

# Professional Stress Prevention Program for Employees Working Remotely in Crisis

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**Keywords:** Professional Stress, Crisis, Remote Work, Mental Health, Psychological Safety.

**Abstract:** This article highlights the problem of professional stress of workers in the mass transition to remote work caused by the difficult conditions of our time in a pandemic COVID-19. Based on the results of theoretical analysis of scientific literature, the classification of the main models of stress is given. The content, features, factors, consequences of professional stress of workers working remotely in general in a pandemic in particular are highlighted. Personal indicators of professional stress of employees are revealed. The role of personal qualities of employees in the emergence of professional stress as a buffer that mediates the impact of stressors, enhancing their action, or inhibiting it, negatively affecting the mental health, psychological safety of employees and the quality of their professional activities are shown. The results of an empirical study show that the influence of stressors, which is significantly enhanced in the forced transition to remote work, causing violations in the communicative, emotional, volitional and need-motivational spheres of personality of employees in general and depending on gender and age and professional features of employees in particular. The expediency of taking into account the personal characteristics of employees to prepare them for the prevention and overcoming of professional stress, developing the ability of employees to conscious and active stress management and counteracting stressors is stated. The article presents the components of the program of professional stress prevention for employees working remotely in crisis (cognitive, motivational, volitional, communicative). The data on approbation of the program is given, which testify to its positive influence on the dynamics of stress subjective perception. Prospects for further research aimed at large-scale implementation of the program in postgraduate education are outlined.

## 1 INTRODUCTION

The dynamic changes observed in Ukrainian society are caused by a significant number of stressors in professional activities, which, combined with the personal characteristics of employees, contribute to professional stress, which negatively affects the effectiveness of professional activities and well-being. This problem is especially vital in today's crisis when a significant number of professionals went to work re-

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motely under the pressure of external circumstances (pandemic COVID-19, martial law), which led to a radical change in the usual way of life and, consequently, the emergence of new, additional stressors. Given this, developing programs for professional stress prevention of specialists deserve particular study.

Analysis of the literature shows that the problem of stress is the subject of research by many scientists. Intensive research of the phenomenon of stress began after the publication of the works of Selye (Selye, 1976) in the 1950's, in which the main attention was focused on physiological changes in the body under the influence of stressors. Later, the psychological component of stress development was singled out and, accordingly, the concept of "psychological stress" was introduced as a product of the subject's cognitive processes (Lazarus, 2001; Pilkey et al., 2020; Cooper and Quick, 2017).

The problem of professional stress as a factor influencing the ability to work, quality of work and health of employees of organisations, devoted to the research of (Burke et al., 1996; Vodopyanova, 2013; Greenberg, 2008; Edwards et al., 1998; Karamushka and Gnuskina, 2018; Cohen and Wills, 1985; Cooper et al., 1994; Leonova, 2016; Beehr and McGrath, 1992; Pankovets, 2006; Zhou and Salvendy, 2019; Sharit and Salvendy, 1982). There are investigated some aspects of the specifics of the organization of effective work of remote virtual teams online (Pazos, 2012; Orti and Middlemiss, 2019) and the possibility of obtaining the psychological safety in such teams (Lechner and Tobias Mortlock, 2021; Costello, 2020), including crisis (Sandoval-Reyes et al., 2021; Horton and Jacobs, 2022).

Some approaches to employee skill improvement, psychological stress relief, work-family balance, and company culture reinforcement from an HRM perspective are considered because of the impact of work-from-home patterns during the COVID-19 crisis (Chen, 2021).

At the same time, the peculiarities of professional stress prevention of specialists who work remotely in general and are forced due to a pandemic or martial law, in particular, have not previously been the subject of a particular study. The urgency and insufficient study of the problem determined the purpose of the study – to theoretically justify and test the program to prevent professional stress of employees who were forced to switch to remote work in a crisis.

## 2 LITERATURE REVIEW

An in-depth analysis of stress models was made by Ukrainian researcher Pankovets (Pankovets, 2006), who classified such models depending on the factors that cause stress and ways to manage it.

Thus, the models based on biological stressors include P. Parson's Model of Predisposition (Bodrov, 2000), H. Selye's physiological model (Selye, 1976; Pankovets, 2006; Bodrov, 2000), J. Fuller's genetic-constitutional model (Bodrov, 2000). Psychological factors are taken into account primarily in the cognitive model of R. Lazarus (Lazarus, 2001; Bodrov, 2000) and models of mental tension of N. Naenko (Nayenko, 1976). Complex (biological and psychological) factors are considered in the integrative model of R. Scott (Wong et al., 2006) and the model of Greenberg (Greenberg, 2008), and socio-psychological - in the interdisciplinary model of H. Basovich et al. (Bodrov, 2000), D. Dooley's theory of conflict (Bodrov, 2000) and D. Dorenvend's model (Bodrov, 2000). In addition, the scientist distinguishes models of stress depending on the methods of stress management through the mechanisms of adaptation (model D. Mechanic (Bodrov, 2000)), systemic self-regulation (system model of D. Ford and G. Schwart (Bodrov, 2000)), or coping (model of coping R. Lazarus and S. Folkman (Lazarus, 2001; Greenberg, 2008; Bodrov, 2000)).

