers and Myers, 1995; Yen and Siegler, 2003) Furthermore, it is known that the specific characteristics of introverts' and extroverts' traits are related to self-esteem and self-concept and to personal and relational satisfaction, which results in mental well-being (Laney, 2005; Tieger and Barron-Tieger, 2001; Janowsky, 2001; Van Gundy and Schieman, 2001). It has been found that when introverts try to resemble

extroverts in order to fit in with society, they experience feelings of inadequacy and sadness, which can lead to depression and low self-esteem (Chioqueta and Stiles, 2005; Janowsky, 2001; Van Gundy and Schieman, 2001) (Cited in Balder, 2007).

Objective 2: Differences in the study variables job satisfaction, personality extroversion trait and indicators of anxiety and depression as a function of the modality of remote work, face-to-face or part-time, and as a function of the socio-demographic.

- Hypothesis 5: statistically significant differences are expected to exist between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of remote, partial or face-to-face work mode.

In response to the second research question and based on the statistical analyses carried out and the results obtained, it can be suggested that there are statistically significant differences between the variables in our study – job satisfaction, level of extroversion, anxiety and depression – depending on the type of work modality of the employees, remote, on-site or part-time. Based on the results obtained, hypothesis 5 of our research is accepted.

- Hypothesis 6: remote workers are expected to experience higher levels of anxiety than face-to-face workers.

- Hypothesis 7: remote workers are expected to experience higher levels of depression than face-to-face workers.

The results show that there are statistically significant differences between the anxiety levels of remote and on-site workers, suggesting that remote workers experience a higher degree of anxiety than on-site or office workers. In addition, the results also show that there are statistically significant differences between the levels of depression of remote and office-based workers, with a higher degree of depression being observed in remote workers. Based on the results obtained, hypotheses 6 and 7 of our research are accepted.

These findings are in line with previous information from the literature, confirming that although extroverted individuals adapt more quickly to change, cope better with stress than introverts and tend to experience improvements in performance and well-being (Lucas et

al., 2008), they are also the most vulnerable to depression, they are also the most vulnerable to being affected by the shift from face-to-face to remote work, as the loss of social contact and sense of loneliness typically associated with remote work (Mann and Holdsworth, 2003) drastically impacts the more extroverted. One of the most characteristic traits of extroverted individuals is sociability (Lucas et al., 2000), which is why extroverts may find it difficult to work remotely and lose regular contact with office colleagues (Swickert et al., 2002) (cited in Evans et al., 2021). According to Mann and Holdsworth (2003), those remote employees who have low social interaction in their personal lives tend to develop mental health problems, feelings of loneliness, sunstroke and depression, as well as experiencing high levels of anxiety and stress due to difficulty in establishing boundaries between work and personal life (Evanoff et al., 2020).

- Hypothesis 8: remote workers are expected to have lower scores on the extroversion personality trait.

Exploring the personality trait of extroversion, statistically significant differences were also found between remote and non-remote workers, with lower extroversion scores being observed in employees working remotely compared to employees working face-to-face or in the office, who appear to have higher extroversion scores, i.e. those working remotely are more introverted than those working in the office, the latter being more extroverted. Based on the results obtained, hypothesis 8 of our research is accepted.

These results are supported by the literature, as a study by Evans et al. (2021) states that extroverted individuals start remote work with enthusiasm and good results but that, however, over time, more extroverted employees start to be less productive, experience greater feelings of physical and mental exhaustion, become less committed to the team and the role they perform and ultimately experience less job satisfaction, which would explain why more extroverted people work or prefer to work in a face-to-face manner. This study also explains that employees with a low extroversion or introversion score experience higher job satisfaction, higher productivity, lower feelings of burnout and are more committed to work (Evans et al., 2021), which would explain why introverted people work or prefer to work remotely.

- Hypothesis 9: remote workers are expected to have lower scores on job satisfaction than workers working in a face-to-face or part-time mode.

Looking at the job satisfaction variable, statistically significant differences were found between the job satisfaction of remote and non-remote workers, and also between remote workers and partially remote workers. These differences suggest that remote workers have lower job satisfaction than employees who work in the office, and that employees who work part-time at home or in the office have higher job satisfaction than those who work from home. Based on the results obtained, hypothesis 9 of our research is accepted.

