
Health Crisis and Work Motivation: The Psychosocial Context of Sustainable Work

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Abstract:

Purpose: This article is of a research nature and its aim is to identify the psychological factors that have the strongest impact on staff motivation, taking into account the difficult conditions of the health crisis. The authors want to show that preventive actions regarding psychosocial risks are part of the activities of organizations focused on sustainable development.

Design/Methodology/Approach: First, an in-depth analysis of sources and documents devoted to the topic of employee motivation was carried out. It was necessary to select motivational factors and conduct surveys in the period before and after the COVID-19 pandemic. In the next step, the Delphi method was used to identify motivational factors related to psychosocial risk. Then, using the Absolute Grayness Incidence Rate, selected motivational factors were analyzed, which allowed for a discussion of the research results and formulation of research conclusions. The research was conducted at the turn of 2017-2023 in the Wielkopolska province in Poland. The study involved 460 respondents (n=460) before the COVID-19 pandemic, and 295 respondents (n=295) during the COVID-19 pandemic.

Findings: Analysis of the results using the Absolute Degree of Grey Incidence method showed that before the pandemic, the most motivating factors were: "Employment security", "Lack of mobbing and discrimination" and "Feeling of stability and security at work". In turn, during the pandemic, the factors that received the highest scores in the ranking were: "Feeling of stability and security at work", "Good relations with colleagues" and "Good relations with superiors".

Practical Implications: Correct identification of psychosocial motivators is a current topic that requires deeper analysis, mainly due to constantly changing working conditions, social changes and the epidemiological situation in the world. From the perspective of an organization, the use of an appropriate motivational strategy is an essential element in

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achieving a situation in which an employee uses all their mental abilities and creativity.

Originality/Value: Analysis of the results using the Absolute Degree of Grey Incidence Method showed a ranking of motivating factors before and during the COVID-19 pandemic. The methodological approach, different from the commonly used ones, presented in this manuscript allowed to look at the research problem from a slightly different perspective.

Keywords: Sustainability, employee motivation, work safety, labor costs, social costs, Delphi Method, Grey Systems Theory.

JEL Codes: L2, M5.

Paper Type: Research article.

1. Introduction

The outbreak of the COVID-19 pandemic has caused many changes, including in health care, human relations and the economy (Ewertowski, 2023). The forms and organization of professional work and education have also changed, resulting in a significant increase in mental strain. It is difficult to accurately predict the psychological and emotional consequences of COVID-19, as mental health problems were already affecting some 84 million people in the EU before the pandemic (Health *et al.*, Gance, 2023). Nearly 50% of EU employees surveyed believe that stress exists in their workplaces. Managers believe that occupational stress negatively affects the well-being and welfare of employees and the functioning of the organization (Eurofound and EU-OSHA, 2014).

In 1986, the International Labour Organization defined psychosocial risk factors as "interactions between the essence of work, management and organization of the work process, as well as, on the one hand, other organizational and, on the other hand, environmental conditions and the needs and competences of employees. In this sense, they refer to this type of interactions that have been proven to pose a threat to the health of an individual, as a result of their perception and experience" (Leka *et al.*, 2008).

These are the aspects of design and management of the work process, including their organizational and social context, which can potentially cause a psychological or physical harm (Randall *et al.*, 2005). Preventive actions regarding psychosocial risks are part of the activities of organizations focused on sustainable development (Filipek, 2016). The sustainable development goals (SDGs) are achieved through the adoption of new ecological techniques by the organization's human capital and by the integration of innovative sustainable strategies (Chams *et al.*, 2019).

There is increasingly talk of sustainable management in the context of the human resources (Anlesinya *et al.*, 2020).

The aim of the study is a comparative analysis of the motivational factors before the pandemic and during the COVID-19 pandemic, and to emphasize the need to implement the psychosocial factors into motivation systems as part of shaping the safety and sustainable development of employees.

According to the authors, it is impossible to create the sustainable workplace environment without taking into consideration the psychosocial factors of this environment. Every crisis – also health crisis – amplifies the scale of risk arising from the interactions between the nature as well as conditions of work and the employees needs as well as the motivation which arising from this needs.

2. Literature Review

The research conducted by Sorribes *et al.* (Sorribes *et al.*, 2021) has shown that taking the social responsible activity in the company and adding them to the daily management practices has a positive impact on the employees' welfare. Enterprises can count on the support of many organizations, such as the United Nations, the Organization for Economic Cooperation and Development, and the European Union.

These institutions, concerned with sustainable development, are particularly focused on finding compromises in the interactions between the economic, social and environmental dimensions of development. Sustainable development, despite the multidimensionality of this concept, can be summarized as such development that can help meet current needs and does not threaten the prospects of meeting future needs" (Manigandan *et al.*, 2022).

A significant challenge in this regard is to conduct analyzes on the appropriate research methodology, together with the search for specific tools (Allen *et al.*, 2018). In 2015, the United Nations developed seventeen Sustainable Development Goals (SDGs) on a global scale, with the intention of achieving them by 2030. The Sustainable Development Goals Report 2022, as the eighth issue, reports current achievements and problems regarding the implementation of the goal of decent work and economic growth.

