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## Multidimensional Aspects Affecting the Level of Employee Satisfaction with Remote Work

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**Abstract:**

**Purpose:** The article attempts to assess the multivariable factors influencing the level of satisfaction of employees with the work they perform.

**Design/Methodology/Approach:** The study was conducted in 2021 on a random sample of 740 respondents using a questionnaire. The method used in the study was CAWI. At the first stage of the analysis, attempts were made to determine the variables influencing satisfaction with remote work performed. For this purpose, a structural model was estimated using the maximum likelihood method.

**Findings:** A set of variables that affect employee's satisfaction with the work performed was identified, and the strength of influence between endogenous variables was shown.

**Practical Implications:** The research results show that the employer should emphasize the excellent support of employees because it will result in a higher degree of satisfaction with remote work. These variables should also be systematically monitored and analyzed as this would be mutually beneficial for both employers and employees and would contribute to the effectiveness of remote work.

**Originality/Value:** First work of each own with several variables not being considered by other researchers in the past.

**Keywords:** Remote work, job satisfaction, human resource, Internet, entrepreneurship.

**JEL codes:** J28, M54, E24.

**Paper type:** Research article.

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## **1. Introduction**

Unpredictable environmental conditions, the growing importance of interdependencies between economic entities, deepening globalization, rapid technical and technological progress, and above all, the outbreak of the COVID-19 epidemic implies tough challenges for modern enterprises that constantly try to increase work efficiency by affecting the employee using various incentives (economic and non-economic). At the same time, remote work is becoming an increasingly popular form of work, and it has several effects on employee aspects.

The article aims to determine the aspects affecting the level of employee satisfaction with remote work. The paper presents the results of a survey conducted in January 2021 using CAWI techniques. The conducted research allowed the authors to estimate a structural model using the maximum likelihood method. It allowed for determining the variables affecting employee satisfaction with remote work and illustrating the strength of influence between endogenous variables. Resolving these dependencies will allow for highlighting the most critical factors to the employee when performing remote work and, at the same time, contribute to achieving it thoroughly.

## **2. Literature Review**

### **2.1 Employee Aspects as Part of the Company's Strategy**

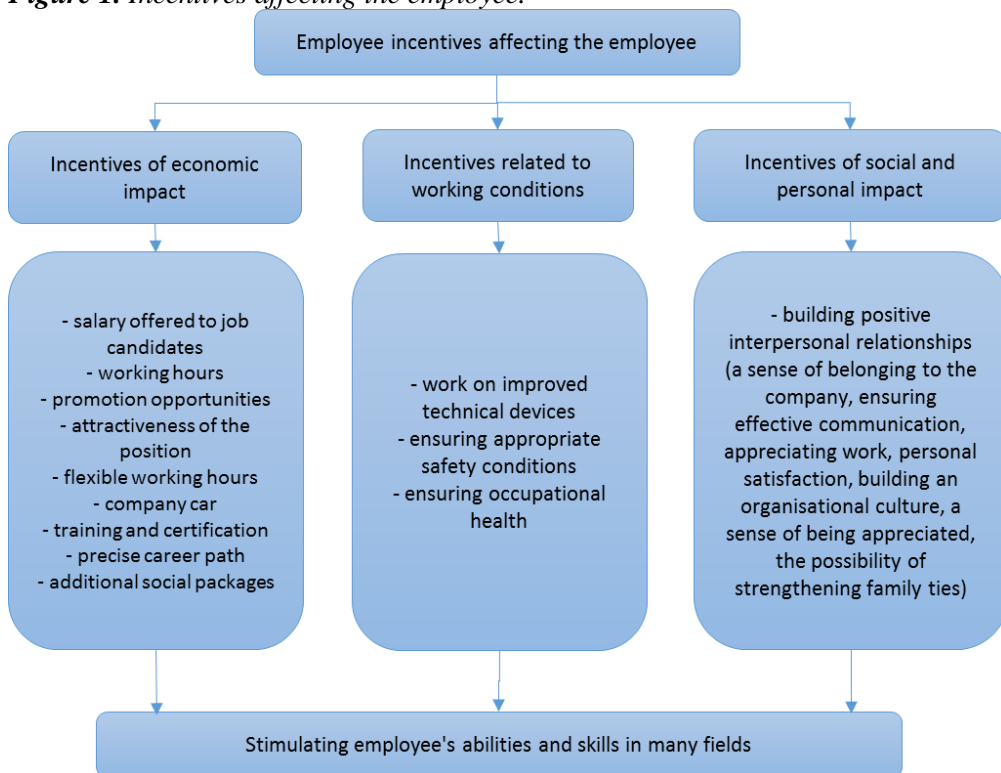
Due to the turbulent business reality, modern enterprises should adapt to new, unpredictable operating conditions. They also have to cope with the arising challenges and difficulties. The desire to find new methods of ensuring the company a stable market position has increased the interest in the importance of human capital in building a competitive advantage in the market. The process of building organizational cultures in organizations plays a vital role in creating human capital (Aarikka-Stenroos, 2014; Gabriel, Korczynski, and Rieder, 2015).