These results are in line with what Golden and Veiga (2005) found in their study, stating that remote workers' job satisfaction tends to increase at the beginning of remote work performance, but that once a certain point is reached, it tends to decrease, due to the loss of social connections with colleagues and the isolation of working from home.

- Hypothesis 10: it is expected that there are statistically significant differences between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of gender.

To continue answering our second research question regarding the statistical differences between the study variables job satisfaction, anxiety, depression and extraversion and the gender variable, it can be suggested based on the analyses carried out and the results obtained that there are only significant differences in the anxiety variable, with anxiety being higher in women than in men. Based on the results obtained, we conclude that Hypothesis 10 is partially accepted, since there are only significant differences between anxiety levels and gender.

These results are supported by the information already obtained from numerous psychology researches in which they state that women of reproductive age are approximately 2 to 3 times more likely to develop anxiety disorders than men, with 17.5% of women developing anxiety disorders compared to 9.5% of men during their lifetime (Alonso et al., 2004; Carrasco-Galán and Espinar-Fellmann, 2008). Furthermore, gender is known to influence not only the prevalence of mental disorders, but also the manifestation of their symptoms, prognosis and treatment response (Phillips and First, 2009; Wisner and Dolan-

Sewell, 2009). This tendency could be explained by several factors such as psychosocial and socio-cultural factors, which have a decisive influence on the sexual role a person adopts, the type of coping, poverty, education, salary, marital status, social support network, childhood, vulnerability and traumatic or stressful life experiences. Other factors would have to do with genetics, personality, sex hormones, stress and the person's neurotransmitter systems (Grant and Weissman, 2009).

- Hypothesis 11: it is expected that there are statistically significant differences between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of age.

The data obtained suggest that there are no differences between the age variable and the study variables anxiety, depression, extroversion and job satisfaction, thus explaining that the age of the employees does not positively or negatively influence the levels of anxiety and depression experienced, the extroversion personality trait and the degree of job satisfaction. Therefore, based on the results obtained, we conclude that Hypothesis 11 is rejected.

These results are quite predictable, because the variables analysed are experiences and characteristics that people possess at different stages of life regardless of the age an individual possesses.

- Hypothesis 12: statistically significant differences are expected to exist between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of the way they live.

No statistically significant differences were found between the type of residence variable and the study variables anxiety, depression, extroversion and job satisfaction, i.e. the levels of anxiety and depression, the extraversion trait and the level of job satisfaction of employees will not be influenced by whether the employee lives alone, with parents, as a couple, with friends or with his or her own family. Therefore, based on the results obtained, we conclude that Hypothesis 12 is rejected.

Some of these results contradict what the literature has so far stated about the conditions in which the employee lives and their well-being or their levels of anxiety and depression, as it has been found in a study by Schifano et al. (2021) that employees working from home who have children or who live in crowded houses have better well-being, affecting their levels of anxiety and depression.

- Hypothesis 13: statistically significant differences are expected to exist between the study variables job satisfaction, anxiety, depression and extroversion personality trait as a function of time worked remotely.

There were also no statistically significant differences between remote employees' levels of anxiety and depression, trait extraversion and job satisfaction as a function of time spent working remotely, i.e. remote employees' well-being explained by their anxiety and depression, their degree of extraversion and their job satisfaction does not vary over time, with no differences between remote employees who have been working remotely for a few months and remote workers who have been working remotely for more than two years. Therefore, based on the results obtained, we conclude that Hypothesis 13 is rejected.

Some of this data contradicts what the literature has so far reported regarding remote workers' job satisfaction and the length of time they have been working from home, as Golden and Veiga stated in their 2005 study that remote workers' satisfaction tended to decrease over time due to disconnection from social relationships and isolation.

Objective 3: Relationships between the remote, on-site or part-time work mode variable and the socio-demographic variables of gender, age and marital status

- Hypothesis 14: Statistically significant differences are expected to be obtained between the type of work modality (remote, face-to-face or partial) and the sociodemographic variables of gender, age, marital status and residence.