According to Eurofound, working and living conditions lead people to start working tailored to a person's characteristics as "sustainable work throughout life" (European Foundation, 2014). Scandinavian researchers were the first to use the term "sustainability" for the profession, as the opposite of an intensive work system to a sustainable work system. The solution is to organize work so that it is possible to "regenerate human and social resources" (Docherty *et al.*, 2009; Albrychiewicz-Słocińska, 2017). Many studies have shown that the stress and other working environment pathologies have negative impact on employees' motivation and

commitment (Olaniyi, 2013; Bolino *et al.*, 2014; Breaugh, 2021; Hammedi *et al.*, 2021). Whereas other studies have shown that the strong emotional commitment and the social support can be used as the resources in the fight with excessive stress (Antonovsky, 1987; Kniffin *et al.*, 2023; Doninck *et al.*, 2023).

The term motivation is understood, aroused and consolidated in various ways. Life motivations, our basic desires, are psychological needs - some need to be satisfied to survive, others to experience life. Most of society cares about opportunities for work, development, education or a place to live. Motivation makes work more satisfying, and sometimes it is even necessary to accomplish specific tasks (Sadłowska-Wrzesińska *et al.*, 2017).

The motivational factors stimulate a person and provide an incentive to act and may have different nature, frequency and duration (Palm *et al.*, 2020). The employer can use motivation tools, i.e., a set of methods, procedures, rules and courses of conduct, as well as organizational solutions that affect the motivation of employees, when applied in an appropriate way. The motivating tools are the employer's instrument to stimulate motivation and affect employees. They are of great importance in the proper functioning of the company, because they affect the behaviour of people, in particular their awareness, attitude to duties and managers, as well as mutual relations.

Moreover, thanks to properties of the motivation tools, employees are usually more involved and want to take on more difficult tasks, raise their qualifications and improve quality. It is worth noting that there is no universal effective motivational system. What encourages one employee to further action may demotivate others. Therefore, the motivational system should be tailored to the personal characteristics and requirements of employees. For this reason, the area of employee motivation is a current and important challenge for companies that care about the safe development of their employees (Shin *et al.*, 2019).

3. Research Methodology

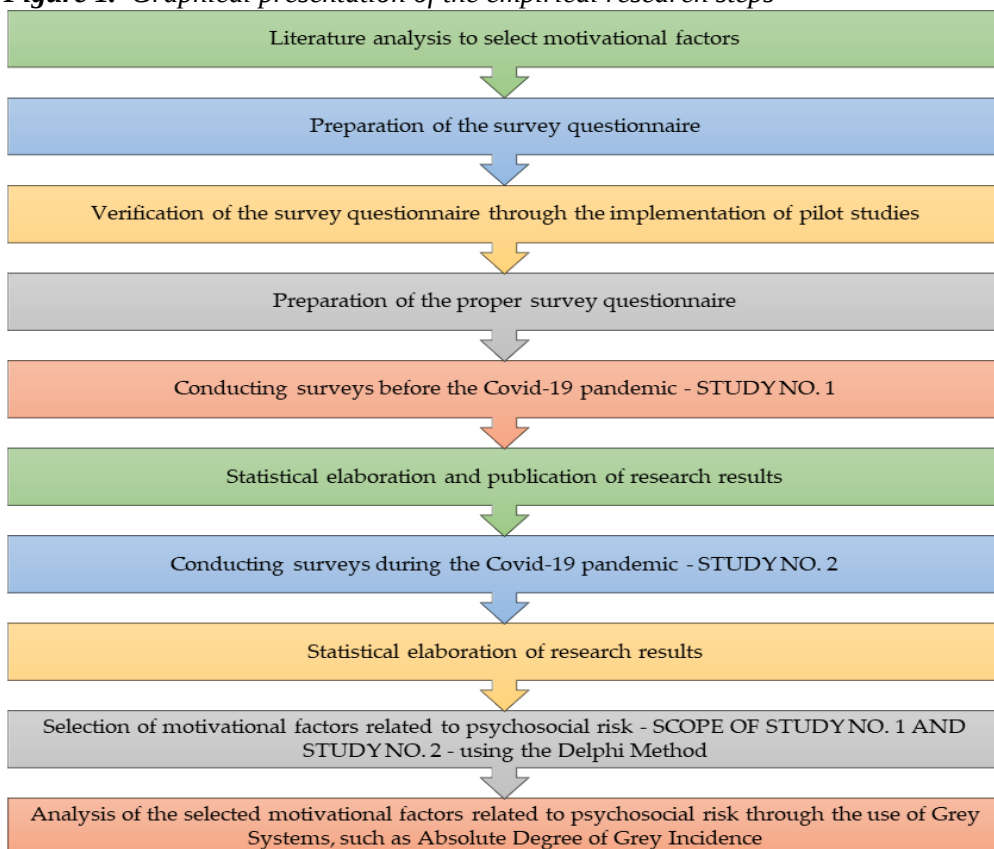
The empirical research process consisted of several stages. The first concerned an in-depth analysis of sources and documents concerning the subject of employee motivation, in order to select motivational factors. Then, a survey questionnaire was prepared. The study used a self-administered survey questionnaire containing sociodemographic questions and statements on opinions about the workplace and the motivational factors. Participation in the study was voluntary and anonymous.