Based on the analysis of these models, we can conclude that the occurrence and development of stress depend on both the constantly changing external environment and the individual psychological characteristics of the individual (Bodrov, 2000). The latter is caused by the fact that a difficult situation can be stressful for one person and not for another. It depends on how threatening the person is. The emergence of negative effects of stress is due primarily to the peculiarities of cognitive assessment of the environment and their own resources, in case of non-compliance of the latter with the requirements of the environment in which the person is.

To explain and describe the stressors associated with work, use close but not synonymous concepts: "work stress", "organisational stress", "professional stress", which carry different content loads (Pankovets, 2006; Kulikov, 2000; Nikiforov et al., 2003; Vasilieva et al., 2004).

Thus, work stress (job stress, stress at work), according to researchers, occurs as a result of complications related to the work environment (features of the workplace, working conditions, etc.). Organisational stress arises as a result of the negative impact of the characteristics of the organisation in which the entity

operates. These concepts are close, but not synonymous. Therefore, it is vital to use them adequately following the objectives.

Professional stress is often understood as such a negative mental state, which is caused by the peculiarities and requirements of the profession itself, in its narrow sense (Bodrov, 2000; Knorring, 2001; Huh-tala et al., 2021; Moreno Fortes et al., 2020; Kendall et al., 2000). These are complications:

- arise in the organic and psychological spheres in the performance of functional duties (according to the requirements of the profession) by the subject of professional activity and depend on the specifics of each profession;
- arising in the absence of a role balance between the professional sphere and the personal sphere: role overload, fuzzy role definition, role conflicts (Pankovets, 2006);
- due to the low level of satisfaction of the needs of the subject of professional activity in the process of performing this professional activity and the emotional attitude of the subject to the same work (Pankovets, 2006).

Currently, there are three main approaches to the study of professional stress: environmental, transactional and regulatory (Vasilieva et al., 2004; Hassard and Cox, 2015). The main task of the environmental approach is to find links between the content of work, the characteristics of the professional environment, the individual characteristics of staff and the violation of the health and psychological well-being of employees.

In the transactional approach, a great role is given to cognitive assessment by employees of professional situations and their own resources. *Proponents of the regulatory approach* (Leonova (Leonova, 2016), G. Hokki (Bodrov, 2000)) emphasise the mechanisms of regulation of activity and the mental state of specialists under the influence of various factors. Based on this, professional stress can be defined as a specific form of violation of the physiological and mental activity of the individual, which is due to individual and personal characteristics and occurs in response to the negative impact of the professional situation.

Both the features of the organisational and professional environment and the personal qualities of employees have a great influence on the development of stress, due to which they, when perceiving such influence of stressors, can reduce their significance or, conversely, strengthen them. In the latter case, there are complications in the psychophysiological state and psychological health and well-being of employees.

During the crisis phenomena that cause the forced transition of several employees to remote work, additional stress factors arise. It is the compulsion of remote work that restricts people's freedom and, despite the understanding of the need for such a state of affairs for survival, at the same time causes internal resistance due to the heavy psychological, emotional and financial burden for people. Employees working at home, especially in small rooms where they are forced to stay with other family members, may feel angry, irritated by the inability to adapt to the conditions and to cope with the difficult current situation. As a result, there is a risk of deteriorating mental health, the spread of symptoms of psychological distress and disorders, and so on (Hawryluck et al., 2004; Parmet and Sinha, 2020; Rubin and Wessely, 2020; Wu et al., 2005; Xiang et al., 2020).

In remote mode, employees receive basic information about the course of events from the media and social networks, which, unfortunately, often broadcast messages that update the perception of danger, threat and risk to life, often against the background of unclear information about the course of events, their uncertainty, etc. (Lechner and Tobias Mortlock, 2021; Pinchuk et al., 2022).

As for social networks, they often talk about spreading unverified rumors or just misinformation, fakes which causes unfounded fears among many people (Bontcheva et al., 2013; Oksanen et al., 2021).

An equally important factor in professional stress is the threat of reduced working hours and job losses in unstable business conditions, reduced payments, risks of housing destruction, etc., which negatively affects the financial capacity of employees due to limited or lost income and, as a consequence – on their emotional state, mental and physical health (Furedi, 2015; Page et al., 2006; Toffler, 1984; Zhou et al., 2020).

The main physiological symptoms of stress include (Pankovets, 2006):

- dysfunction of the nervous system;
- cardiac dysfunction;
- dysfunction of the gastrointestinal tract;
- respiratory dysfunction;
- sleep disorders.

Among the psychological symptoms are (Williams, 2001; Kamenyukin and Kovpak, 2004):

- decreased activity of the cognitive sphere: decreased attention; memory impairment; violation of the adequacy of perception and logic of thinking;

- disorders of the emotional sphere: increased anxiety; increase emotional rigidity; an increase in the number of generalized negative emotional reactions such as anger, guilt, shame;
- changes in the behavioural sphere: “stuck” on the problem; difficulty in performing official and domestic duties, etc.

Remote work in pandemic times increased perceived stress, reduced work-life balance, and work satisfaction and increased productivity and engagement. Researchers also found a partial moderating effect, competitive and complementary, of perceived stress, and one significant gender difference: when working remotely, perceived stress affects men’s productivity more acutely than women’s productivity (Sandoval-Reyes et al., 2021).

Therefore, prevention and coping with professional stress (stress management, according to Greenberg (Greenberg, 2008)) is based on the ability of employees to consciously and adequately use methods and techniques of stress management, in particular, the establishment of personal barriers at all stages of stress in order to combat stressors. In our opinion, such a barrier can be a personal resource as a specific set of personality qualities, which determines the inner readiness to overcome challenging situations.