In response to the third research question and based on the statistical analyses performed and the results obtained, it can be suggested that there are no statistically significant differences between the types of remote, face-to-face and part-time work and the

socio-demographic variables of gender, age, marital status and residence. Therefore, based on the results obtained, we conclude that Hypothesis 14 is rejected.

These results explain that male and female employees, of all ages, single or with a partner and living under any of the circumstances studied in the research, work in the office, at home or part-time without distinction.

Objective 4: Model to predict job satisfaction as a function of the personality trait of extroversion, the variable of remote, face-to-face or part-time work, the indicators of anxiety and depression and the socio-demographic variables.

- Hypothesis 15: It is expected to create a model that confirms that anxiety is a good predictor of low employee job satisfaction.

- Hypothesis 16: It is expected to create a model that confirms that depression is a good predictor of low employee job satisfaction.

- Hypothesis 17: it is expected to create a model that confirms that the extroversion personality trait is a good predictor of high employee job satisfaction.

- Hypothesis 18: it is expected to create a model that confirms that remote work is a good predictor of low employee job satisfaction.

- Hypothesis 19: It is expected to create a model that confirms that partial work is a good predictor of high employee job satisfaction

In response to the fourth research question, which considers the possibility of creating a model to predict job satisfaction based on the extroversion personality trait, anxiety and depression indicators and work mode variables and the rest of the socio-demographic variables, it can be suggested that based on the results obtained, a model can be created that confirms that suffering from anxiety is a good predictor of low employee job satisfaction, that suffering from depression is a good predictor of low employee job satisfaction, that the personality trait of extroversion is a good predictor of high employee job satisfaction, that remote work mode is a good predictor of low employee job satisfaction, and that partial

remote work mode is a good predictor of high employee job satisfaction. Therefore, based on the results obtained, we conclude that Hypothesis 15, 16, 17, 18 and 19 are accepted.

These results are supported by linear regression models previously explored in the literature, which confirms that job satisfaction explains 24% of changes in employee burnout syndrome, i.e. the higher the job satisfaction, the lower the employee burnout (Gomez-Perdomo, 2017). Furthermore, it is also known that job satisfaction explains 35% of the changes in emotional exhaustion, i.e. the higher the job satisfaction, the lower the emotional exhaustion experienced by employees (Gomez-Perdomo, 2017).

CONCLUSION

This study highlights once again the importance of job satisfaction for people throughout the working population's lives. Performing a job that satisfies the employee is crucial for the well-being and mental health of workers, as it has been found that employees who work unhappily in their job experience symptoms related to anxiety, depression, emotional overload and burnout. Furthermore, this research confirms that employee anxiety is a good predictor of low job satisfaction.

The emergence of a new way of understanding work and the implementation of remote work in the wake of Covid-19 has raised much interest in whether remote workers experience better job satisfaction and well-being, irrespective of the personal and professional advantages and disadvantages of working from home. This study confirms that remote working is a good predictor of low employee job satisfaction. The data obtained suggest that employees who work remotely have lower job satisfaction than those who work in person or part-time and also have a higher degree of anxiety and depression, due to the difficulty in setting boundaries between personal and professional life and the feeling of loneliness due to isolation.

The study of the influence of personality traits as a factor to be taken into account when assessing the well-being and job satisfaction of remote employees has been little explored so far. Thanks to this study, we now know that the personality trait extroversion is a good predictor of employee job satisfaction. In addition, it is confirmed that introverted employees experience more anxious and depressive symptoms than extroverted employees.

However, when employees work from home, it is the extroverts who experience higher levels of anxiety and depression due to the lack of social contact, while introverts experience an improvement of these symptoms. It is for this reason that more introverts than extroverts work remotely.

Overall, it seems that remote working should not be a measure to be implemented permanently by organisations as it has a negative impact on job satisfaction and well-being of employees, especially the more extroverted ones. Partial remote working could be a good measure to accommodate employees with different personality types and needs, offering the employee flexibility to work remotely or face-to-face when it suits them, providing the perfect balance for both employees and employers.

