The influence of a stressful situation on human behaviour in the modern world

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Abstract. The article presents the results of a study of the types of response among bailiffs-executors in stressful situations. The relevance of the study is driven by the need to search for effective strategies and technologies for psychological support of bailiff officers which is due to the high riskiness and stressfulness of their professional activities. The study involved 675 bailiffs-executors, 410 males (60.7%) and 265 females (39.3%) aged 21 to 59 years. In our research, we used Minnesota Multiphasic Personality Inventory (MMPI) and K. Leonhard-N Shmishek Test to identify character accentuations supplemented with personal data. The study revealed the features of bailiffs' response in stressful situations and established the prevailing types of response. The obtained data indicate sufficient emotional regulation, stability, activity, initiative, enterprise and resourcefulness among the bailiff service officers in non-standard stressful situations. The data factor analysis allowed us to highlight the main characteristics common for bailiffs-executors with the most widespread rigid - type of response in a stressful situation. The results of the study can be used in professional training of the bailiff officers, in psychological selection and psychological support, as well as in foreseeing and prevention of professional deformation of a personality among bailiffs.

1 Introduction

The professional activity of bailiffs is associated with making decisions and taking actions not only in standard professional situations, but also in conditions of limited time and uncertainty of information, in extreme conditions, in the situations of increased danger with a risk to one's own life and the lives of others, in stressful conditions requiring maximum effort, physical endurance, emotional stability, intellectual involvement.

The implementation of professional tasks by a bailiff is associated with the state justice and law enforcement nature of their activities, with diversified non-standard situations characterized by time shortage. Bailiffs' duties join into one such qualities and requirements as pronounced organizational skills. numerous communicative contacts, individual approach, high responsibility and social significance, knowledge of legal regulations, exercising authority, educational functions, procedural independence, originality of the socio-psychological atmosphere in the execution of court decisions, high stressfulness [1].

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The professional activity of bailiffs makes increased demands on their psychological traits which characterize professional competence, social responsibility, organizational, communicative, moral, ethical, emotional and volitional qualities, and intellectual abilities.

The relevance of studying the types of bailiffs' response in stressful situations is crucial for professional training of bailiffs. It is connected with the need to determine the criteria and indicators of their stress resistance when solving professional problems, to develop professionally significant personality traits, to work out methods and tools for forming effective types of response in stressful conditions, to develop flexibility both in decision-making and actions during their professional training [2].

It is now recognized that police work including that of bailiffs can be regarded as one of the most stressful. Among the most stressful factors are the peculiarities of the internal organization of activities and interdepartmental interaction, insufficient career growth, inadequate reward system, characteristics of the justice system, public practice, etc. In this case, various options for the response of the individual in a stressful situation are possible. According to K. Sweeny, J.L. Howell, V.W. Kwan [3], personality characteristics play a special role in responding to stressful situations: neuroticism, consciousness, etc. García-Leóna, J.M. Pérez-Mármol, R. Gonzalez-Pérezc, M.C. García-Ríosb, M.I. Peralta-Ramíreza [4] note that a significant factor determining the characteristics of a person's perception of stress is their stability. Thus, individuals with low resistance demonstrate higher scores in terms of perceived stress level (p <0.001), intensity of stressful events (p <0.025), interpersonal sensitivity (p = 0.028), phobic anxiety (p = 0.044). The very same stressful events and their experiences can increase the risk of suicidal thoughts and behavior [5]. The studies of M. Gächter, D.A. Savage, B. Torgler [6] found that female officers were significantly more likely to report physical loading than men, while there were no gender differences in terms of psychological stress.

A study of the stressors and patterns of coping with them in law enforcement officials showed that the main stressors are the financial situation, the situation when a fellow officer killed or witnessed death, poor personal relationships with the boss, and unfair career opportunities. Physical exercise is the most effective way to regulate the level of stress under such situations [7]. A study by B. Skowroński, J. Bartoszewski [8] shows that stress in the work of bailiffs correlates with self-efficacy indicators: an increased level of self-efficacy reduces the severity of stress and the destructiveness of its impact. The main stress factors are as follows: lack of adequate communication in the team, an unfavorable atmosphere at work, misunderstandings in the performance of professional duties, obstacles to professional and career growth, lack of actual support and control, unsatisfactory working conditions, inadequate response to accusations and inability to solve systemic problems.