In line with this idea, employed workers should be treated as a vital resource of every enterprise. They determine the organization's success and thus shape its competitive position in the market (Danneels and Kleinschmidt, 2016). Contemporary organizations must face turbulent market conditions in a rapidly changing market environment. Hence, they should develop effective ways to survive in such an environment (Kathuria and Partovi, 2009). Therefore, a necessary condition is constantly investing in the employee, continually increasing their qualifications, skills, and abilities (Sumukadas and Sawhney, 2012). Employees committed to the performance of their duties and managing staff members effectively in a knowledge-based organization contribute to achieving a competitive advantage (Krull and Mackinnon, 2016). The priority of any enterprise should be to strengthen the abilities, knowledge, and skills of the employee and treat them as a potential source of unlimited opportunities, material, and non-material benefits (Luthar, 2012). It is the employee who becomes the resource through which the organization gains

strength. Therefore, they can be considered an essential resource of any organization. It becomes crucial to realize that work affects employee satisfaction in a multidimensional way, in various aspects, both material and non-material (Gabriel, Korczynski, and Rieder, 2015).

Modern trends in human resource management assume that superiors should individualize the incentives listed above and try to use potential abilities inherent in every employee (Bagozzi, 2012), as well as engage in the implementation of some personal goals of their employees related to the company's aspirations (Almahamid, Awwad, and McAdams, 2010). The possible effects of human resource management should undoubtedly be considered in forming and implementing the enterprise's organizational strategy (Ofogebu and Akanbi, 2012). Considering that even the most modern technologies are depreciated, and the competition can take over the remaining capital, the company should focus on its employees, their development, and abilities, bearing in mind that human capital is the most critical asset of the organization (Sułkowski, Seliga, and Woźniak, 2016). Work should stimulate their abilities in many fields of activity. These areas are listed in Figure 1.

**Figure 1.** Incentives affecting the employee.



**Source:** Own creation.

Modern trends in human resource management assume the individualization of the incentives listed above. Only then can the enterprise use the potential abilities inherent in each employee and engage in the implementation of specific personal goals of the employees related to the company's aspirations (Gitling, 2013).

Considering the assumptions of modern concepts of human resource management, the relationship between work and the employee who provides it should be considered in terms of the mutual feedback between the superior and the subordinate (Wołk, 2009). Subordinates will certainly behave by the requirements of their superior when, while performing their work, they will be guaranteed the possibility of implementing their value systems (Roberts and Grover, 2012). In turn, the superior who wants to manage their staff correctly must learn about the expectations of their employees, which are a function of their characteristics. The supervisor should also have a wide range of previously specified incentives to offer and skillfully apply them in practice (Krull and MacKinnon, 2016).

Therefore, in the current economic reality, only enterprises that will build appropriate interpersonal relationships at work and provide fair working conditions for their employees can survive and develop dynamically. Employees' knowledge, skills, and competencies should be recognized as the most important source of a company's competitive advantage (Yang and Liu, 2012).

However, in a turbulent business environment, organizations face uncertainty, and therefore employees are expected to have appropriate skills, among which digital competencies play an essential role (Olesiński, Rzepka, and Olak, 2017). Due to the ongoing COVID-19 pandemic, an increasing number of employees are working remotely.