In the next step, the questionnaire was verified through the implementation of pilot studies, and on the basis of the verification, the appropriate empirical survey questionnaire was prepared. The next step was related to the implementation of the research applicable before the COVID-19 pandemic (STUDY No. 1), which was statistically elaborated.

The analysis of the empirical material allowed for making conclusions, and the key ones were published. Due to the worldwide situation, decision was made to conduct the survey again during the COVID-19 pandemic (STUDY NO. 2), which was also statistically elaborated. Following the analysis of the research results, the authors decided to choose motivational factors related to psychosocial risk (THE SCOPE OF STUDY NO. 1 AND STUDY NO. 2), with means of the Delphi Method.

The last step concerned the analysis of selected motivational factors related to psychosocial risk, with the use of Grey Systems, such as Absolute Degree of Grey Incidence. The choice of these research methods was dictated by the character of studies and the authors' fields of interests in – more and more popular – the Delphi method and the Absolute Degree of Grey Incidence method, which is an alternative to statistical methods, methods based on fuzzy logic and methods based on the rough set theory. The choice of these research methods was dictated by the nature of the study and the authors' interest in the method, which is gaining popularity Delphi and metod Absolute Degree of Grey Incidence, which is an alternative to statistical methods, methods based on fuzzy logic and methods based on the rough set theory.

Figure 1. Graphical presentation of the empirical research steps



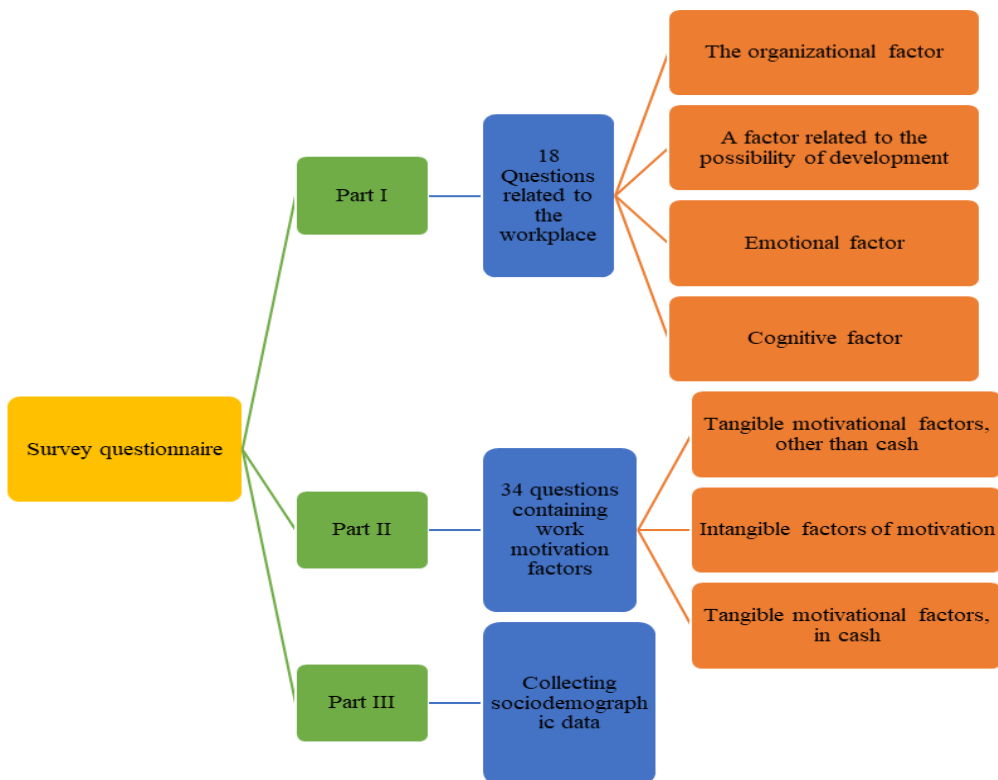
Source: Authors' own study.

3.1 Survey Questionnaire

The authors developed a research tool that was tested in a pilot study. The questionnaire sheet consisted of parts I, II and III and was addressed to employees employed in micro and small enterprises in the Wielkopolskie Voivodship. A quota selection was used in the study, with consideration to the type of surveyed companies, the employment sector, and the demographic factors of the employees.

The survey was conducted in order to work out a set of motivational factors and to identify the relationships between socio-demographic data and the examined factors motivating to work. Due to the area of research and the specificity of the surveyed enterprises, it was decided to use the PAPI (Paper and Pencil Interview) method with all precautions applied. The research was carried out at the turn of 2017-2022 in the Wielkopolskie Voivodeship in Poland. 460 respondents participated in the study before the COVID-19 pandemic, and 295 respondents participated during the COVID-19 pandemic.