Studying the problems of professional psychological selection of bailiffs, D.V. Maslennikov [1] singled out high indicators of emotional stability, common sense, courage, and self-control. The author established the leading coping strategies of bailiffs in the form of three behavior models: making a social contact, seeking social support and cautious actions. It turns out that highly successful bailiffs have a significantly higher level of assertive and cautious actions and making a social contact, while low-successful bailiffs have a significantly higher level of manipulative, asocial and aggressive actions. It should be noted that when assessing the influence of extreme factors on mental and somatic health, bailiffs consider the psychological load of their service to be "extreme" (50.7%) and even "beyond the extreme" (19.9%). According to the authors, more than 70% of the bailiffs in the study admitted that they were unable to maintain a high pace of work for a long time without harming their psychological health.

I.N. Nazarov [9] focuses his attention on high requirements for the psychological qualities of bailiffs, such as social maturity, responsibility, organizational, communicative,

moral, ethical, emotional, volitional qualities and intellectual abilities. The research found out that most of the subjects (70.4%) are nervous at work, experiencing stress, whereas only 33.6% of respondents characterize the atmosphere at the place of service as calm. The data revealed in the study allow us to make an assumption about a sufficiently high level of stress and risk of professional deformation among the bailiffs performing professional duties.

Investigations by L.D. Demina, A.S. Kuzmina [10] revealed the relationship between the individual-typological characteristics of bailiffs and manifestations of self-attitude. A positive attitude of specialists towards themselves, acceptance and interest in their identities, self-confidence are associated with such professionally important qualities as an advanced self-control, discipline, accuracy in following social norms, emotional stability, the ability to find a way out of difficult situations, perseverance in achieving the set goals, consistency, conscientiousness, responsibility. Knowledge of one's own characteristics, understanding of oneself, self-approval, self-confidence characterize serious, self-confident, persistent and reserved bailiffs who are characterized by firmness in actions and adherence to their principles. A high level of self-leadership, self-confidence and self-trust distinguish practical, rational, realistic, civil servants. Self-critical bailiffs-executors with a high level of self-accusation concerned in the opinion of others are characterized by dependence on group opinion, conformity, the tendency to feel guilty, by lack of independence in decision-making and an orientation towards social approval.

The study of the value-based orientations of bailiffs-executors by A.S. Kuzmina [11] made it possible to conclude that bailiffs with a high level of meaningfulness in life who set goals for the future are distinguished by an internal locus of control. They are characterized by the ability to control their emotions and manage their lives, to see in themselves the reasons for the events happening to them in life. The process of regulating one's own behavior, the choice of a strategy for coping with stress is carried out with the actualization of personal meanings and awareness of the importance of one's role in a stressful situation. In view of this, the work of A.S. Kuzmina [12] analyzed the features of the life-meaning orientations of bailiffs. The bailiff-executor regards himself/herself as a strong personality, possessing freedom of choice and ability to build his/her own life attesting to an internal locus of control. They operate as dynamic subjects of activity which contributes to an increase in adaptive capabilities and the choice of adequate coping strategies for solving stressful situations.

Analyzing the psychological characteristics of bailiffs' service, D.V. Karelin, E.I. Meshcheryakova, A.V. Larionova, P.A. Trusov [13] focused on socio-professional and personal-communicative characteristics. They revealed that in most cases bailiffs are characterized by a competence-based type of communication, the ability to come into contact with other people. They express positive responses and feelings in relationships, demonstrate adequate reactions to the opponent's behavior. For them compromise is the predominant strategy of behavior in conflict situations. The authors' observations show that personal characteristics of bailiffs in a sufficiently harmonious psycho-emotional state can present controversial combinations of a high level of claims and self-doubt, energetic performance and rapid exhaustion. Such inconsistencies indicate the risk of emotional burnout.