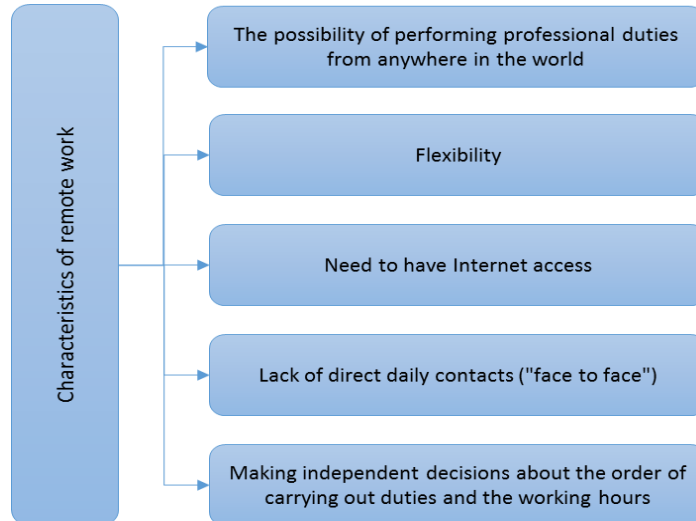
## **2.2 The Essence of Remote Work**

J. Nilles is one of the most outstanding researchers and promoters of remote work (Bayarama and Dijks, 2012). According to his definition and European Union regulations, remote work (teleworking) is a form of work outside the employer's office with the use of information technology in a place convenient for the employee and meeting the employer's requirements, so that the employee has the possibility of this form of cooperation at least one day a week (Gisch and Robertson, 2013).

This definition considers the essential elements of remote work while emphasizing the minimum amount of time during which the employee can (and not the obligation) perform telework (Zineldin and Hytter, 2012). In addition, it describes more precisely the place of telework, which should be determined by the employee performing remote work, but at the same time should meet the requirements of the employer. When employers adopt remote work, the focus is on the work results, not on the time when teleworking was performed (Gunasekera, 2020).

Remote work is based on sending work results electronically and storing company data outside the company's premises. This undoubtedly affects the necessity to adjust the security procedures in the company. Features of remote work are presented in Figure 2.

**Figure 2.** Remote work characteristics



*Source:* Own creation.

The primary conditions for the provision of remote work include implementation of cooperation mechanisms adequate to the expectations of the labor market, increasing the flexibility of the company's operation, the positive impact of widely used remote work on environmental protection (Ozkan and Solmaz, 2015).

The management style and the ways of cooperation between employees and the company have changed dynamically over the years. The development of competencies leading to success is closely related to giving the company a new internal architecture, direct and open communication, information and knowledge flow processes, employee learning, and the company's openness to new forms of cooperation, e.g., remote work (Mencl and Lester, 2014).

The adaptation of internal processes in the enterprise to employees' expectations through remote work allows companies to adapt to the current needs of the labor market. By meeting market expectations through implementing remote work, it is also possible to increase the flexibility of the company's operation.

### 3. Research Methodology

In January 2021, scientific research was carried out to determine employee satisfaction with remote work. The analysis covered working time, work efficiency,

employee earnings, supervision from the superior, physical, and mental fatigue, stress level, free time to rest, and physical activity. The study also covered the impact of remote work on the shaping of interpersonal relationships. A hypothesis was put forward that the level of satisfaction with remote work is a derivative of many aspects, both economic and non-economic. There is also a strength of influence between endogenous variables. The knowledge about these matters draws a picture of the impact of individual issues on satisfaction with remote work.

To achieve the research goals and verify the hypothesis, primary research was carried out using the survey method. In January 2021, a questionnaire was sent to respondents via the Internet. The standards of the CAWI technique were used during the study. Survey results were compiled with the help of the SPSS Statistic program.

The research results will considerably contribute to the process of increasing the satisfaction and comfort of work of an employee performing remote work. This topic was taken up due to its up-to-date nature and great significance, and a noticeable research gap in this area. The research sample consisted of 740 people, also characterized by several variables listed in Table 1. From the point of view of the subject matter discussed in this article, it was necessary, among other things, to characterize the professional activity of the people included in the study.