Figure 2. A graphic representation of the survey questionnaire scheme.



Source: Own study.

The questionnaire was accompanied by a cover letter explaining the purpose of the study. Participation in the study was voluntary and anonymous. The questionnaire contained an information clause about the possibility of withdrawing from the study at any time, motivation to undertake the study and the place and method of storing the results. The research began before the appointment of the Scientific Research Ethics Committee, which was established by the Rector's order RO/IV/15/2022.

The answers to the questions, which related to the motivational factors, can be treated as discrete quantitative variables, with assigning each answer a score according to the 1-5 point scale. Excel and Statistica were used to analyse the survey results.

The Cronbach's alpha reliability test was used to check the survey questionnaire. Cronbach's alpha takes values from 0 to 1. The higher the value, the greater the reliability of the scale. Values above 0.7 are considered to indicate the correct reliability of the scale. Table 1 presents the Cronbach's alpha scale reliability results for opinions on the workplace and in its individual areas.

Table 1. *Reliability scores of Cronbach's alpha scales for workplace opinions*

Reliability of scales	Cronbach's alpha
Part I of the survey questionnaire: Opinions about the workplace	0.890
Emotional factor	0.701
Factor related to the possibility of development	0.745
Organizational factor	0.703
Cognitive factor	0.739

Source: *Own study based on the results of empirical research.*

As the research results show, the part of the survey questionnaire concerning eighteen opinions about the workplace is characterized by a very high reliability of the scale at the level of Cronbach's $\alpha=0.890$. Also, the reliability of the scales in particular areas of opining the workplace is high (Cronbach's $\alpha > 0.7$), i.e. the emotional factor 0.890, the factor related to the possibility of development 0.746, the organizational factor 0.703 and the cognitive factor 0.739.

The authors also verified the reliability of opinions on motivational factors (part II of the survey questionnaire) and the Cronbach's alpha reliability test was used in its individual areas. Table 2 presents the reliability results of the Cronbach's alpha scales for factors motivating to work and in its individual areas.

The questionnaire concerning 34 factors motivating to work is characterized by a very high reliability of the scale at the level of Cronbach's $\alpha=0.921$. The reliability of scales for the area of intangible and tangible motivational factors, other than cash, is also high (Cronbach's $\alpha > 0.8$). Cronbach's alpha is good only for

the area of tangible motivational factors in cash, especially since this scale consists of four factors (variables).

Table 2. Reliability results of Cronbach's alpha scales for the factors motivating to work

Reliability of scales	Cronbach's alpha
Factors motivating to work	0.921
Intangible	0.897
Tangible, other than cash	0.814
Material, in cash	0.592

Source: Own study based on the results of empirical research.

The statistical analysis of the research questionnaire indicated that it is a valid, standardized tool and it measures the level of motivation, as well as identifies the dependencies between socio-demographic data and the examined factors motivating to work. The evaluated research results, together with an in-depth analysis, have been published by the authors.

3.2 Delphi Method

In order to select the motivational factors related to psychosocial risk, the Delphi Method (expert) was used, which is classified as a heuristic method. The Delphi method is a special process of systematic consultation of experts' opinions. As a results, the Delphi study involves experts from a wide range of scientific disciplines and specialties as well as practitioners. Their selection depends on the type of the study problems. The Delphi method is universal tool which can be used for research in the field of social life, economic life, science and technology (Ozkeser, 2019).

According to Listone and Turoff, it is a method of constructing a group communication process so that the process enables an effective handling with a complex problem by a group of individuals, as a whole (Grouzet *et al.*, 2024). The Delphi method is a free search method. The mechanism of this method includes (Linstone *et al.*, 2002):

- selection of a group of experts related to the subject of the issue,
- expert interactions that allow for unanimous opinions,
- feedback to participants for mutual interaction,
- obtaining expert opinions, which enable solving the problem.

The applied research procedure of the Delphi method included several steps (Plummer *et al.*, 2007).

- Conceptual phase - specifying the methodological basis of the study, including the selection of motivational factors from the survey questionnaire, which will be verified by experts.
- Preparation - selection of experts, setting the conditions of the study and selection of a responsible person. The authors asked a competence-diverse group of experts, including academics in the fields of employee motivation and occupational safety as well as managers who manage and apply motivation systems plus occupational health and safety work-service, for verification of the motivational factors.
- Presentation of the motivational factors contained in the survey questionnaire to the experts.
- Receiving initial proposals for the selection of motivational factors related to psychosocial risk, including justification.
- Analysis - of the obtained answers, supported by IT and statistical tools.
- The next round of the study - presenting the study participants with the summarized results along with an anonymous list of opinions, including justification and a modified questionnaire.
- Modification of the proposed solution.
- Consolidation of opinions- the steps presented in points 5-7 are repeated until a satisfactory compliance of opinions among experts is obtained, until the time the full compliance is achieved.
- Final analysis of the results.
- Evaluation of the study - control of the results obtained and improvement of subsequent ones.