Unfortunately, certain historical events have been unfolding for several months now and the consequences for Europe are proving to be very hard on an economic and social level. The current war between Russia and Ukraine has triggered an energy crisis of major gravity for the European continent, the pressure from Brussels with its energy saving plan forces many European countries to reduce gas consumption by up to 15% (El pais, 2022), causing a large part of European companies to rethink remote working again due to the rising CPI and the high cost of basic energies, taking into account the high costs for them to open their offices. Implementing remote working on a permanent basis may pose a danger to workers' well-being in the long term, so it would be important for governments and organisations to develop prevention programmes and strategies to mitigate the effects of remote working on mental health.

LIMITATIONS AND FUTURE SUGGESTIONS

The first limitation encountered by the researcher is the difficulty to determine the causal relationship of the variables due to the use of a cross-sectional research method, nor to analyse the changes of the studied variables job satisfaction, anxiety, depression, extroversion and sociodemographic variables over time.

The limitations of the research include the difficulty in finding a larger and more representative sample that includes employees from all sectors and not only participants working in multinational companies, as their job satisfaction may be different from the

general population due to strong talent retention strategies and benefits packages that impact on job satisfaction. In addition, the sample has been obtained in a non-probabilistic way, with the participation in the study of those people who were available, so it is important to take into account possible biases by including in the study a very homogeneous sample of similar professional profiles. The participation in the study of a more heterogeneous sample of workers from all sectors and all professions in future research would give us a more complete picture of the phenomenon of job satisfaction associated with the study variables.

Job satisfaction is a concept that encompasses a wide variety of factors such as job satisfaction, learning and promotion capacity, salary, benefits, work environment and relationships with colleagues, corporate culture, among others, so it would be interesting to apply in future research an instrument that not only assesses overall job satisfaction, but also provides information about those factors that contribute more or less to employees being satisfied with their work.

Another limitation to be taken into account is the assessment of anxiety and depression levels of post-pandemic employees, as the depressive symptomatology experienced may be associated with the loss of a loved one or the loss of support network and friendships due to quarantine. In addition, typically anxious symptomatology such as breathing difficulties may be due to the after-effects of Covid-19 disease, so the results of our study may be affected. Thus, I would suggest that this research be conducted at a time when the aftermath of the pandemic is in the past.

The need for a single data collection instrument that included remote, face-to-face and part-time workers has limited the possibility of analysing the remote working phenomenon in detail and obtaining information about the factors that influence employees' motivation and preference to work remotely. In future research, I suggest developing a questionnaire with specific questions about employees' motivations and preferences for remote work to find out whether employees actually enjoy the experience or whether they choose remote work because it is an advantage for other areas of their lives.

Finally, the lack of studies on the relationship between remote work satisfaction and personality traits in the literature has been a limitation of the study, as only the extroversion personality trait has been assessed, and there is hardly any literature that takes into account

other traits to support the results of the study. In future research it would be interesting to assess the possible relationship between all personality traits (Honesty-Humility, Emotionality, Extroversion, Agreeableness, Conscientiousness and Openness to Experience) and job satisfaction of remote workers, as this would reveal which personality types are more suited to each work mode.

RECOMMENDATIONS AND IMPLICATIONS OF FINDINGS

The aim of this dissertation has been to know the possible influence of the extroversion trait of the personality on the job satisfaction of remote workers and how this can influence the levels of anxiety and depression of employees. The results obtained allow us to understand that remote work does not affect all employees in the same way, affecting more the well-being and job satisfaction of the more extroverted ones. For this reason, it would be advisable for organizations wishing to implement remote work partially or permanently to encourage human resources departments to develop a prevention plan and implement new strategies to ensure the well-being of their employees.

It is advisable that the prevention and strategy implementation plan follow the following recommendations:

- Hiring a specialized clinical psychologist to conduct personality, anxiety, depression and job satisfaction assessment tests on employees for an estimated period of time. Subsequently, employees would receive feedback on the results obtained and recommendations of the work modality to adopt based on their personality and well-being levels. Depending on the number of employees it would be necessary to hire this service more or less hours, but making an estimate it could be said that the psychological evaluation process could last a week, so the costs would amount to 2000 euros per evaluation session, taking into account that the cost is 50 euros per hour.
- Implementation of remote work, in-office presence or partial work for all those who wish to do so.