**Table 1.** Socio-demographic characteristics of respondents.

Variables		Frequency N = 740	Percentage %	
1	Sex	Male	356	48.1
		Female	384	51.9
		Total	740	100
2	Generation	X	10	1.5
		Y	93	12.5
		Z	637	86
		Total	740	100
3	Level of studies	1 <sup>st</sup> degree – bachelor	464	62.5
		1 <sup>st</sup> degree – engineering	266	36
		2 <sup>nd</sup> degree - master's degree	10	1.5
		Total	740	100
4	Employment status	Full-time contract	405	54.7
		Job order contract	136	18.3
		Self-employed	33	4.5
		Non-active	166	22.5
		Total	740	100
5	Expected form of employment	Full-time contract	443	60
		Job order contract	102	13.7
		Freelancer	49	6.6
		Self-employment	146	19.7
		Total	740	100

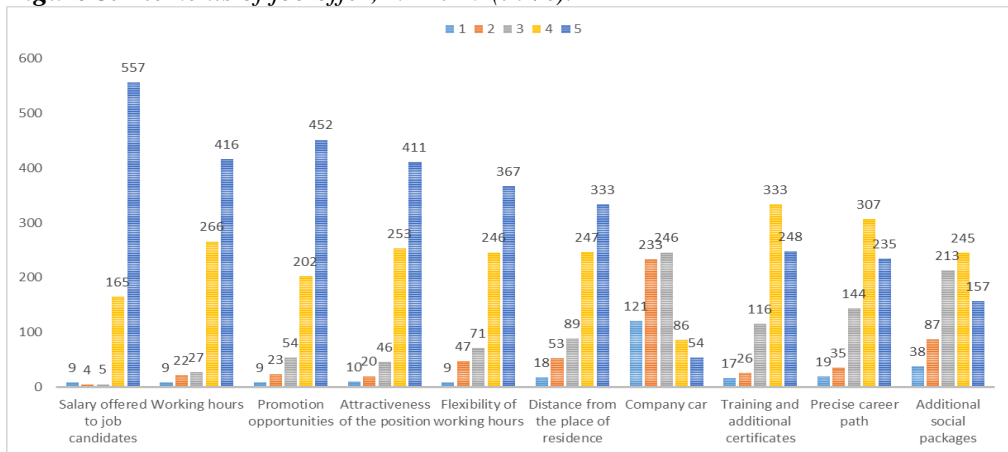
		Sole proprietorship	201	27.2
		Small family business - up to 10 employees	94	12.7
7	Expected place of employment	Middle-sized company - up to 100 employees	200	27
		Big company - up to 1000 employees	88	11.9
		International corporation	157	21.2
		Total	740	100
3	Model of work	Traditional	233	31.5
		Hybrid	85	11.5
		Remote	422	57
		Total	740	100

Source: Own study.

#### 4. Results and Discussion

The first step was to list the issues important to the employee in the job offer. The respondents considered the salary offered to job candidates to be the most important. Working hours, promotion opportunities, the position's attractiveness, and flexible working hours are also necessary. Likert scale 1 – 5 was used to estimate measured issues, where 1 was negative, while 5 was positive. The exact specification of the percentage significance of individual aspects is presented in Figure 3.

Figure 3. Elements of job offer, N = 740 (in %).

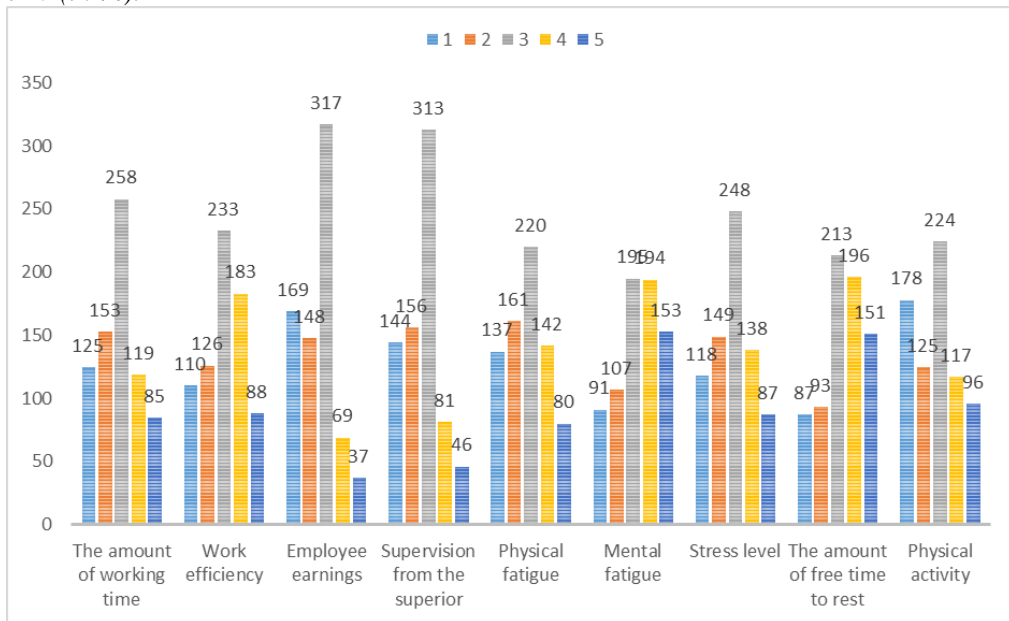


Source: Own creation.