It was pointed out in the in-depth analysis of the research results, that the highest values were achieved by motivational factors related to psychosocial risk, which is why the authors decided to further analysis this set of factors.

Due to the fact that motivational factors are sensitive to environmental factors, the authors decided to repeat the research in this specific period, which was the COVID-19 pandemic (Matejun 2012; Grouzet *et al.*, 2024). An in-depth analysis of the research results affected the selection of factors related to psychosocial risk, as it was noticed that these factors underwent a significant change in motivation of employees (Anlesinya *et al.*, 2020; Taheri *et al.*, 2020).

3.3 The Use of Grey Systems Theory - Absolute Degree of Grey Incidence Tool

Theory of grey system was first established in 1989 by Deng. This system offers techniques, concepts and ideas for the analysis of hidden and complex systems (Dahler-Larsen *et al.*, 2020). With the advantages of non-functional series used for constructing the models and simple calculations, Grey systems theory has been used for factorial analysis, optimization theorem, forecasting, or numerical analysis, in various research fields (Liu *et al.*, 2016).

The world's leading centre where the theoretical and practical trend of Grey systems theory is developed is the Institute for Grey System Studies (IGSS) at Nanjing University of Aeronautics and Astronautics (NUAA). The subject of the theory of grey systems is modelling the information uncertainty, which is expressed with means of one of three grey constructs, which are grey numbers, the whitening function and the distributive understanding of greyness.

When the subject of cognition has not produced any information about the object, apart from the fact that the system exists, there is full information uncertainty (the set of information, which is generated about the system, is marked with an empty set in Graph 1.1).

Such a situation means that the subject can express only a positive judgement on the existence of the system, which is explored. If the full information uncertainty is determined with means of at least one of the grey constructs, then such a system can be called a black system.

The second extreme situation is related to generating full information about the system under study, as a result of cognition. In this case, there is no information uncertainty about the system. If such a system is described using at least one of the grey constructs, then the system can be called a white system.

The third possible situation is when in the course of cognition the subject has produced some information about the system under study (apart from the fact that the sole system exists), but this information is incomplete. This type of system, as defined in 1.17, is called the grey system (Hsu *et al.*, 2009).

GIA Grey Incidence Analysis answers to questions (Nowak *et al.*, 2020; Mierzwiak *et al.*, 2021):

- *Which factors among the many are more important than others?*
- *Which factors have more effects on the future development of the systems than others?*
- *Which factors actually cause desirable changes in the systems so that these factors need to be strengthened?*
- *Which factors hinder desirable development of the systems so that they need to be controlled?*

Steps of the Absolute Degree of Grey Incidence Method:

I. Observation values are assigned according to the formula: $X_i = (x_i(1), x_i(2), \dots, x_i(n))$,

$$s_i = \int_1^n (X_i - x_i(1)) dt \quad (1)$$

II. Then the s_i coefficient is calculated

III. In the next step, the difference between the following variable values is calculated:

$$s_i - s_j = \int_1^n (X_i^0 - X_j^0) dt \quad (2)$$

IV. In the next step, the epsilon coefficient is calculated:

$$\varepsilon_{ij} = \frac{1 + |s_i| + |s_j|}{1 + |s_i| + |s_j| + |s_i - s_j|} \quad (3)$$

satisfies the properties of normality, pair symmetry, and closeness, but not wholeness.

V. The next calculation step is as follows:

$$|s_i| = \left| \sum_{k=2}^{n-1} x_i^0(k) + \frac{1}{2}x_i^0(n) \right|,$$

$$|s_j| = \left| \sum_{k=2}^{n-1} x_j^0(k) + \frac{1}{2}x_j^0(n) \right|,$$

and

$$|s_i - s_j| = \left| \sum_{k=2}^{n-1} [x_i^0(k) - x_j^0(k)] + \frac{1}{2}[x_i^0(n) - x_j^0(n)] \right| \quad (4)$$

The absolute degree ε_{ij} of grey incidences satisfies the following conditions:

- $0 < \varepsilon_{ij} \leq 1$;
- ε_{ij} is only related to the geometric shapes of X_i and X_j , and has nothing to do with the spatial positions of X_i and X_j . Or in other words, moving horizontally does not change the value of the absolute degree of grey incidences;
- Any two sequences are not absolutely unrelated. That is, ε_{ij} never equals zero;
- The more X_i and X_j are geometrically similar, the greater ε_{ij} ;

- When X_i and X_j are parallel, or X_j^0 is vibrating around X_i^0 with the area of the parts with X_j^0 on top of X_i^0 being equal to that of the parts with X_j^0 beneath X_i^0 , $\varepsilon_{ij} = 1$;
- When any one of the data values in X_i or X_j changes, ε_{ij} also changes accordingly;
- When the lengths of X_i and X_j change, ε_{ij} also changes accordingly;
- 8. $\varepsilon_{ij} = 1$, $\varepsilon_{ij} = 1$; and
- $\varepsilon_{ij} = \varepsilon_{ji}$.