### **3 ORGANIZATION AND PROCEDURE OF RESEARCH OF PERSONAL RESOURCE OF PROFESSIONAL STRESS OF EMPLOYEES WORKING REMOTELY**

#### **3.1 Research Methods**

In situations of change, uncertainty, and the impact of stressors, the role of personal resources becomes especially significant. The features of such spheres are decisive here, such as: motivational (active motivation in overcoming adverse external circumstances, focus on success despite all obstacles and challenges), volitional (personal endurance, control over life situations) and communicative (ability to interact effectively with others and maintain social contacts).

The following methods were used in the study: a questionnaire of interpersonal relations (author – V. Schutz, modification of A. Rukavishnikov) (Krylov and Manichev, 2006), a questionnaire for self-assessment of patience (authors – E. Ilyin, E. Feshchenko) (Ilyin, 2009), the method “Motivation for

success and fear of failure” (author – A. Rean) (Fetiskin et al., 2009), method “Level of occupational stress” K. Weiman to study the characteristics of professional stress (Greenberg, 2008), as well as the author’s questionnaire for self-assessment of professional stress of employees working remotely.

The questionnaire of interpersonal relations (author – V. Schutz, modification of A. Rukavishnikov) was used in our study to assess the communicative sphere of personality (Krylov and Manichev, 2006) in conditions of professional stress.

The test measures personal characteristics and evaluates relationships between people. The type of behaviour is diagnosed in three areas:

- 1) an inclusion (the need to create and maintain satisfactory relationships with other people (psychologically acceptable), based on which there is interaction and cooperation, considered in two directions: the first - from individual to other people in the range from “establishing contacts with all people” to “does not establish contact with anyone”, the second – from other people to the individual in the range from “always establish contact with him” to “never establish contact with him/her”),
- 2) a control (the desire to create and maintain a sense of mutual respect, based on competence and responsibility, to feel competent and responsible person, ranging from the desire for power, authority and control over others to the desire to be controlled, to lose responsibility),
- 3) an affect (the need to create and maintain a satisfying relationship with other people based on emotional attachment, the desire to create and maintain a sense of mutual warm emotional relationship, the individual’s need to feel worthy of love is considered in the range: behaviour expected by the individual from others in the range of “always establish a close personal relationship” to “never establish a close personal relationship with an individual”).

In the process of the stressor’s influence on the personality, its initial cognitive evaluation takes place by cognitive mental processes, such as thinking, memory, attention, imagination, will, etc. Based on this assessment, the situation is considered threatening or favourable, respectively, the analysis is carried out whether there are enough resources to cope at the emotional and volitional level or not.

That is why to assess the emotional and volitional sphere of employees we used the questionnaire for self-assessment of patience (authors – E. Ilyin, E. Feshchenko) (Ilyin, 2009). Under the latter E. Ilyin un-

derstands the quality of personality for a long time with the help of strong-willed efforts to withstand adverse situations (Ilyin, 2009). The questionnaire is aimed at studying the volitional component of personality, personal self-assessment of personality opportunities to perform work or perceive any situation.

The method “Motivation for success and fear of failure” (author – A. Rean) provided an assessment of the severity of motivation to achieve in situations of professional stress, its impact on the effectiveness of employees who are forced to work remotely (Fetiskin et al., 2009).

Analysis of the data by the method allows you to assess which desire mainly determines the behavior: the desire to succeed or avoid failure. The advantage of one of these two options largely determines the level of our aspirations – whether the person is ready to set difficult tasks to experience significant success, or chooses more modest goals so as not to be disappointed.

K. Weimann’s method “Level of occupational stress” (Greenberg, 2008) is aimed at studying the degree of manifestation of professional stress in employees of the organization. The methodology contains 15 statements, which respondents are asked to rank in terms of the frequency of experiencing difficult situations.

As a fundamental characteristic of the cognitive component of the personal resource for the prevention of professional stress was chosen features of the subjective perception of professional stress by employees, which were determined by the author’s questionnaire. The questionnaire consisted of 10 questions related to various manifestations of professional stress, the presence of which respondents noted in the following gradation: 1 point – manifestations are almost absent, 2 – minor manifestations, 3 – moderate manifestations, 4 – severe manifestations, 5 – pronounced manifestations.

The sample consisted of 156 people, of whom 55.8% were employees with telework, who worked stably outside the headquarters and 44.2% were employees at distance work, who were forced to work remotely due to crisis conditions.

The age composition of the sample is presented as follows: employees under the age of 30 – 51.9%; at the age of 35-45 years – 15.4%; at the age of 45-55 years – 25%; over 55 years – 7.7%

The organisation of employees of organisations was also divided according to the record of professional activity: up to 5 years (25%); 5-15 years (30.8%); 15-25 years (15.4%); more than 25 years (28.8%) of the respondents.

Regarding the organisational and professional

composition of the sample, it is distributed as follows: managers – 25%, employees – 75%. Among them: 5.8% – top managers, 32.7% – middle managers, 61.5% – specialists.

The experimental array of data obtained during the experiment was subjected to quantitative and qualitative analysis. Data processing was performed using the computer package of statistical programs SPSS (version 23.0) Criterion  $\chi^2$ , correlation analysis of variance, and K-means cluster were used to identify statistically significant differences and the relationship between different groups of respondents and data.

