

Impact of Stress Caused by the COVID-19 Pandemic Work and Conduct of Police Officers in Stressful Emergency Situations

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Abstract

This paper elaborates the relationship between stress from the COVID-19 pandemic and the work and conduct of police officers in stressful emergency situations and is directly based on a survey conducted among police officers working in Croatia. Field research was conducted in May and June 2020 during the first pandemic wave on a sample of 988 police officers. The objectives of this study are to determine the extent to which the emergency situation caused by the COVID-19 pandemic has led to changes in police officer work and behavior of police officers, to determine the severity of stress exposure and to assess police officers in relation to the following sources of stress in the police environment: newly created working conditions, working expectations, interpersonal relations, control in work, support from superiors or associates or the general public, work roles, familiarity with changes, mistakes made in work and a certain insecurity in terms of job preservation. The obtained results suggest that the crisis caused by the pandemic has affected organizational changes in the police force, changed the structure and scope of police tasks and had a significant impact on the professional health of police officers. Moreover, the risk of infection has increased given that police work continues to be carried out in direct contact with citizens, and consequently increased exposure to stress.

Keywords: COVID-19 pandemic, stress, police work, occupational health.

INTRODUCTION

Police action in new security circumstances

Police work is constantly changing and demands the ability to adopt to new circumstances. Such changes are mainly influenced by new technologies that improve policing and increase its efficiency. Secondly, changes are also often a result of democratic processes in society, new policing standards and social values

(Vitez & Balgač, 2016). Examples include new standards for protecting victims and approaches towards perpetrators of crimes or towards certain vulnerable groups (persons with disabilities, migrants, asylum seekers, the LGBT population). The third group of reasons related to changes in police work involving a new security environment, especially based on a global international scale. Accordingly, such changes became evident that in police work and activities during the migrant wave

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to Europe after 2015 and also the recent wave of terrorist attacks on European soil (Borovec, 2020). A particular setting that has had a significant impact on police work is the outbreak of the COVID-19 pandemic affecting all parts of the world.

In December 2019, health authorities in the People's Republic of China observed an increase in the number of people suffering from pneumonia in the city of Wuhan (population 11.08 million, 2018). Wuhan is the capital of Hubei Province (population 58.5 million, 2015). Examined patients had symptoms exhibiting fever and difficulty breathing. According to available data, the first case was detected on December 8, 2019. Once initial information was received concerning infections stemming from the unknown virus, an alarm was sounded in all competent agencies tasked with monitoring infectious diseases at the international level, as well as in all nation states. The first case of coronavirus in Croatia was confirmed on February 25, 2020. Due to the spread of the infection among the population and the reactions of the competent health and government departments, changes were introduced which subsequently affected all aspects of life and work in Croatia. These changes were apparent in the economy, transport, tourism, education, public services, services sector and, in fact, every area of life. Consequently, the nature and intensity of social contacts also changed, and social distancing which had previously evoked a negative connotation suddenly became a desirable style of behavior.

As a reaction to this new threat, the Croatian Government established the Civil Protection Headquarters of the Republic of Croatia with the purpose of coordinating all services in the event of the onset of the COVID-19 in Croatia. The Civil Protection System Act stipulates that the civil protection headquarters is an expert, operational and coordinating department established at the state, regional and local level implementing civil protection measures and activities during large scale accidents and catastrophes.

The Deputy Prime Minister and Minister of the Interior was appointed Chief of the Headquarters which consists of representatives of relevant sectors from public administration institutions, operational forces of the civil protection system and police, as well as representatives of legal entities of special importance for the civil protection system in Croatia. The crisis in Croatia

is managed using central crisis management based at the National Civil Protection Headquarters.

Coinciding with the formation of the National Civil Protection Headquarters, the National Police Headquarters was established and given the task of coordinating and implementing police measures and activities at the national level. Key decisions passed to prevent the spread of the infection and their implementation, largely undertaken by the police, were as follows:

- a) Decision on Measures to Limit of Social Gatherings, Work in Commerce, Provision of Services and the Holding of Sports and Cultural Events
- b) Decision on Working hours and Mode of Work in Commerce and Industry for the Duration of the COVID-19 Disease Outbreak
- c) Decision on Prohibiting of Leaving Place of Residence and Permanent Residence in the Republic of Croatia
- d) Decision on Temporarily Banning Passing through the Border Crossings of the Republic of Croatia
- e) Decision on Banning Entry into Seaports and Inland ports of the Republic of Croatia
- f) Decision on Shutting Down Playgrounds and Outdoor Sports Venues, and
- g) Decision on Imposing Restriction Measures on the Streets and Other Public Places