4. Research Results

The research results for factors motivating to work, which are related to psychosocial risk, are presented below. The first part of the aforementioned analysis concerns the presentation of a selection of 20 factors related to psychosocial risk, which is carried out using the Delphi method. In turn, the second part presents a statistical analysis of grey systems using the Absolute Degree of Grey Incidence method, which, according to the opinion, was selected as optimal. Moreover, this novel method is suitable for comparing results before and during the COVID-19 Pandemic.

4.1 Results of Tests Carried Out Using the Delphi Method

As a result of the analysis by the Delphi method, the experts selected 20 factors related to psychosocial risk (marked in colour in the table) of the 34 motivational factors.

Table 3. Selection of motivational factors related to psychosocial risk using the Delphi Method

Factors motivating to work
Contract of employment
Employment security
A sense of stability and safety at work
Certainty of receiving remuneration on time
A sense of rightful remuneration
Equal treatment of all employees
Good communication, in open sense
Good relationships with colleagues
Good relationships with superiors
Commendation from your supervisor
Consultations of superiors with the employees regarding company's future
Importance of performed tasks
Satisfaction from the performed work
Opinions about the company I work for
Fixed working hours

Flexible working time
Compliance with the principles of labour law
No mobbing or discrimination
Work without stress
Opportunity for promotion
Opportunity for professional development
Co-financing the education
Participation in trainings
Integration meetings/trips
Increase in remuneration
Receiving bonuses in cash
Discount when buying company goods
Share in company's profit
Christmas vouchers
Co-financing for the cinema, gym, swimming pool, etc.
Receiving a laptop, car, business phone
Fear of punishment
Fear of losing the bonus
Fear of dismissal

Source: Own study.

4.2 Results Using the Absolute Degree of Grey Incidence Method

Further analysis for selected motivational factors (before the COVID-19 pandemic and during the COVID-19 pandemic) the Absolute Degree of Grey Incidence Method was applied and the ranked list of results was established.

Table 4. Development of motivational factors using the Absolute Degree of Grey Method - before the COVID-19 pandemic and before the COVID-19 pandemic

Factors motivating to work	Before the COVID-19 pandemic		During the COVID-19 pandemic	
	Result with the Absolute Degree of Grey Incidence Method	Ranking	Result Absolute Degree of Grey Incidence Method	Ranking
Equal treatment of all employees	0.923892	11	0.871242	13
Importance of performed tasks	0.866057	14	0.868831	14
Consultations of superiors with the employees regarding company's future	0.845369	16	0.834906	15
Certainty of receiving remuneration on time	0.952273	6	0.823944	16
A sense of stability and safety at work	0.967091	3	0.996479	1

Good relationships with colleagues	0.965116	5	0.976232	2
Good relationships with superiors	0.926357	10	0.969421	3
Good communication, in open sense	0.943548	7	0.930303	4
A sense of rightful remuneration	0.933925	8	0.929652	5
Fear of losing the bonus	0.751716	18	0.715642	17
Fear of dismissal	0.743363	20	0.714017	18
Fear of punishment	0.751429	19	0.70417	19
No mobbing or discrimination	0.985227	2	0.516725	20
Opportunity for professional development	0.933925	9	0.910405	9
Fixed working hours	0.898551	13	0.902266	10
Opportunity for promotion	0.913534	12	0.9	11
Flexible working time	0.805556	17	0.876159	12
Work without stress	0.966102	4	0.926426	6
Employment security	0.991071	1	0.918134	7
Commendation from your supervisor	0.865449	15	0.917647	8

Source: Own study.

Analysis of the results using the Absolute Degree of Grey Incidence Method showed that before the pandemic, the most motivational factors were: 1. Security of employment (0.991071), 2. No mobbing or discrimination (0.985227) and 3. A sense of stability and safety at work (0.967091). In turn, during the pandemic, the factors that achieved the highest scores in the ranking were: 1. A sense of stability and safety at work (0.996479), 2. Good relationships with colleagues (0.976232) and 3. Good relationships with the superiors (0.969421).

On the other hand, the motivational factors that were assessed as the least motivating before the pandemic were as follows: 18. Fear of losing the bonus (0.751716), 19. Fear of punishment (0.751429) and 20. Fear of dismissal (0.743363).

The factors ranked lowest during the pandemic were: 18. Fear of dismissal (0.714017), 19. Fear of punishment (0.70417) and 20. No mobbing or discrimination (0.516725).

5. Discussion

The identified literature reports on negative impact of COVID-19 on individual mental health, although immediately after the outbreak of pandemic in the center of scientists interests was mainly public safety issues in the context of a public health crisis. The issue of psychosocial consequences, neglected in the initial phase of the pandemic, was reflected in studies later. The group of the most frequently cited stressors connected with COVID-19 includes perception of safety, threat and risk of contagion (Delcea *et al.*, 2022), lack of knowledge about the unknown virus [64], isolation, stigma and social exclusion (Dubisz *et al.*, 2023) as well as financial loss and job insecurity (Xiang *et al.*, 2020; Brooks *et al.*, 2020).