### **3.2 Features of the Cognitive Component of the Personal Resource of Professional Stress Prevention for Employees Working Remotely**

According to the results of an empirical study based on the author’s questionnaire, the distribution of the studied employees according to the subjective perception of professional stress was revealed. It was found that the manifestations of professional stress are virtually absent or insignificant for only 11.1% and 20.4% of respondents, respectively. 37.0% of employees rated the manifestations of professional stress as moderate, 25.9% – as severe, and 5.6% – as pronounced. Thus, the vast majority of respondents (68.5%) perceive the situation of professional activity as stressful.

At the same time, the results of the analysis of variance revealed the features of the subjective stress assessment of employees depending on status (figure 1).

It was stated that managers, regardless of gender, perceive the situation of professional activity as more stressful than ordinary employees, which may be due to their greater overload and responsibility for the results of the case ( $p < 0.05$ ). At the level of the trend ( $p = 0.1$ ) it was found that with the increasing length of service in women, regardless of position, the subjective assessment of professional stress deteriorates significantly compared to men.

Thus, in general, the insufficient level of the cognitive component of the personal resource for the prevention of professional stress was stated in a significant part of the respondents, especially in female managers who have a significant length of service.

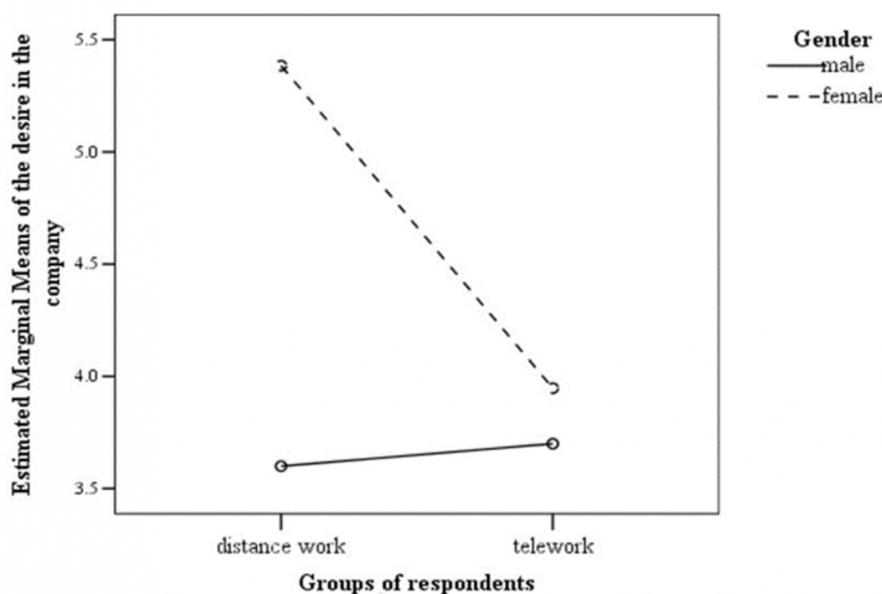


Figure 1: Features of the subjective stress assessment of employees depending on status.

### 3.3 Features of the Communicative Component of the Personal Resource of Employees Working Remotely

At the first stage, the study of the communicative component of the personal resource of the employees with telework and distance organisation of work with the help of a questionnaire of interpersonal relations (author – V. Schutz, modification of A. Rukavishnikov) (Krylov and Manichev, 2006).

As follows from the data given in table 1, a significant number of respondents (42.2%) have a low desire to belong to different social groups, avoid large and frequent communication with others; do not feel very comfortable among others. Moreover, they do not require others to be involved in active communication (48.0%).

At the same time, regarding the need for affect, it was found that more than half of the respondents (65.4%) feel very careful in establishing close, intimate relationships, based on love and emotional attachment. Only 13.4% of employees have a strong need to create and maintain a feeling of mutual warm emotional attitude.

Regarding the need for control, it was stated that more than half of the respondents (65.4%) seek to build and maintain satisfactory relationships with others based on a sense of mutual respect, competence and responsibility. In fact, we can talk about the ex-

pressed need for this category of workers to feel competent and responsible person.

The next step was the analysis of the communicative component of the personal resource of employees with a remote of labour organisation by gender and organisational and professional characteristics.

Thus, according to the results of analysis of variance (figure 2) found statistically significant differences ( $p < 0.05$ ) gender characteristics of employees in the desire to establish friendly relations with others depending on the form of work organisation. As Figure 2 data shows, men, both at telework and distance work, show a low tendency to be in the company of people, while women at distance work are characterized by a greater desire to maintain relationships with others for interaction and cooperation. For women at telework, this need is relatively less important. In our opinion, this picture shows that women, having experience in the office with constant communication with employees, remain more oriented to psychologically satisfactory interaction with people.

In general, it should be stated that women, regardless of the forms of labour organisation, are more inclined to close emotional contacts with a partner and need a relatively greater feeling and confirmation in the love of a partner, in contrast to men.

Regarding the professional and organisational features of the communicative component of the personal resource of employees, we revealed statistically significant differences ( $p < 0.01$ ) in the desire for control in communication. Thus, employees in manage-

Table 1: Features of interpersonal needs and behavior of employees of organisations with different forms of work.