The scope of the new tasks for the police force becomes evident in that, depending on the current epidemiological situation, between 700 and 1,200 police officers are given such tasks on a daily basis. On the other hand, assuming new job roles is facilitated by the fact that previous policing jobs, such as those involving public gatherings and traffic law enforcement, have been greatly reduced. A number of new activities related to state border control and border police also took place. This line of police work required implementing the Decision on Temporarily Banning Passing through the Border Crossings of the Republic of Croatia with the exception of permitting persons in transit, cross-border workers, health and traffic staff to pass through the border crossings.

The COVID-19 pandemic has led to significant changes in the way of life and habits of the entire population. The manner of committing crimes has also changed to some extent. Instructions given to police officers mandating them to perform only necessary and urgent tasks in direct contact with citizens required a different approach to conducting criminal investigations as well as collecting data on crime and criminal offenses. Ac-

Accordingly, certain changes in criminal phenomenology have also become apparent:

- a) This has primarily been the emergence of new forms of crime such as fraud related to impersonating medical and humanitarian personnel, production and sale of fake and counterfeit medical and protective products, fake news related to the COVID-19 pandemic as well as an increase in criminal offences in the area of cybercrime.
- b) Due to the changes in economic flows and daily routines of citizens, certain types of crimes have shown a decreasing trend, primarily traditional property crimes.
- c) Violent crimes involving murder, attempted murder and rape have increased. Data on such crimes should be approached with caution, given that the data is based on crime reported to police, and which may have been skewed due to limitations on citizens in directly contacting the police and been able to report a crime.
- d) Coinciding with Europol's assessment and recommendations that the global COVID-19 pandemic poses a cyber security risk, the Croatian criminal police recorded an increase in criminal activity in cyberspace, as well as increased activity on the dark web.

However, police and judicial authorities are facing a two-fold challenge: responding to new criminal threats and adapting operational methods to the new environment.

Occupational risks in police work

Police work is specific and demanding in many ways. The organization of work, working conditions, police tasks, emergency situations as well as obligations, mandated powers and the moral code set a high demand on police officers. Accordingly, the police profession is ranked among the high-risk occupations, and hence the need for providing police force employees various protections and assistance (Borovec et al., 2020). Typical police work involves operational activities accompanied by violence, danger, tension, trauma, confrontation with death and the use of firearms on a daily basis. In addition to organizational stressors, conclusions on the stressful nature of police work drawn from literature become clear. Axelbred and Valle (1978) identified policing as the most dangerous form of work in the world, while Fenell (1981) argued that it is also the most dangerous emotional form of work.

Identifying factors that negatively impact the performance of police work and working ability of each police officer is important, and include risks to physical integrity and health as well as possible sanctions

² <https://osha.europa.eu/hr/themes/psychosocial-risks-and-stress>

and prosecution for the manner in which policing is performed. Regardless of the nature of risks, such factors have a negative effect on the motivation of police officers in performing tasks and fulfilling work obligations. Possible negative consequences may encourage risk avoidance among police officers, something which is in conflict with the nature of police work and its effectiveness.

Literature on this topic deals with various professional risks faced by police officers, and can be classified as follows:

- a) Risk of death and murder
- b) Risk of attack and injury
- c) Risk of infectious diseases
- d) Risk of stress and fatigue
- e) Risk of posttraumatic stress disorder
- f) Risk of developing an addiction
- g) Risk of other types of injuries and illnesses.

In addition to the new circumstances brought on by the COVID-19 pandemic, there are reasonable grounds to claim that the mentioned professional risks for police officers lead to the risk of further exposure to stress and the risk of infection.

Several introductory considerations related to the mentioned risks are necessary, especially the risk of stress in the police force. Stress is the body's response to a situation perceived as threatening, dangerous or threatening to a person's physical or mental integrity.

The human body is exposed to daily doses of stress, and reactions to stress are constantly present. Exposure to overbearing stress not only makes a person incapacitated in the short term but leads to long-term harmful effects, depending on the amount of daily exposure to stress and stressful situations. The impact of pressure from certain occupations is a significant predictor of exposure to higher amounts of stress. According to the European Agency for Safety and Health at Work,² some examples of working conditions that cause psychosocial risks include:

- a) Excessive workload
- b) Conflicting requirements and unclear role of workers
- c) Non-involvement in making decisions that affect the worker and the inability to influence the way work is done
- d) Poorly managed organizational change, business insecurity

- e) Ineffective communication, lack of support from management or colleagues
- f) Psychological and sexual harassment
- g) Third party violence.