The analysis of the research results showed that the motivational factor “fear of being dismissed” increased by two places from the last place (research carried out before the COVID-19 pandemic). This may be related to the fact that the research conducted during the COVID-19 pandemic was carried out at the turn of 2021/2022, at the beginning of layoffs in Poland, which began in the fourth quarter of 2021 (Mobbing in Poland, 2023).

The COVID-19 pandemic is the first global event in the 21st century, which has forced most countries in the world to clearly subordinate the current economy to the need of the society’s safety in terms of health. This phenomenon has been referred to as “freezing the economy” (Announcements of group layoffs in Poland, 2022). About 90 percent of the surveyed organizations experienced a drop in revenue, due to the Coronavirus.

The Coronavirus was destroying Polish business, regardless of the size of the company. As many as 93% of companies answered yes, when asked whether the pandemic caused a decrease in revenue! One third of companies have already lost from 26 to as much as 50 percent of the revenue. Almost a quarter of companies lost between 51 and 75 percent of revenue (Lionel Laurent, 2023).

The fear of punishment, as a motivational factor, both before and during the pandemic, was assessed at the same, penultimate level. Rewards and punishments are widely used in organizations. Analyses show that the expected punishment is a strong determinant of submissive behaviour, while the main effect of the expected reward is not significant. In addition, the relationship between the expected reward and submissive behaviour is moderated by a focus on promotion, and the relationship between the expected punishment and submissive behaviour is moderated by a focus on prevention (Lohaus *et al.*, 2019).

Managers have the ability to motivate employees with means of rewards and penalties. Negative motivation is a method of stimulating the subordinates by the employer on the basis of the established threat and intimidation, which results in numerous fears and anxiety.

Negative reinforcements are rarely motivating, but they are most often used. It mainly results from the conviction of managers/owners that they can achieve the desired effect without any investment (Results of the survey of Employers of the Republic of Poland 2023).

Fear of degradation, loss of bonuses or fear of dismissal leads to an increase in the distance between the subordinate and the superior, lowering the employee's self-esteem and worsened atmosphere in the team. Nonetheless, the COVID-19 pandemic showed that many leaders were able to motivate employees by providing different ways to protect themselves from virus as well as using employees' creativeness and flexible forms of management (Wiradendi *et al.*, 2019).

The evaluation of the fear of losing bonus, as a factor, increased by one place. A frequent practice of employers is to introduce an additional component of remuneration, in the form of bonuses. Sometimes employers decide to introduce bonuses for the lack of sickness absence. As a result, sick employees come to work, as they fear of losing their bonuses. Not only will they infect other employees, but they also contribute to the deterioration of own health.

This pathological manifestation of the modern work environment, called presenteeism, refers to work-related behaviour during times of ill health (Wolor *et al.*, 2020). It is a phenomenon that negatively affects not only employee health and work performance, but also crew morale (Ruhle *et al.*, 2020). In addition, some studies show that workers not only come to work despite being ill, but also often work from home while sick, especially since the COVID-19 crisis has enabled home-office working on a large scale (Lio *et al.*, 2016).

For the authors, the most suprising result of the study was the one concerning attitudes towards very serious pathologies of the work environment - the lack of mobbing and discrimination factor shifted from the most motivating to the least motivational factor during the pandemic. Mobbing is a systematized form of psychological violence used against a victim by people cooperating with such a person, i.e., colleagues, superiors or subordinates.

Until the 1980s, the aspect of violence mainly focused on the exposure of employees to physical violence, which is relatively easy to detect. In the following years, a different type of violence was distinguished, the consequences of which are no less serious, but proving its manifestations is much more difficult. The Swedish researcher Heinz Leymann was the first to notice this phenomenon. Violence in the workplace is defined by the European Commission as "all situations in which an employee is insulted, intimidated or attacked in a work-related circumstances and it directly or indirectly poses a risk to the safety, well-being and health of such a person" (Albrychiewicz-Słocińska, 2021).

According to the Polish Labour Code, "mobbing is an action or behaviour affecting an employee or directed against an employee, consisting in persistent and long-term harassment or intimidation, causing a lowered sense of professional suitability in such a person, causing or aimed at humiliating or ridiculing the employee, isolating him or eliminating him from team of associates" (Government Ordinance, 1989).

This phenomenon affects the organizational culture in a negative sense, reduces job satisfaction and creates a tense atmosphere. The consequences of this phenomenon affect the culture inside the organization, outcome of the employees, and thus organizational goals (Article 94 of the Labour Code in Poland).

Mobbing in the workplace has serious organizational and economic consequences, and it leads to serious health problems. Research results demonstrate that the

interaction between focused on emotions handling with a problem and the perceived stress affects the relationship between mobbing in the workplace and PTSD symptoms (Petrescu *et al.*, 2020) - in Poland, the latest statistical data on mobbing come from 2019.

According to this data, as many as 49 percent of office and grey-collar workers fell victim to this phenomenon. More than half of the respondents admitted that they had experienced verbal violence at least once, and 14 percent were victims of physical violence. In turn, as many as 63 percent of the respondents were inadequately treated by their superior (International Labour Organization; Minibas-Poussard *et al.*, 2022).