- Monthly psychological session of one hour duration for those remote workers who need it and application of a specific treatment plan for the work area. This measure would involve a cost of 50 euros for each psychological session with each employee.
- Monthly reimbursement of electricity and internet costs, as well as office furniture and computer. This measure would mitigate the economic stress experienced in households. An amount of 160 euros would be reimbursed for the monthly internet and electricity bill. In addition, the employee would be provided with a Mac computer valued at 1800 euros, and a reimbursement of 500 euros for office furniture.
- Hours off on a quarterly basis so that employees can invest them in activities related to their wellbeing and mental health such as meditation, yoga, sports, etc. The hours off would be paid as if the worker were working, so the cost of this strategy depends on the worker's hourly wage.
- Monthly meeting of all employees in the office to facilitate interaction, socialization and engagement. During this meeting, activities that enhance the participation of all employees such as talks, games, dinners or lunches would be carried out. This strategy will cost the organization 20 euros per employee.

It is advisable that this prevention plan be implemented as soon as possible and within a maximum period of 2 months, evaluating the implementation costs for each employee. These strategies should be implemented quickly because the change of season will soon begin, employees will reduce their summer activities and social interactions that mitigate the possible symptoms of depression and anxiety, and give way to isolation. In addition, having satisfied and mentally healthy employees is very important and beneficial for organizations, as they are more productive and more committed, which would help talent retention. In addition, it is advisable to perform a psychological evaluation of the employees' condition every 6 months, to see the improvement or worsening of job satisfaction and symptoms.

PERSONAL LEARNING STATEMENT

Thanks to this dissertation I have developed my research skills and I have acquired a better knowledge about remote work, its advantages and disadvantages, as well as the importance of acquiring the modality of work that best suits oneself.

During the research process I have acquired new skills such as searching for literature review in various databases, developing and applying questionnaires, the ethical issues of a study, the advantages and disadvantages of different types of sample selection and research methods, analysing statistical data, performing different statistical tests and interpreting the results, as well as writing and synthesis skills. I can affirm that the present dissertation has awakened my interest in the field of research in relation to human resources and psychology topics.

As aspects to improve in order to carry out the project more effectively, I would include a more realistic estimate of research time, since I have had unexpected contingencies such as the refusal of three multinationals for the application of the questionnaires to employees, as well as the difficulty in obtaining a representative sample of the three modalities of remote, face-to-face and partial work. In addition, conducting a research project in a language other than the native language sometimes makes it difficult to understand the literature review in its entirety, slows down the writing stage of the dissertation and hinders the fluency of the writing, so I would improve this drawback by checking the writing with a native English speaker.

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APPENDICES

Office Work, Remote Work and Personality

First of all I would like to thank you for your dedication and participation in this research.

The aim of the study is to find out your honest opinion about office work and remote work.

To this end, you will be asked a series of questions. The questionnaire is ANONYMOUS and the information provided is TOTALLY CONFIDENTIAL. Therefore, please answer the following questions as honestly as possible. There are no right or wrong answers, all answers are valid. It takes most people about 5-10 minutes to complete the form, but you can take as much time as you need.

Don't forget to hit "SEND" when you get to the end. If you agree with what is mentioned here click "NEXT".

Demographic Data

Let's start by gathering information about you.

1. Gender
 - A. Man
 - B. Woman
 - C. Other
2. Age
3. Nationality
4. Marital Status

- A. Single
- B. In a Relationship
- C. Married
- D. Divorced
- E. Widow

5. Residence

- A. I live alone
- B. I live with my parents
- C. I live with friend/friends
- D. I live with my partner
- E. I live with my own Family (Partner and Children/ Children without partner)
- F. Other

6. Are you currently working remotely?

- A. Yes
- B. Partial: Working remotely and working from office
- C. No

7. Do you have adequate space to work at home?

- A. Yes
- B. No

8. If you work remotely or partially remotely, how long have you been working in this way?

- A. 0-6 months
- B. 6-12 months
- C. 12-18 months
- D. More than 18 months
- E. I don't work remotely

Job Satisfaction Survey - Brayfield & Rothe

Next, you will be asked a set of questions related to your current level of job satisfaction. You should answer depending on the degree to which you agree or disagree with the following statements. Remember that there are no right or wrong answers, all answers are valid for the research.