According to Tot and Šikić (2004), the largest classified group of consequences caused from stress to the health of police officers were neurotic disorders. They highlighted the fact that the police profession is particularly susceptible to various stressful situations, and various occupational diseases of police officers are mentioned in this regard. Therefore, when recruiting, future police officers are required to possess complete physical health, psychological stability, as well as social and emotional maturity. However, exposure to various stressors, traumatic events, crises and their accumulation, inadequate defense mechanisms and neglect of psychophysical fitness may possibly weaken over time the good initial predispositions and high levels of motivation for the police profession as well as weaken the immune system leading to various disorders and diseases. For the same reasons, inappropriate and socially unacceptable behavior, disagreements and conflicts in the workplace or family, and other disturbances can ultimately lead to suicide.

Due to the specifics of police work, the term “police stress” has long been used in literature and practice. In addition to stressors that are recognized in emergency situations, there also exist constant sources of stress or everyday stressors, the impact of which accumulates and over time can gradually and over the long-term disrupt psychophysical stability. Some of these stressors are recognized as being specific to working conditions such as daily work, shift work, social characteristics, sense of physical vulnerability and other aspects of police work, including specific forms of communication involving a hierarchical command structure, assigned responsibilities, the carrying of weapons, special powers).

According to Mayhew (2001a, 2001b), extremely stressful events in the professional life of police officers are the violent death of a partner in the police force, dismissal, loss of life of a citizen while policing, wounding citizens, suicide of a colleague, violent death of another colleague on duty, murder committed by a police officer, violence or injury in the line of duty, serious personal injury inflicted while on duty, suspension, impediments to promotion, arrest of an armed

suspect, investigations at the scene of a violent death, prolonged absence from one’s family, participation in office-involved shootings, salary reduction, internal investigation procedure and the like.

It is clear that stress does stem from all types of workloads but occurs when the assessment of a police officer’s own abilities to perform a certain task or resolve a situation is not aligned with the objective requirements of the task or situation. Unknown situations or situations possibly leading to an unknown outcome, such as the COVID-19 pandemic, may instill fear. Characteristic stressors of police work and those caused by the organization of work may possibly lead to a state of boundless stress (N.N., 2006).³

Different types of stress are associated with various consequences. Responses to stressors related to the nature of work, interpersonal relationships and organizational stressors can cause negative mental or physical reactions. In addition to the body’s immediate reactions to stress, stressors may also cause acute and chronic reactions. Immediately after a traumatic event, reactions may occur such as loss of sleep, emotional distancing from friends and family, excessive wakefulness or a sense of numbness (Chapin et al., 2008).

Interpersonal stressors are an indispensable part of the stress faced by police officers. Sour relationships between colleagues and superiors in the police force lead to an increased level of stress where interpersonal conflict becomes more stressful than events such as police chases, murder, robbery or gun incidents (Garner, 2008).

Organizational stressors also include shift work, overtime work, administrative workloads, poor equipment, uncertain opportunities for advancement, low salaries, insufficient training, work on holidays and weekends, lack of administrative support, poor relations with superiors, lack of communication throughout the police hierarchy and numerous interpersonal rules (Glavina & Vukosav, 2011). Research has shown that organizational stressors are more worrying than stressors arising from the content of the police profession, i.e., they exert a stronger impact than stressors stemming from the nature of the actual police profession (Graf, 1986; Dowler & Arai, 2008).

Accumulated organizational stressors and direct work-related stressors increase aggressive behavior,

3 Psychische Belastungen und Stress im Polizeidienst – Runter vom Stresskarusell, (2006).

where Manzoni and Eisner (2006) noted that domestic violence and abuse are often the result of the police officer's profession directly endangering family members.

A police officer may be exposed to causative agents of infectious diseases when investigating a criminal offense, conducting an investigation, taking samples and clues, or arresting a suspect. Examining clothes or the body of a drug user or searching premises always poses the risk of getting stabbed with a used needle and consequently infected with HIV, hepatitis B, or some other virus or bacterium. Officers come into contact with hepatitis B through saliva, bite, vomit, or stool. However, research by Heiskell and Tang (1998) showed that the perception of risk far outweighs the actual likelihood of contracting HIV or AIDS. The onset of the COVID-19 virus and given the newly assigned policing tasks in controlling the movement of citizens, implementing self-isolation and quarantine measures, the possibility of police officers getting infected increases.