Discrimination, in turn, is a different treatment based on sex (sexism), age (ageism), religion, sexual orientation (homophobia), origin. In article 32 sec. 1 and 2 of the Constitution of the Republic of Poland, there is a provision that: "Everyone is equal before the law. Everyone has the right to equal treatment by public authorities. No one may be discriminated in political, social or economic life for any reason". Residents of Poland aged 15 and more, notice the cases of discrimination based on sex more often than a year ago. In 2020, discrimination based on gender was noticed by 12% of respondents, and in 2021 it was 20% (Mobbing in Poland, 2023).

The result for the sense of stability and safety factor is obvious because the need for safety is one of the main human needs. During the pandemic, the score in the ranking shifted to the 1st place.

When explaining the detected dependencies, the broader context of the work environment characteristics should be considered. Perhaps the respondents (it concerns research during the pandemic) were less eager to strive for a work environment free from mobbing and discrimination, because they functioned in a work environment that adequately responded to their needs, in terms of counteracting pathologies.

Another explanation could be an argument in line with the concept of person-environment fit (Bullying in the workplace, 2023). Finally, the reason may be real functioning in a dangerous situation. Generating a lower level of stress by organizational culture can be explained by the buffer effect of good relationships with superiors.

This translates into more efficient (more effective) superior-subordinate communication, and a real possibility of obtaining social support from superiors, which is indicated in a number of literature items as one of the most important factors minimizing the sense of organizational stress and general frustration associated with (Rauvola *et al.*, 2020; Discrimination against women in the workplace; Sadłowska-Wrzesińska *et al.*, 2022; Wang *et al.*, 2022).

In addition, it is a factor in achieving a sense of security at work, especially when it is done through engaged participation. It results in the emphasis on “good/correct relations” both with the superiors and colleagues.

Companies and Human Resources Departments should focus on achieving the idea of sustainable organizations by applying HRM policies and practices, which improve the quality of work in all areas and not only contribute positively to the competitiveness of companies but also to sustainable growth of the (Wiradendi *et al.*, 2019).

In times of crisis, the efforts have to be even greater. Human Resources Departments should be the strategic axes of the company, adapting their reactions to dynamic external conditions by applying these kinds of policies and practices, which impact is the most positive for employees and company as a whole. The authors are going to further explore the area regarding the study of motivational factors after the COVID-19 pandemic and in other industries.

6. Limitation of the Study

The authors are aware of the limitations of this study. First of all - contextual information has been included in the article. Questionnaire survey was addressed to employees employed in micro and small enterprises in the Wielkopolskie Voivodship in Poland.

Another limitation was the research method, i.e., the survey, which, although it allowed for the collection of a large amount of data, limited the possibility of a deeper understanding of the motivations and reasons for the respondents' answers.

Another limitation was the data analysis method. This paper presents the use of the Absolute Degree of Grey Incidence Method for selected motivational factors (before and during the COVID-19 pandemic) and the ranked list of results was established. It should be noted, however, that other metrics can also be used to measure ranking of motivational factors.

The authors referred to specific studies. The research problem discussed in the manuscript - employee motivation (set in a health crisis situation) in the context of sustainable development assumptions - is not often addressed, and this may be the reason for the lack of arguments from previous research results.

The data obtained provide valuable information that can serve as a basis for further research and analysis, enabling deeper knowledge on the health crisis and work motivation.

7. Conclusions

The motivational system for the employee consists of a number of rules and factors, in order to ensure a sufficiently high level of motivation, which creates the basis for

the proper use of human potential in the development of organization. The development and improvement of an efficient employee motivation system is not an easy task, therefore it is worth to note that the motivational system in question is one of the most important elements determining the effectiveness of the human resource management process in the organization.

The functioning of structured psychosocial risk management programs is one of the basic company management components in most EU countries. Many years of scientific research and analyses of costs incurred by enterprises, as a result of high levels of stress among employees, provide arguments outlining the need to take preventive measures in relation to the excessive occupational stress, with particular emphasis on the latest threats in this area, which are: job insecurity, and threat of violence (aggression, mobbing, sexual harassment), as well as discrimination (Nakra *et al.*, 2023).

The terms of recession and economic crisis as well as health crisis, which we all experienced during the COVID-19 pandemic, pose enormous challenges for companies which are taking care of work quality. The necessity of adaptation to the new work conditions can be an excellent chance to implement the social responsible practices, taking care of employees' wellbeing and, in the same time, being compatible with the sustainable development as well as with purposes of the sustainable development.

At the level of scientific inquiry, it is fruitful to use different study methods in this area (Albrychiewicz-Słocińska, 2017). The methodological approach, different from the commonly used one, presented in this manuscript, allowed to look at the research problem from a slightly different perspective.

The authors' message is to emphasize that preventive actions regarding psychosocial risks are part of the activities of organizations focused on sustainable development. In such organizations, addressing psychosocial risk incentives will positively impact employee safety and sustainability.

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