The relationship between the level of emotional burnout, life-meaning orientations and coping strategies among bailiffs-executors is established in the work of S.E. Zakharova and Z. G. Ustaev [14]. N.V. Semenova, E.V. Ivanova, A.N. Zakharova studied the features of decision-making by bailiffs depending on their personal characteristics [15]. They found out that bailiffs with a high level of personal anxiety are able to get mobilized in stressful situations and make decisions 2.1 times faster than the respondents with low personal anxiety. The latter are characterized by a higher level of procrastination in decision-making

and hypervigilance when it is necessary to choose between alternative options. Bailiffs with low personal anxiety are more inclined to take risks compared to the respondents with the high level of personal anxiety.

The study of the professionally significant qualities for bailiff officers by A.I. Alontseva [16] who investigated the dynamics of their professional success showed that the majority of bailiffs-executors are characterized by an average level of self-control, initiative, responsibility, diligence, motivation and a fairly high level of professional activity, a threshold level of stress resistance, a low level of proneness to conflict in relationships with colleagues.

The study of the characterological peculiarities of the bailiff officers made it possible to establish that bailiffs are characterized by emotional balance, sufficient self-control, restraint in the performance of professional duties [17]. Along with this, in most professional situations bailiffs tend to mobilize their internal resources for successful overcoming of difficulties. This may cause decrease in mood, increase in pessimism and dissatisfaction.

Our research aims to study the types of response of bailiffs-executors in stressful situations.

2 Sampling and research methods

The empirical base of the study was 675 bailiffs-executors. Gender distribution of the sample: 410 men (60.7%) and 265 women (39.3%). The age of the subjects ranges from 21 to 59 years old. The average age of the subjects is 36.18 years. The most common age range is 26 to 38 years old. The most frequent age is 28 years (6.4%). Work experience constitutes 4 months to 17 years.

In order to study the types of response of bailiffs in stressful situations, we carried out their psycho-diagnostic study. The following characteristics of bailiffs-executors were collected and analyzed: age and work experience, character accentuations, basic personality traits, emotional state and self-esteem of the subjects, as well as the type of response in stressful situations.

The data on the indicated parameters were obtained on the basis of the study of individual questionnaires that were filled in by the subjects, alongside with the Minnesota Multiphasic Personality Inventory (MMPI) and the K. Leonhard-N. Shmishek test to determine character accentuations.

3 Results

Let us consider the results of investigating personal characteristics in bailiffs according to the method of K. Leonhard-N. Schmishek in the aspect of studying their response in stressful situations presented in Table 1.

Table 1. The results of the study of the personal characteristics in bailiffs according to the method of K. Leonhard-N. Shmishek

Variable	M	min	max	σ
Hypertension	16.48	3	24	16.01
Sticking	12.27	0	22	3.37
Pedantry	9.06	0	22	4.52
Emotiveness	13.18	0	24	5.31
Anxiety	6.28	0	24	4.98
Cycloidity	9.39	0	21	3.22

Excitability	5.00	0	18	3.32

Research results according K. Leonhard-N. Shmishek test showed that the data obtained on the scales "Pedantry" (9.06 ± 4.52) , "Cycloidity" (9.39 ± 3.22) , "Dysthymia" (9.86 ± 3.58) , "Exaltation" (10.80 ± 4.24) turned out to be within the normal range which reflects sufficient emotional regulation, stability, an adequate attitude to professional activity. Along with this, there is a slight increase in indicators on the scale "Hypertension" (16.48 ± 16.01) . This data characterizes bailiffs as agile, proactive and energetic in solving professional tasks, and also having high motivation for achievement. Bailiffs are characterized by enterprise and resourcefulness in non-standard stressful situations, by the ability to quickly and easily navigate a new environment in extreme risky situations. In professional interaction, bailiffs are distinguished by sociability, optimism, love for life, an articulated sense of humor, and also by independence from the opinions and assessments of others, self-reliance in decision-making and action.

There is an increase of results on the scale "Demonstrativeness" (14.35 ± 3.45) compared with the norm. It characterizes sociability, friendliness, personal charm, the ability to attract attention in the process of interpersonal communication and professional interaction, arouse confidence in oneself, show artistry, exert influence on others. The data obtained indicate good self-regulation of bailiffs, their ability to quickly adapt to any conditions, determination, courage in extreme conditions, and the ability to resolve conflict situations. It should be noted that bailiffs have a developed intuition, the ability to actualize and get an advantage in the most unfavorable conditions, to be able to quickly navigate in an unpredictable situation. They strive to reach sufficiently high socially approved standards in their professional activity both in ordinary and extraordinary situations.