RESEARCH OBJECTIVES AND WORK METHODS

Research goal

The aim of this research is to determine the extent to which the emergency situation brought on by the COVID-19 pandemic has led to changes in the work and conduct of police officers in Croatia. Furthermore, the objectives include determining the severity of consequences of stress exposure based on self-reports and assessments from police officers in terms of following sources of stress in the police environment: new working conditions, expectations, interpersonal relationships, roles, awareness of change, mistakes made in work and job insecurity. Ultimately, the aim of the paper is to determine the share of pandemic-related tasks in the total workload of police officers.

It should be noted that this paper is part of a broader research project that aims to investigate the predictor power of certain specifics of the police work environment in circumstances brought on by the COVID-19 pandemic.

Sample description

The survey included a sample of 988 police officers in Croatia, representing approx. 5% of the total number of police officers. Male police officers account for 77% of the total, meaning that 23% are female police officers.

4 [HSE_dodana-skala-1.pdf \(hzzsr.hr\)](#)

Based on levels of education, about 16% of police officers possess a university degree and 68% have a high school diploma. In terms of gender, 33.9% of respondents are regular police, 13.3% from the criminal police, 20.3% are traffic police, 25.2% from the border police, 3.7% are intervention police, while 3.7% of respondents come from other branches of the police. The ages of respondents are from 20 to 62 years. Considering the structure, the sample is representative of the stated socio-demographic characteristics.

Survey questionnaire

The research was based on a questionnaire⁴ used to investigate the impact of the emergency situation imposed by the COVID-19 pandemic on changes in the work and conduct of police officers and measuring assessments of respondents in certain typical areas of the police work environment. The survey in the form of a questionnaire consists of four sections. Sociodemographic data were collected in the first section of the questionnaire. The second section of the questionnaire includes control questions covering direct experience with COVID-19 and the involvement of police officers during the pandemic. The third section of the questionnaire contains 11 scales:

1. Changes in working conditions (9 statements/variables) measuring changes in work organization, tactics and methodology of action,
2. Workload (8 statements/variables) measuring intensity of work and compliance of tasks, deadlines,
3. Interpersonal relationships (5 statements/variables) exploring communication and relationships as well as conflicts with co-workers and managers,
4. Control in work (5 statements/variables) measuring the possibility of managing work tasks,
5. Supervisor support (5 statements/variables) measuring support from management, openness to communication, management feedback,
6. Support from associates (4 statements/variables) assessing the possibility of receiving help from associates, respect and understanding,
7. Public support (3 statements/variables) determining the degree of public and media support,
8. Work role (5 statements/variables) measuring an understanding of one's own role and tasks in the work environment,

9. Awareness of changes (4 statements/variables) measuring an awareness of changes, participation in creating and understanding changes,
10. Mistakes made in work (6 statements/variables) measuring the intensity and reasons for making such mistakes,
11. Job insecurity (4 statements/variables) identifying concerns about possible job loss and fear of negative changes.

Answers were ranked on a 5-point Likert scale: (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Mostly agree; (5) Strongly agree.

The last and fourth section of the questionnaire assesses consequences of stress exposure. Respondents were offered a choice of three categories:

- A) Occasional and shorter episodes of anxiety and negative feelings including anger, sadness, fear, frustration. Added to this are occasional stress reactions of shorter duration without disturbances to one's health condition, occasional mistakes and accidents at work, as well as short periods of reduced work efficiency

- B) Frequent psychological symptoms: anxiety, worry, irritability, frustration, mood swings, difficulties in concentrating and making decisions, sleeping difficulties. Occasional physical symptoms include headaches, stomach aches, nausea or chest pains, negative feelings concerning work. Such symptoms are reflected in an increase in the number of mistakes, accidents or injuries at work, as well as shorter sick leave, prolonged periods of reduced work efficiency and reduced work motivation.
- C) Stress-related health problems: high blood pressure, diabetes, stomach ulcers, frequent headaches or migraines and digestive problems. This also is reflected in difficulties of a psychological nature such as depressive symptoms, anxiety, constant physical and mental exhaustion, chronic fatigue, frequent mistakes, accidents or injuries at work, including longer sick leave, continuously reduced work efficiency and work avoidance.