Trends in interpersonal interaction	The level of severity of the trend, %		
	low	medium	high
to be in the company of other people	42.2	38.5	19.3
the desire for others to show interest in the individual and accept him into their society	48.0	19.4	32.6
control relationships with others	21.1	13.5	65.4
to obey others in relationships	34.6	38.5	26.9
to establish close relationships with others	65.4	21.2	13.4
the desire to establish deep emotional relationships with other	38.5	26.9	34.6

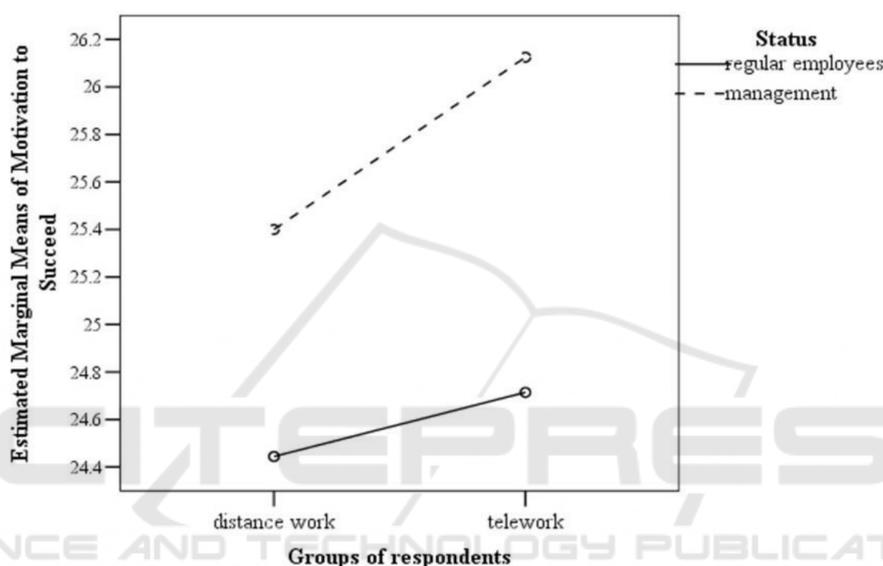


Figure 2: Features of the desire in the company of employees depending on gender and form of labour organisation.

rial positions show a greater need for authority, influence over others, and are more likely to show responsibility and dominance over others, in contrast to ordinary employees. Instead, the tendency to obey others is more pronounced in ordinary employees, while managers are less likely to avoid responsibility and obey others.

### 3.4 Determining the Indicators of the Emotional and Volitional Component of the Personal Resource of Employees Working Remotely

The next stage of the empirical study of the psychological characteristics of the impact of professional stress on employees of organizations involved the analysis of the features of the volitional component of the personal resource using a questionnaire for self-assessment of patience (authors – E. Ilyin, E. Fes-

hchenko) (Ilyin, 2009).

It was found that absolutely all the surveyed employees rated their patience at a high level, which indicates a tendency to highly appreciate the strong-willed qualities associated with purposefulness.

Regarding gender-age and organisational-professional features of subjective assessment of volitional ability to regulate activities, it was found that employees (women and men) of telework form of labour organisation evaluate their patience relatively higher as opposed to employees of the distance work form of employment.

Based on the results of the analysis of variance, the statistically significant differences ( $p < 0.05$ ) were found in the level of subjective assessment of patience from the record of service.

The group of employees of the distance work form of labour organisation with work experience up to 15 years tends to have higher values of volitional assessment; the group of employees with work experience from 15 to 25 years evaluates volitional qualities

much lower; and in the group of employees working more than 25 years increase again. A group of respondents from a distance work form of labour organisation is characterized by a relatively high level of assessment of volitional qualities, regardless of the record of professional activity.

Such differences, in our opinion, can be explained by the fact that in the extreme situation of recent years, associated with the spread of coronavirus and martial law and, consequently, a sharp change in living conditions, for a group of workers with experience of distance work, there were significant limitations of career prospects, which affected the level of endurance in contrast to the group of employees of telework, for whom, in general, the changes had less impact.

### **3.5 The Results of the Study of the Indicators of the Motivational Component of the Personal Resource of Employees Working Remotely**

The analysis of the study results of the features of the motivational sphere of the employees' personality was carried out using the method "Motivation for success and fear of failure" (author – A. Rean) (Fetiskin et al., 2009).

Summarizing the results, it was found that only 25.0% of employees are motivated to succeed, which indicates a desire in the process of setting and achieving goals to focus on the successful completion of tasks and getting a positive result. The vast majority of respondents (67.7%) show a tendency of motivation to succeed, which indicates a lower level of their activity in achieving results. In addition, 7.7% of respondents show a tendency of motivation to fail, which can lead to a decrease in self-confidence and, consequently, the level of demands.

At the same time, a detailed analysis revealed the peculiarities of the motivational component of employees depending on gender, position and record of professional activity.

Regarding the peculiarities of the manifestation of motivation for success depending on gender, a statistically significant difference ( $p < 0.05$ ) was recorded in employees with telework and distance work forms of labour organisation.

Men with a distance work form of labour organisation have higher rates of motivation to succeed than women. While for employees with telework form of activity of both male and female, the indicators of positive motivation are almost indistinguishable.

There is a more active desire of men without experience of telework to realize themselves in a new place, in new conditions, with new employees.

Further analysis of variance allowed determining the features of the motivational component of resource depending on the position and form of labour organisation (figure 3).

Figure 3 shows that employees in management positions show higher motivation to succeed than regular employees, both during telework and distance work.