The study was aimed at determining the effects of remote work on the employee and verified its impact on increasing the following aspects: the amount of working time; work efficiency; employee earnings; supervision from the superior; physical fatigue; mental fatigue; stress level; the amount of free time to rest and physical activity.

The most significant number of respondents admitted that remote work is irrelevant to the issues mentioned above. However, when it comes to aspects such as the impact of remote work on mental fatigue or the amount of free time, a large group of respondents had a completely different opinion. Again, the Likert scale 1 – 5 was used to estimate measured issues, where one was negative, 5 – definitely positive. The exact distribution of the answers is shown in Figure 4.

**Figure 4.** The impact of remote work on the intensification of selected aspects, N = 740 (in %).

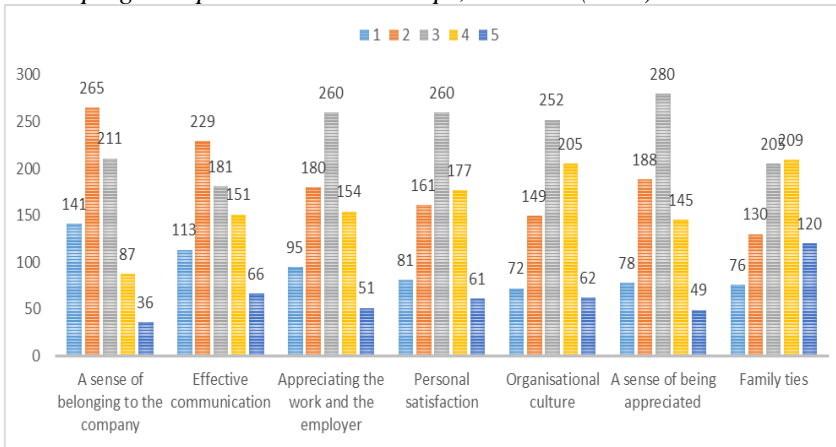


**Source:** Own creation.

An essential part of the study was to determine the impact of remote work on interpersonal relationships developed in employment. The analysis covered such issues as: - a sense of belonging to the company; - effective communication; - appreciating the work and the employer; - personal satisfaction; - organizational culture; - a feeling of being valued and - family ties. Most respondents think that remote work does not build a sense of belonging to the company and does not contribute to effective communication. The situation is different in building family ties, where surprisingly, many respondents believe that remote work strengthens such relations. At the same time, only a slightly lower number of people have a completely different opinion on this issue. In the case of problems such as the impact of remote work on the intensification of the appreciation of work and the employer, increased personal satisfaction and sense of being appreciated, and building organizational culture, the most significant part of the respondents do not have an opinion on this subject. The exact distribution of respondents' answers in terms of the impact of remote work on building selected aspects in developing interpersonal relationships is shown in Figure 5.



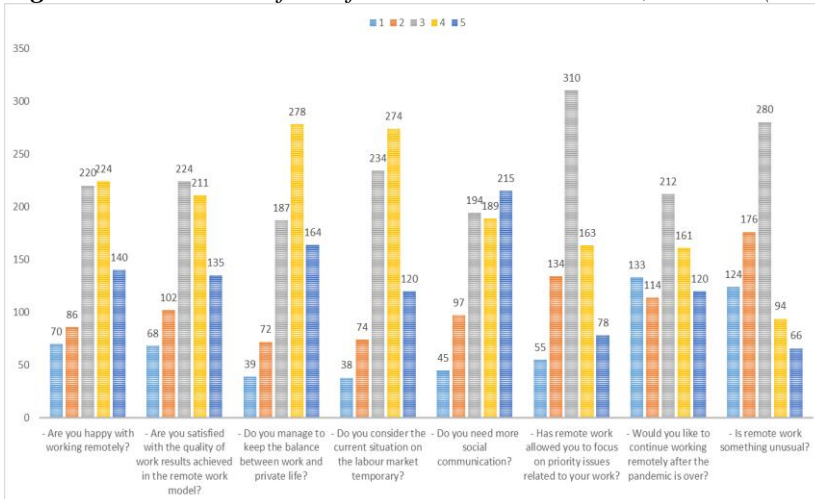
**Figure 5.** The impact of remote work on building selected aspects in the field of developing interpersonal relationships, N = 740 (in %).