There is a decrease of indicators on the scale "Exaltation" (5.0 ± 3.32) in comparison with the norm. It characterizes a high level of self-regulation and self-control of bailiffs, deliberateness in decision-making and action. Characteristic are the manifestations of emotional stability, the ability to manage affective states, restrain emotions, the absence of aggressive tendencies in behavior, lack of hostility and irascibility. These features determine restraint, reduced tendency to conflict and aggressiveness in professional interaction of bailiffs-executors.

A decrease in the level of "Anxiety" (6.28 ± 4.98) emphasizes confidence in oneself, one's own decisions and actions, and the adequacy of self-esteem. In stressful situations, bailiffs are characterized by determination, self-control, stability, and the ability to fight back. Bailiffs reveal the ability to make decisions in the situations with shortage of information and a time limit. They can easily cope with the situations that require mobilization of effort, endurance and self-confidence.

The use of the Minnesota Multiphasic Personality Inventory (MMPI) provided the identification of a number of scales that allow us to reveal the specifics of a person's response in stressful situations. The latter include: Hs (hypochondria), Pt (psychostenia), Sc (schizoidness), Ma (hypomania), Hy (hysteria), Pd (impulsivity), D (depression), Mf (masculinity / femininity), Pa (rigidity). Let us consider the results for each scale.

On the Hs scale (hypochondria), the average results are 29.86 ± 7.36 which indicates the absence of a tendency to over-control, an adequate attention to the functioning of one's body. It proves that attention is paid mostly to others added by flexibility of navigation and high possibilities for adaptation.

Indicators on the Pt (psychostenia) scale are also low - 20.76 ± 8.66 . Such results testify to the respondents' confidence in themselves, their own strengths, their ability to make bold and risky decisions, including in situations of shortage of information.

The mean values on the Sc (schizoid) scale are 33.24 ± 7.69 . Such personalities do not demonstrate pronounced originality, they adapt well to the environment, they are not

inclined to search for non-standard approaches, they are quite predictable, at the same time, they are able to adequately apply standard methods of response.

The values on the Ma scale (hypomania), reflecting the energy potential and general tonus of the personality are 49.25 ± 8.66 , which allows us to speak of sufficient activity, optimism, and absence of negative fixation on difficulties in oncoming cases.

Indicators on the Hy scale (hysteria) range between average values - 55.23 ± 9.30 . This may indicate proactive attitude, liveliness, the ability to make a good impression, which in some cases can be combined with egocentric tendencies in behavior and a decrease of interest to a routine work.

The results on the Pd scale (impulsivity) in the studied sample averaged 43.88 ± 7.86 which reflect balance, calmness and harmonious adherence to generally accepted norms of behavior.

At the same time, one should note the increase in indicators on the D scale (depression) -60.20 ± 9.42 . However, this is the evidence of the tendency to dissatisfaction with oneself, to mood swings, internal tension, and certain indecision rather than destructive reaction of the respondents. Still, we believe that attention should be paid to such symptoms for the timely prevention of professional destruction associated with the difficulties of adequate implementation of professional functions in non-standard situations requiring extra efforts.

The average results on the Pa scale (rigidity) were also high enough - 66.14 ± 8.71 . This may indicate industry, perseverance in achieving goals in the professional activities of bailiffs-executors, combined with a tendency to an authoritarian type of leadership, dominance in relationships, in some cases - suspicion and resentment.

The results on the Mf scale (masculinity / femininity) are 57.49 ± 11.04 which allows us to state that in their assessments and behavior, respondents try to take into account the positions of others, to understand them, while, as a rule, they do not express obvious rudeness and get involved into conflicts which is of no small importance in stressful situations.

The 2nd, 7th and 0th scales indicate signs of a hyposthenic type of response and characterize the predominance of inhibited personality traits. A significant prevalence of these scales' profile over others reveals conformity, social compliance, personality normativity and refusal from self-realization. Any profile reflecting a personality's reaction to a traumatic situation which contains a configuration with the leading scales of the hypostenic register indicates a neurotic variant of maladjustment or personality decompensation towards an increase in inhibited reactions (Sobchik, 2000).