This state of affairs, in our opinion, can be explained by the fact that managers of different levels (top, middle management) have greater access to information about the prospects and plans for the company development, project implementation, are more involved in the financial aspects of the activities of structural divisions and the organisation as a whole, which contributes to the confidence that they are more involved in the process of achieving the company's success and have a direct influence on it.

Next, the study performs the analysis of variance of the positive motivation of employees depending on professional experience during telework and distance work forms of labour organisation. Regarding it, the study established that employees during telework form of labour organisation are characterized by consistently high rates of positive motivation, i.e. they are focused on achieving constructive, positive results. While in contrast to employees with a distance work form of organisation of activities, it shows a decrease in motivation to succeed with work experience from 15 to 25 years.

Thus, both with the general level of patience and with the peculiarities of the motivational sphere, employees with experience of 15 to 25 years have certain difficulties, which may be associated, in our opinion, with crisis experiences related to the age characteristics of this category of respondents. We can assume that external complex circumstances acted as a catalyst for internal fears. However, the positive fact is that the lower values of this group of respondents by professional experience fluctuate within the positive motivation, i.e. employees look to the future with hope.

According to the results of the K-means cluster, the distribution of the surveyed by the levels of personal preventional resources concerning professional stress was established. Previously, the indicators (the distribution of which, despite all the peculiarities, did not differ statistically enormously from the normal distribution curve) were transformed by McCall's T-scale in order to present individual test results in a way that is easy to interpret. As a result, 3 clusters

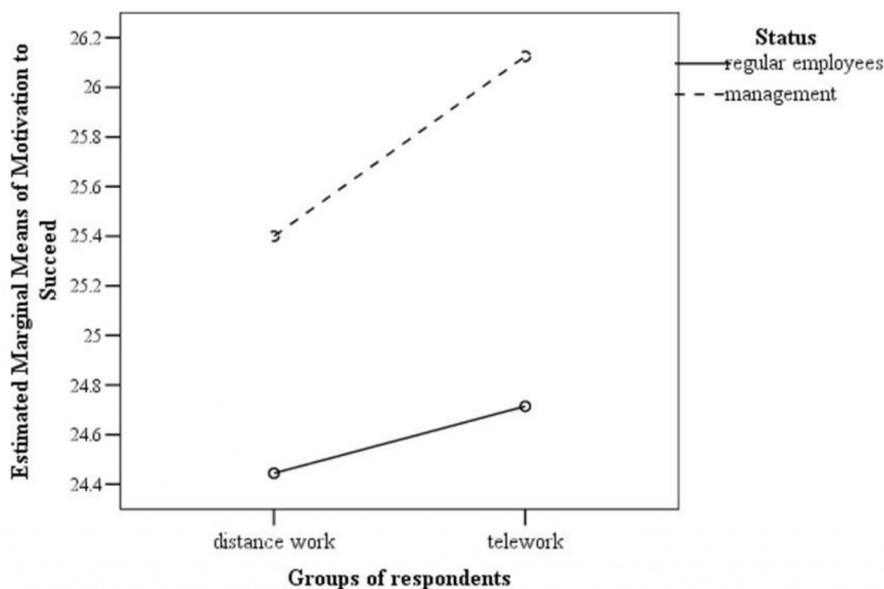


Figure 3: Features of the motivational sphere of employees depending on the position and form of labour organisation.

were identified, the analysis of which allows us to determine the presence of groups of subjects with levels below average, average and above-average (table 2).

Cluster 1 (34.6% of respondents) included employees with mostly low indicators of personal resources, including a high subjective assessment of professional stress. At the same time, given the sufficient indicators of patience and balance of interpersonal relationships in terms of inclusion in interpersonal relationships, their level of personal resources can be considered as below average.

Cluster 2 (50.0% of respondents) consisted of employees with mainly average indicators of personal resource, which gives grounds to define the level of personal resource in general as average.

Cluster 3 (15.4% of respondents) includes employees with mostly high indicators of personal resources. At the same time, taking into account the subjective assessment of stress and a certain imbalance of interpersonal relations according to the indicator of control in interpersonal relations, their level of personal preventional resources of professional stress can be considered higher than average.

At the same time, according to the results of variance analysis, it was found that higher levels of personal resources correspond to lower indicators of professional stress ( $p < 0.01$ ). This indicates the expediency of its development as a significant factor in preventing professional stress of employees.

#### 4 CONTENTS OF THE PROGRAM

Therefore, there was a need to develop and approve a program to prevent professional stress of employees who work remotely in crisis conditions, which is based on the development of personal resources. For this purpose were identified and implemented the main principles and psychological conditions for the development of personal resources of employees working remotely. Thus, the main principles include:

- systemic (mutually determining influence of psychological components on the development of the individual's personal resources);
- comprehensiveness (orientation on the integral development of the personality of employees by using a set of complementary methods of corrective and developmental influence);
- individualization (development of a positive attitude towards oneself, belief in one's own abilities by taking into account the individual characteristics of the development of remotely working employees);
- individual activity (overcoming developmental barriers takes place due to strengthening the internal potential of the individual and including it in joint activities);
- objectification of behavior (providing constructive feedback leads to occurring of transforma-

Table 2: Distribution of employees of organizations by levels of personal resources.