**Source:** Own creation.

The issue of employee satisfaction with the remote work performed by them was also analyzed. The results are optimistic in this regard. The respondents remain somewhat satisfied with small work. They usually manage to keep the balance between work and private life. They also mainly treat the current market situation as temporary. People included in the study also report the need to intensify social communication. When it comes to aspects such as focusing on priority work-related issues, the willingness to continue working remotely after the pandemic is over, and treating remote work as something unusual, respondents often did not have an opinion. The picture of the respondents' views on satisfaction with remote work is presented in Figure 6.

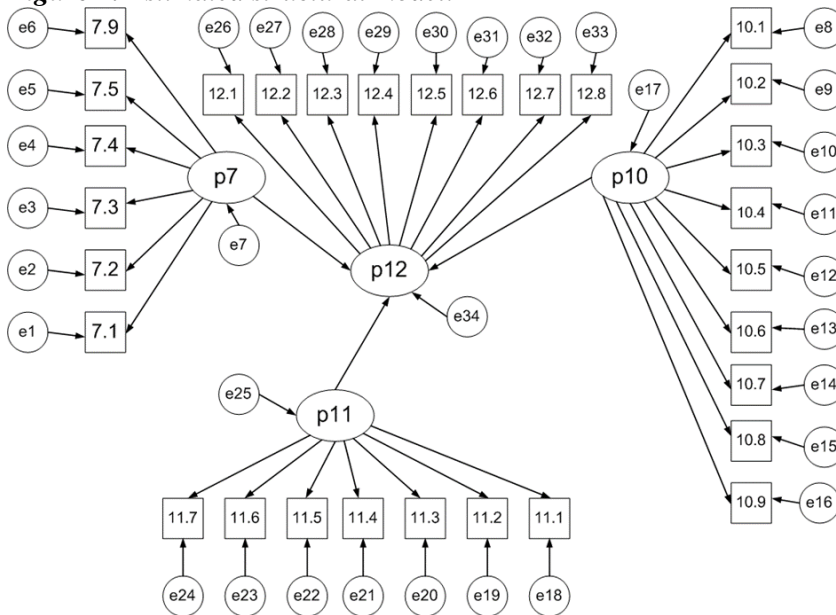
**Figure 6.** Assessment of satisfaction with remote work, N = 740 (in %).



**Source:** Own creation.

Based on the conducted research, attempts were made to determine which variables affect the level of satisfaction with remote work. An attempt was also made to illustrate the strength of influence between these variables. For this purpose, a structural model was estimated using the maximum likelihood method (Fig. 7). There was no reason to reject the null hypothesis that the residual values of the empirical and theoretical matrix are equal to zero ( $\chi^2 = 2014.95$ ;  $p = 0.001$ ). A root means square error of approximation (RMSEA) = 0.074 indicates that the model fits the data well.

**Figure 7.** Estimated structural model.



**Source:** Own creation.

The structural model estimated with the maximum likelihood method includes the following:

- observable endogenous variables:

7\_1 - Salary offered to job candidates; 7\_2 - Working hours; 7\_3 - Promotion opportunities; 7\_4 - Attractiveness of the position; 7\_5 - Flexible working hours; 7\_9 - Precise career path; 10\_1 - Amount of working time; 10\_2 - Work efficiency; 10\_3 - Employee earnings; 10\_4 - Supervision by the superior; 10\_5 - Physical fatigue; 10\_6 - Mental fatigue; 10\_7 - Stress levels; 10\_8 - Free time to rest; 10\_9 - Physical activity; 11\_1 - A sense of belonging to the company; 11\_2 - Effective communication; 11\_3 - Appreciating the work and the employer; 11\_4 - Personal satisfaction; 11\_5 - Organizational culture; 11\_6 - A sense of being appreciated; 11\_7 - Family ties; 12\_1 - Are you happy with working remotely?; 12\_2 - Are you satisfied

with the quality of work results achieved in the remote work model<sup>6</sup>?; 12\_3 - Do you manage to keep the balance between work and private life?; 12\_4 - Do you consider the current situation on the labour market temporary? 12\_5 - Do you need more social communication? 12\_6 - Has remote work allowed you to focus on priority issues related to your work?; 12\_7 - Would you like to continue working remotely after the pandemic is over? 12\_8 - Is remote work something unusual?