The 4th, 6th and 9th scales are determinative for the sthenic type of response and reflect the activity of the personality, strength and predominance of excitable traits. A moderate increase in these scales in the profile indicates the manifestation of the tendency to self-realization, to counteraction against the influence of the environment and the surrounding. Maladaptive manifestations in this type of response can be conflict behavior, non-conformity, authoritarianism, a desire to dominate, an increased sense of independence and repulsion of imposed authorities.

The combination of multidirectional trends, i.e. indicators of both hyposthenic and hypersthenic properties reveal a mixed type of response. A mixed type of response is characterized by a combination of a high need for self-realization with increased self-control and a tendency to inhibit and restrain behavioral reactions. In this case, the channels of both neurotic and behavioral responses are blocked which can cause general overstrain manifesting itself in somatization of internal conflict. The characteristics of a mixed type of response are indicators of the 1st and 3rd scales. They reflect suppressed hostility.

An internally contradictory mixed type of response is a reflection of a combination of the 7th and 4th scales which is characterized by a collision of multidirectional tendencies: a tendency for decisive actions with a tendency to block activity in a stressful situation.

Increased self-esteem and desire for domination combats self-doubt and excessive self-criticism. A sthenic register of emotions of anger, admiration, pride and contempt collides with emotions of the asthenic register: fear, guilt, anxiety. All this, on the one hand, leads to compensation of some features by others, on the other hand, leads to inner tension. Outwardly, the behavior of the individual may seem balanced, but the internal conflict is channeled according to the intra-somatic version.

With a combination of high indicators on the 4th and 6th scales, an explosive (hot-tempered) type of response is observed. It is characterized by manifestations of hot temper, aggressiveness, impulsivity in behavior and performance. Often, there is a tendency towards rivalry, a desire for leadership, persistence in defending one's opinions and interests and stubbornness.

Analysis of the data obtained in the course of our study showed that the most common types of responses to a stressful situation in the sample group are a rigid type of response (43%), a stenic type of response (18.84%), an asthenic type of response (15.76%). Less often presented were a mixed type of response (7.69%) and an aggressive-hypersthenic type of response (6.15%). Personality psychopathization was found in 5.3% of the subjects.

Let us consider in more detail the characteristics of bailiffs with the most common type of response to a stressful situation.

According to the data obtained on the basis of the Spearman correlation analysis, we revealed a direct relationship between the parameter "Rigidity" and "Pedantry" (r = 0.38), "Depression" and "Sticking" (r = 0.44). Also, "Rigidity" positively correlates with emotiveness (r = 0.47).

To identify the main socio-psychological personality traits of bailiffs with a rigid type of response, we carried out a factor analysis of the data with the SPSS package using the Varimax rotation method. With such a parameter as "Rigidity", the following scales were combined into one factor: "Lies", "Hypochondria", "Hysteria", "Impulsivity", "Correction" and "Depression". Taking into account the fact that the indicators of average values according to these scales generally do not exceed the normative indicators, it can be assumed that this type of response is characterized by the sufficient emotional stability, a realistic view of the current situation, dedication, perseverance, hard work, criticality towards oneself and others, a somewhat overrated self-esteem, the desire to be in the foreground. At the same time, there are characteristics that are imposed by the specifics of the profession - distrust, increased caution in communication situations, some pessimism and a desire to meet the requirements of the environment, sometimes even to the detriment of their inner convictions.

4 Discussion of the results

The application of the methodology of K. Leonhard-N. Schmishek testified to a sufficient level of emotional regulation, stability, an adequate attitude to professional duties. The study showed the dominance of agility, initiative and energy in solving professional problems among the bailiff officers. According to the study, bailiffs are characterized by enterprise, resourcefulness in non-standard stressful situations, the ability to quickly and easily navigate in a new environment and extreme risky situations.