Indicators of personal resources	Cluster		
	1 (lower than average)	2(average)	3 (above average)
Subjective stress assessment	60.0	41.5	50.7
Motivation to succeed	48.2	48.7	53.2
Patience	49.6	49.1	53.8
<i>Inclusion in interpersonal relationships</i>			
Tendency to be in the company of other people	41.2	52.5	61.9
The desire for others to show interest in the individual and accept him into their society	41.6	52.4	61.1
<i>Control of interpersonal relationships</i>			
Tendency to control others in relationships	42.7	54.3	52.4
Tendency to obey others in relationships	51.2	46.2	59.6
<i>Intimacy in interpersonal relationships</i>			
Tendency to establish close relationships with others	43.5	48.8	68.4
The desire to establish deep emotional relationships with others	41.8	51.5	63.4

tional changes of the personality in perception, attitude and behavior towards oneself and others);

- research position (activation of self-regulatory strategies due to the application of reflective analysis of one's own activity);
- partner communication (development of reflection, tolerance, recognition of the value of another person, his thoughts, interests, preferences).

These principles were clarified in the psychological conditions of the development of personal resources of employees working remotely in crisis conditions:

- 1) ensuring the correspondence of methods and techniques to life experience and the level of personal development, through a systematic reflective analysis of needs, values and meanings in all types of interactions within the program;
- 2) creation of a safe virtual space for personal changes, based on the feelings, experiences, states, and interests of the participants, admitting the value of their personality, as well as joint development and adoption of the rules of the group and ontime feedback;
- 3) promotion of self-discovery, self-disclosure and self-realization of employees through the discussion of personally significant professional and life situations and the development of a common vision of emerging problems and ways of their solutions;
- 4) maintaining an active position towards a new, developing experience, which allows each participant to discover opportunities for expanding the

perception of the situation, oneself and one's resources, and the vision of others;

- 5) the organization of problem-meaningful creative space, which is aimed at cooperation and joint creativity in solving complex professional and life tasks;
- 6) the use of interactive learning methods as a means of promoting the development of personal resources of employees of organizations that work remotely in crisis conditions;
- 7) stimulation of personal responsibility, which increases involvement in the process of group interaction, increasing motivation for internal changes and becoming personally meaningful.

The program "Prevention of professional stress for employees who work remotely in crisis" is designed for 30 hours (of which – 12 classroom hours and 18 hours for independent work) and was implemented in the format of a special training course on the basis of the Ukrainian Open University of Postgraduate Education (UOUPE) <https://bit.ly/3a2PBSe>. It consists of four modules, which involve remote individual and group processing of selected components of personal resources (communicative, volitional and motivational). Forms and methods of the program are aimed at the development of all its components and were selected according to the results of the diagnosis of the personal resources of employees who work remotely (Bondarchuk and Pinchuk, 2020).

Taking into account the identified features of the development of the personal resource of employees who work remotely in crisis, we consider the most optimal forms and methods of its development to be active group methods adapted to

the specifics of a remote form of interaction in a virtual learning space. These are thematic group discussions (rooms in Zoom), brainstorming (online boards Google Jamboard, Mentimeter), mini-lectures (Zoom, BigBlueButton, Google Meet), situational role-playing games, individual and group exercises (Zoom), tasks for individual independent works (Google Classroom), etc.

Exercises that ensured the development of personal resources of employees who work remotely in crisis, in accordance with the components we identified and were included in the modules, developed by us personally or borrowed from other authors and modified by us in accordance with the goals and objectives of the program (Greenberg, 2008; Karamushka and Gnuskina, 2018; Leonova, 2016; Pankovets, 2006; Pinyuhina et al., 2015).

To create a comfortable, trusting atmosphere of interaction and communication, relieve emotional tension, and unite the group at the organizational and preparatory stage, techniques were used to get to know the group members, determine the goal and tasks, develop and approve the rules of interaction, and study the expectations from participation in the program. This was achieved by the use of icebreaker exercises, during which, for example, the participants, answering the questions: "I think that I...", "Others think that I...", "Actually, I...", invented three imaginary characters, heroes, animals and then introduced themselves in a circle.

Elaborating on the content of the first module "Cognitive component of personal resource as a factor of prevention of professional stress", the participants were asked to describe and analyze problematic situations of professional activity concerning the main factors of the development of stress, using the following questions:

- regarding the "significance of the situation": What is valuable for me that I will lose if I refuse to perform this activity or from being in this situation?
- regarding "uncertainty": What do I not know about this situation? What information do I need? What am I missing to cope? How should I act?
- regarding the "load": What resources (effort, funds) will I lose or do I need to cope with the situation? At what cost can I succeed in this dish?
- regarding "risk": What valuable for me will I lose if I take the wrong steps?
- regarding the "rush": How much time do I need to deal with the situation? How much time am I willing to devote to this matter? (significance of the situation, uncertainty, load, risk, rush).

This approach helped carry out a detailed cognitive analysis of professional situations in crisis conditions to reduce emotional tension and awareness of ways and personal opportunities to solve difficult circumstances.

Within the deployment of the second module "The role of the communicative component of a personal resource in overcoming professional stress in crisis conditions", the work was aimed at finding and developing means of social support. Thus, the participants were invited to join mini-groups in Zoom Breakout rooms and discuss and write down what are the positive and negative aspects of communication in a remote format in these challenging conditions.

Self-study of this module consisted of the tasks of providing and asking for social support. For example, talking to someone close to them about a difficult situation they are in, talking about their experiences using the I-statement technique, and providing constructive feedback.