- unobservable endogenous variables:

p7 - What elements in the job offer are important to you? - Salary offered to job candidates; - Working hours; - Promotion opportunities; - The attractiveness of the position; - Flexible working hours; - Precise career path.

p10 - Did remote work increase: - The amount of working time; - Work efficiency; - Employee earnings; - Supervision from the superior; - Physical fatigue; - Mental fatigue; - Stress level; - Free time to rest; - Physical activity.

p11 - Does remote work cause building the following in interpersonal relationships: - A sense of belonging to the company; - Effective communication; - Appreciation of the work and the employer; - Personal satisfaction; - Organizational culture; - A sense of being appreciated; - Family ties.

p12 - Assessment of satisfaction with remote work: - Are you happy with working remotely? - Are you satisfied with the quality of work results achieved in the remote work model? - Do you manage to keep the balance between work and private life? - Do you consider the current situation on the labour market temporary? - Do you need more social communication? - Has remote work allowed you to focus on priority issues related to your work? - Would you like to continue working remotely after the pandemic is over? - Is remote work something unusual?

- unobservable exogenous variables:

e1, e2, e3, e4, e5, e6, e7, e8, e9, e10, e11, e12, e13, e14, e15, e16, e17, e18, e19, e20, e21, e22, e23, e24, e25, e26, e27, e28, e29, e30, e31, e32, e33, e34.

The non-standardised and standardised coefficients of the model and relationships between latent variables are summarized in Tables 2, 3 and 4.

The above interpretations only apply when the values of the remaining variables remain unchanged. Thus, the importance of the coefficients describes the direction (positive/negative) and the strength of the influence of the explanatory variable on the explained variable. The power of impact on the defined variable can be compared between the explanatory variables using standardized coefficients. The values of non-standardized coefficients depend on the units in which the variables are measured (Kline, 2005).

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<sup>6</sup> “Happy” refers to the feeling one experiences, and “satisfied” is rather a measure of quality.

**Table 2. Non-standardised model coefficients<sup>7</sup>**

Variables	Estimated value of the parameter	Standard error of the estimate	Critical value	P value <sup>8</sup>
7_1	1	-	-	-
7_2	1.137	0.101	11.302	***
7_3	1.657	0.12	13.787	***
7_4	1.603	0.117	13.745	***
7_5	1.091	0.114	9.581	***
7_9	1.326	0.133	9.949	***
10_1	1	-	-	-
10_2	0.818	0.077	10.648	***
10_3	0.717	0.069	10.467	***
10_4	0.825	0.071	11.609	***
10_5	1.331	0.09	14.76	***
10_6	1.352	0.092	14.646	***
10_7	1.036	0.072	14.439	***
10_8	0.438	0.073	5.972	***
10_9	0.761	0.081	9.37	***
11_1	1	-	-	-
11_2	1.124	0.058	19.222	***
11_3	1.138	0.054	21.098	***
11_4	1.18	0.054	21.821	***
11_5	1.083	0.054	20.198	***
11_6	1.173	0.052	22.67	***
11_7	0.572	0.06	9.57	***
12_1	1	-	-	-
12_2	1.005	0.022	44.82	***
12_3	0.491	0.033	14.986	***
12_4	0.188	0.034	5.451	***
12_5	-0.096	0.04	-2.384	0.017
12_6	0.594	0.029	20.339	***
12_7	0.897	0.032	27.74	***
12_8	0.395	0.036	10.898	***

Source: Own creation.

**Table 3. Standardised model coefficients<sup>9</sup>**

Variables	The estimated value of the parameter <sup>10</sup>
7_1	0.597
7_2	0.537
7_3	0.737

<sup>7</sup> According to the assumptions of the confirmatory factor analysis, in the case of parameters 7\_1, 10\_1, 11\_1 and 12\_1 a constant value was adopted, and it was not estimated. The non-standardised coefficients of the model inform by how many units the value of the explained variable will change when the value of a given explanatory variable increases by one unit. (Konarski, 2010; Osińska, 2008; Osińska, Pietrzak, Żurek, 2011).