The conducted research indicates the variability of the types of responses to a stressful situation among bailiffs-executors. The predominant type of response to a stressful situation in bailiffs is a rigid one. The sthenic and asthenic types of response are also quite pronounced. Less represented in the surveyed group of bailiffs are a mixed and aggressive-hypersthenic types of response.

The data obtained as a result of the correlation and factor analysis in the rigid type of response which is the most common in our sample clearly demonstrate that under a

stressful situation the most typical reactions in bailiffs are a sufficient level of emotional stability, an objective assessment of the current situation, an adequate goal setting and an active search for ways to achieve it, a critical attitude towards oneself and others, the ability to resist emerging difficulties. In some cases these are combined with obvious pessimism and increased caution, even distrust to the environment and/ or to oneself.

5 Conclusions

Formation of a personality, development of professionally significant qualities, improvement of the self-regulation system in solving professional problems is happening within the process of professional activity not only in standard conditions, but also in stressful ones. Our analysis of the research data made it possible to identify the most pronounced and the least pronounced types of bailiffs-executives' response in a stressful situation. The most common types of response are rigid, sthenic and asthenic ones. The least frequent types of response are mixed and aggressively hypersthenic. The factor analysis with Varimax rotation method allowed us to describe the main features inherent in the leading type of response (a rigid type) to a stressful situation: sufficient emotional stability, a realistic view of the current situation, dedication, perseverance, hard work, criticism of oneself and others, distrust and some pessimism. The identified tendencies require special attention from the psychological service of bailiffs-executors in order to timely diagnose and prevent professional and personal deformation of this category of civil servants under excessive stress.

References

- 1. D.V. Maslennikov, Professional psychological selection of bailiffs, extended abstract of diss. ... Cand. psychol. Sciences (Rostov-on-Don, 2007)
- 2. E.S. Pyatkina, E.S. Grinina, T.F. Rudzinskaya, L.V. Shipova, Society: sociology, psychology, pedagogy **12(80)**, 167-171 (2020).
- 3. K. Sweeny, J.L. Howell, V.W. Kwan, Personality and Individual Differences **156**, 109-117 (2019).
- 4. M.A. García-Leóna, J.M. Pérez-Mármol, R. Gonzalez-Pérezc, M.C. García-Ríosb, M.I. Peralta-Ramíreza, Physiology & Behavior **202**, 87-93 (2019).
- 5. E.J. Howartha, B.D.O'Connor, M. Panagioti, A. Hodkinson, S. Wilding, J. Johnson, Journal of Affective Disorders **266**, 731-742 (2020).
- 6. M. Gächter, D.A. Savage, B. Torgler, Gender Issues 28, 66–93 (2011).
- N. Ermasova, A.D. Cross, E. Ermasova, Journal of Police and Criminal Psychology 35, 48–63 (2020).
- 8. B. Skowroński, J. Bartoszewski, European Journal of Social and Human 11(3), 123-136 (2016).
- 9. I.N. Nazarov, Bulletin of the Stavropol State University 55, 97-100 (2008).
- 10. L.D. Demina, A.S. Kuzmina, News of the Altai State University 2(74), 43-46 (2012).
- 11. A.S.Kuzmina, News of the Altai State University **2-2(82)**, 33-37 (2014).
- 12. A.S. Kuzmina, Kazanskaya nauka 2, 224-227 (2014).
- 13. D.V. Karelin, E.I. Meshcheryakova, A.V. Larionova, P.A. Trusov, Bulletin of the Tomsk State University **410**, 172-178 (2016).
- 14. S.E. Zakharova, Z.G. Ustaev, Akmeologiya 1, 124-127 (2017).

- 15. N.V. Semenova, E.V. Ivanova, A.N. Zakharova, Features of decision-making by bailiffs taking into account individual psychological indicators of personality, (Vereschak, S.B. (ed.). Current problems of legal science and law enforcement practice: proceedings of VII Int. scientific-practical conf., dedicated to the 50th anniversary of I.N Ylianov) Russia, Cheboksary, Chuvash republic 1, 379-384 (2017).
- 16. A.I. Alontseva, Human capital 3(135), 199-207 (2020).
- 17. E.S. Pyatkina, E.S. Grinina, T.F. Rudzinskaya, L.V. Shipova, Scientific opinion 12, 109-116 (2020).