1. I am quite satisfied with my current job.
 - A. Strongly disagree
 - B. Disagree
 - C. Neither agree nor disagree
 - D. Agree
 - E. Strongly agree

2. Most days I am enthusiastic about my work.
 - A. Strongly disagree
 - B. Disagree
 - C. Neither agree nor disagree
 - D. Agree
 - E. Strongly agree

3. Every working day seems like it will never end.
 - A. Strongly disagree
 - B. Disagree
 - C. Neither agree nor disagree
 - D. Agree
 - E. Strongly agree

4. I really enjoy my work
 - A. Strongly disagree

- B. Disagree
- C. Neither agree nor disagree
- D. Agree
- E. Strongly agree

5. I consider my job to be rather unpleasant.

- A. Strongly disagree
- B. Disagree
- C. Neither agree nor disagree
- D. Agree
- E. Strongly agree

DASS-21

Please read each statement and press a response that indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

NEVER - Did not apply to me at all

SOMETIMES - Applied to me to some degree, or some of the time

OFTEN - Applied to me to a considerable degree, or a good part of time

ALMOST ALWAYS - Applied to me very much, or most of the time

1. I was aware of dryness of my mouth

- A. Never
- B. Sometimes
- C. Often
- D. Almost always

2. I couldn't seem to experience any positive feeling at all

- A. Never

- B. Sometimes
 - C. Often
 - D. Almost always
3. I experienced breathing difficulty (eg, excessively rapid breathing ,breathlessness in the absence of physical exertion)
- A. Never
 - B. Sometimes
 - C. Often
 - D. Almost always
4. I found it difficult to work up the initiative to do things
- A. Never
 - B. Sometimes
 - C. Often
 - D. Almost always
5. I experienced trembling (eg, in the hands)
- A. Never
 - B. Sometimes
 - C. Often
 - D. Almost always
6. I was worried about situations in which I might panic and make a fool of myself
- A. Never
 - B. Sometimes
 - C. Often
 - D. Almost always
7. I felt that I had nothing to look forward to

- A. Never
- B. Sometimes
- C. Often
- D. Almost always

8. I felt down-hearted and sad

- A. Never
- B. Sometimes
- C. Often
- D. Almost always

9. I felt I was close to panic

- A. Never
- B. Sometimes
- C. Often
- D. Almost always

10. I was unable to become enthusiastic about anything

- A. Never
- B. Sometimes
- C. Often
- D. Almost always

11. I felt I wasn't worth much as a person

- A. Never
- B. Sometimes
- C. Often
- D. Almost always

12. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)

- A. Never
- B. Sometimes
- C. Often
- D. Almost always

13. I felt scared without any good reason

- A. Never
- B. Sometimes
- C. Often
- D. Almost always

14. I felt that life was meaningless

- A. Never
- B. Sometimes
- C. Often
- D. Almost always

Eysenck's Questionnaire

Here are some questions about the way you behave, feel and act. Each question has options to answer YES or NO. Try to decide whether YES or NO represents your usual way of acting or feeling. Work quickly and don't waste too much time on any one question, we want your first reaction, not a lengthy thought process.

1. Are you a talkative person?

- A. Yes
- B. No

2. Are you rather lively?

A. Yes

B. No

3. Do you enjoy meeting new people?

A. Yes

B. No

4. Can you usually let yourself go and enjoy yourself at a lively party?

A. Yes

B. No

5. Do you usually take the initiative in making new friends?

A. Yes

B. No

6. Can you easily get some life into a rather dull party?

A. Yes

B. No

7. Do you tend to keep in the background on social occasions?

A. Yes

B. No

8. Do you like mixing with people?

A. Yes

B. No

9. Do you like plenty of bustle and excitement around you?

A. Yes

B. No

10. Are you mostly quiet when you are with other people?

A. Yes

B. No

11. Do other people think of you as being very lively?

A. Yes

B. No

12. Can you get a party going?

A. Yes

B. No