<sup>8</sup> Note: \*\*\* means  $p < 0.001$

<sup>9</sup> Standardised coefficients describe by how many of their standard deviations the value of the explained variable changes when the value of the explanatory variable increases by one standard deviation. (Bollen, 1989);

<sup>10</sup> Note: \*\*\* means  $p < 0.001$ ;

Variables	The estimated value of the parameter <sup>10</sup>
7_4	0.731
7_5	0.435
7_9	0.456
10_1	0.582
10_2	0.475
10_3	0.465
10_4	0.531
10_5	0.757
10_6	0.746
10_7	0.728
10_8	0.247
10_9	0.407
11_1	0.721
11_2	0.730
11_3	0.801
11_4	0.828
11_5	0.767
11_6	0.861
11_7	0.367
12_1	0.935
12_2	0.940
12_3	0.504
12_4	0.203
12_5	-0.090
12_6	0.630
12_7	0.759
12_8	0.386

**Source:** *Own creation.*

Based on the standardized coefficients of the model, it turned out that the variables 7\_3 and 7\_4 have the strongest influence on the variable p7, while the variable 7\_5 has the weakest influence on it.

Based on the standardized coefficients of the model, it turned out that the variables 10\_5 and 10\_6 have the strongest influence on the variable p10, while the variable 10\_8 has the weakest influence on it.

Based on the standardized coefficients of the model, it turned out that the variables 11\_6 and 11\_4 have the strongest influence on the variable p11, while the variable 11\_7 has the weakest influence on it.

Based on the standardized coefficients of the model, it turned out that the variables 12\_2 and 12\_1 have the strongest influence on the variable p12, while the variable 12\_5 has the weakest influence on it.

In the group of latent variables, the variable p12 is influenced most strongly by the variable p11, and the weakest by the variable p7.

**Table 4.** Standardised model coefficients showing the relationships between latent variables

Variables		The estimated value of the parameter
p12	<--> p7	0.014
p12	<--> p10	-0.150
p12	<--> p11	0.550

*Source:* Own creation.

## 5. Limitations of the Study

Because not all persons included in the study perform remote work, the research sample cannot represent a larger population. Moreover, most of the respondents are young people born after 1995. Therefore, it would be interesting to extend this research in the future and direct it to a broader group of people and a diverse age group. In this way, it would be possible to compare satisfaction with remote work in different age groups.

In addition, the research took place during the COVID-19 pandemic. Therefore, the authors of the investigation did not have the opportunity to meet the respondents in person and conduct a more detailed interview, which can undoubtedly be considered a significant limitation of this study.

## 6. Conclusions

The conducted research and statistical analyses allowed the authors to identify endogenous variables that affect employee satisfaction with the remote work performed by them and illustrate the strength of influence between endogenous variables.

The assessment of satisfaction with remote work is most strongly affected by aspects related to building such issues in interpersonal relations as the sense of belonging to the company, effective communication, appreciating work and the employer, gaining personal satisfaction, building the organizational culture, strengthening the feeling of being valued and family ties.

On the other hand, much less significance in building employee satisfaction with remote work is attached to issues related to such aspects as the amount of working time, work efficiency, employee earnings, supervision from the superior, physical fatigue, mental fatigue, stress level, free time to rest, physical activity. In turn, the most negligible impact on employee satisfaction with remote work is exerted by such aspects as the salary offered to job candidates, working hours, promotion opportunities, the attractiveness of the position, flexibility of working hours, or a precise career path.

Therefore, it can be concluded that a company that wants the employees who perform remote work to derive satisfaction from doing it should emphasize building positive interpersonal relationships. First of all, effective communication with the employee should be a priority issue. The employee should be informed about the most critical issues concerning their work and the company's functioning. The employee should feel a part of their company, appreciate their work and derive satisfaction from it. The research has also shown that it is essential to develop its organizational culture and that the employee should feel a part of it. This will lead to the strengthening of their self-worth. Indeed, increasing the satisfaction with the discussed form of work will result in its better effectiveness, which will contribute to expanding the company's competitiveness and strengthening its position on the market.

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