Self-regulation techniques, goal-setting techniques and others were suggested for the development of the willpower and perseverance of employees. Thus, performing the "Fortress" technique, the participants were offered, divided into small groups of 4-5 people, to create a security fortress in Google Jamboard, using any of the board's available tools. During the task, it was necessary to think of a group answer to the following questions: "What emotions and feelings accompanied the process of creating the fortress?", "What material is the fortress built from?", "How strong are the walls of your fortress?" If it is not enough – "Who can help make them stronger? / How can they be strengthened?", "Who (or what) does the fortress protect?", "What resources/things make the inhabitants of the fortress stronger?", "Who defends the fortress from enemies?", "What will you take with you to the fortress?".

The setting goals and developing steps to achieve them technique was also used. For this, the participants independently determined the best result they enjoy to gain (the best purpose) in four areas: health, work, family (relationships with a loved one, children) and personal development. If desired, the spheres could be changed in accordance with one's own priorities. Next, on a scale from 1 to 10, the current level of satisfaction with each area was recorded. After that, it was necessary to write down 3-5 easy, real steps that will help move one position closer to the goal.

The basis of tasks for self-study in this module was based on the statement that repeated mental states gradually change the corresponding personality properties (Maksymenko et al., 2015). And the main prin-

principle of managing mental states is the analysis, selection and use of self-regulation methods. Accordingly, the participants were offered to independently compile a list of available and desirable methods of self-regulation, using the list: autogenic training (self-suggestion), breathing techniques, muscle relaxation, physical exercises, meditation, visualization (use of positive images), etc.

In the process of mastering the tasks of the fourth module “Development of the motivational sphere of personal resource as a factor of preventing professional stress of employees”, it was suggested to individually perform the exercise “I want, I can, I will be in professional activity” (Kamenyukin and Kovpak, 2004) when each participant continued unfinished sentences about his/her professional activity:

- “I want to work...” (desire).
- “I can at work...” (abilities and opportunities, unique ability).
- “I will be at work...” (plans).

After that, there was a discussion about the participants’ analysis of the correspondence between their desires and opportunities for self-realization in the professional sphere. The value and relevance of the proposed exercise lie in finding and identifying one’s own internal resources that will help achieve success in professional activities.

The independent work on this module included the task of analyzing the motives of professional activity in crisis conditions, answering the question: “Why do I work in such difficult times?”. Another task was to recall some stressful events that happened in the last year and analyze the motives of one’s own behaviour under the influence of a challenging situation.

The developed program for the prevention of professional stress for employees who work remotely in crisis was based on a combination of the following components:

- educational, training and development components;
- agreement and compliance with the rules of group interaction;
- determination of the goals of each stage of the program;
- creation and maintenance of greeting and farewell rituals unique to the group;
- verbal reflection, which created favourable conditions for the development of cognitive, communicative, volitional and motivational components of the personal resource in countering challenging circumstances.

60 employees who were forced to work remotely took part in the approbation of the program, of which 30 were in the experimental group and 30 were in the control group.

At the end of the approbation of the program, the participants were asked to answer the questions of the questionnaire again regarding the determination of the level of subjective perception of professional stress, the results of which are presented in table 3.

Table 3: Distribution of respondents of the experimental regarding the levels of individual perception of professional stress before and after approbation of the program.

Levels of individual perception of manifestations of professional stress	Number of respondents in %	
	Before approbation (I stage)	After approbation (II stage)
practically absent	10.0	23.3
insignificant	23.3	30.0
medium	36.7	26.7
pronounced	20.0	20.0
great pronounced	10.0	0.0

As shown in table 3, a comparative analysis of the individual perception of the manifestations of professional stress of employees working remotely in crisis conditions, as a result of the preliminary approbation of the program, testifies to the effectiveness of the proposed program for participants (statistically significant differences at the level of  $p < 0.01$  according to the sign criterion). At the same time, no statistically significant differences were found in the indicators of individual perception of professional stress in the control group. The obtained results indicate the need its wider implementation with different categories of employees in the postgraduate education system.

## 5 CONCLUSIONS

Stress as a reaction to a difficult life situation is seen as a result of individual interaction with the environment, individual adaptive response to the complication of the situation or a special class of states that reflects the mechanisms of regulation of activities in difficult conditions.

Professional stress can be defined as a specific form of violation of physiological and mental activity, which occurs in response to the negative impact of the professional situation, and which is due to individual psychological and personal characteristics of employees.

Personal qualities of employees play a very impor-

tant role in the occurrence of professional stress. They are the buffer that mediates the impact of stressors, increasing their action, or inhibiting it, negatively affecting the mental health of employees and the quality of their professional activities.

The influence of stressors is significantly enhanced in the forced transition to remote work, causing violations in the cognitive, communicative, volitional and motivational components of personality resources of employees of the organization, which acquire their specifics depending on gender, age and professional characteristics of employees.

Therefore, personal factors should be taken into account in the prevention and coping of professional stress, developing the ability of employees to consciously and actively manage stress and counteract stressors.

A program for preventing professional stress for employees who work remotely in crisis has been developed, and several principles and psychological conditions for its implementation have been substantiated.

The approbation of the program, which consisted of four modules corresponding to the cognitive, communicative, volitional and motivational components of the personal resource, proved its effectiveness. The results of the analysis of the distribution of respondents regarding the levels of individual perception of professional stress before and after the approbation are evidenced. Accordingly, the need for broader implementation for various categories of workers in crisis is actualized.

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