Respondents were also given the opportunity to estimate the share of pandemic-related task in their total workload.

By checking the validity and reliability factor, the questionnaire exhibited good metric properties. The reliability indicators in the questionnaire are shown in Table 1.

Table 1. Reliability of the measuring instrument

Measuring scales	Cronbach's α
Engagement during the pandemic	0.75
Changes in working conditions	0.72
Workload	0.87
Interpersonal relations	0.91
Control in operation	0.88
Supervisor support	0.90
Associate support	0.83
Public support	0.74
Working role	0.91
Awareness of change	0.83
Operating errors	0.89
Job insecurity	0.54
Complete questionnaire	0.77

Work methods

The survey was conducted in May and June 2020 on a sample of 988 police officers, based on a survey method using a stratified sample of all twenty Police Directorates in the Republic of Croatia. The survey of respondents was conducted by an educated interviewer using the face-to-face method in paper and pencil format. Preceding the survey, respondents were introduced to the aim and purpose of the survey, as

well as the fact that the survey is anonymous and voluntary. Respondents were also informed that individual answers will not be published but only the results obtained on the total sample. Data processing was carried out using the statistical program SPSS to check the validity and reliability of the questionnaire. The factor structure of the questionnaire was verified by performing a confirmatory factor analysis, given that the variables are classified in certain areas in terms of their meaning, and establishing a good reliability of Cron-

bach's alpha at 0.77. Given that the aim of this paper is not factor analysis, the results will not be presented in more detail; however, summarization of data in the form of the mentioned factors contributes to clarity and interpretability of the results.

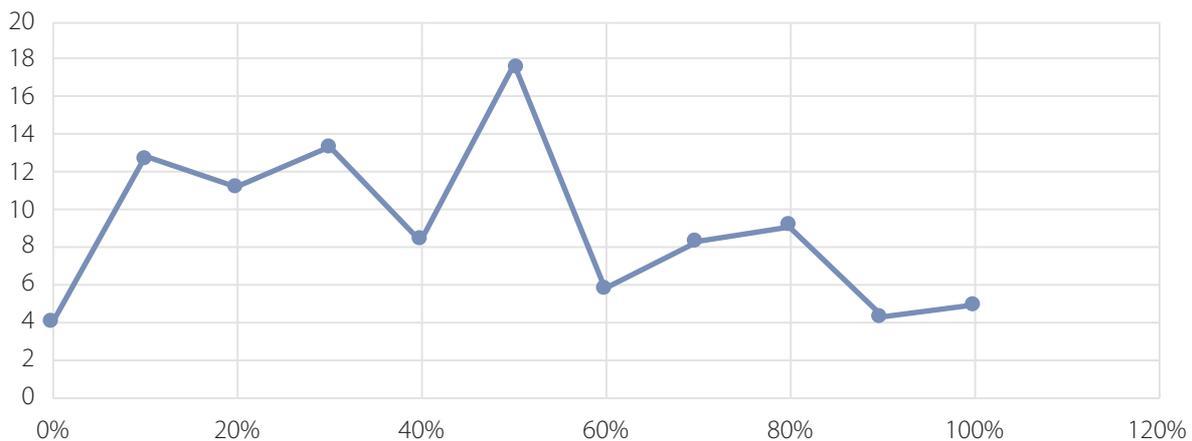
RESEARCH RESULTS AND DISCUSSION

The first part of the research collected data on the experiences of police officers with COVID-19 positive individuals. The results show that during the first wave of the pandemic and the lockdown, 10.3% of police officers had contact with a person who was COVID-19 positive while on duty, 11.5% had a COVID-19 positive colleague in their organizational unit. 4.9% of respondents ended up in self-isolation, and 0.8% eventually became COVID-19 positive. These results indicated that, regardless of social distancing measures and the introduction of remote work (working from home), po-

lice work was forced to continue through active duty out in the field and direct contact with citizens. Importantly, decisions made by the Croatian Government on introducing new models of work in state and public institutions did not apply to police officers in any branch of the police force at any time.

The COVID-19 pandemic and implementation of measures to prevent it led to the introduction of new tasks, and changes in police affairs. The extent to which new tasks were represented in total working hours of police officers is shown in Graph 1. The results show that for 50% of police officers, new tasks stemming from measures for the COVID-19 pandemic and its prevention accounted for fifty percent or more working hours. In other words, every second police officer spent more than half of his or her working time on pandemic-related tasks.

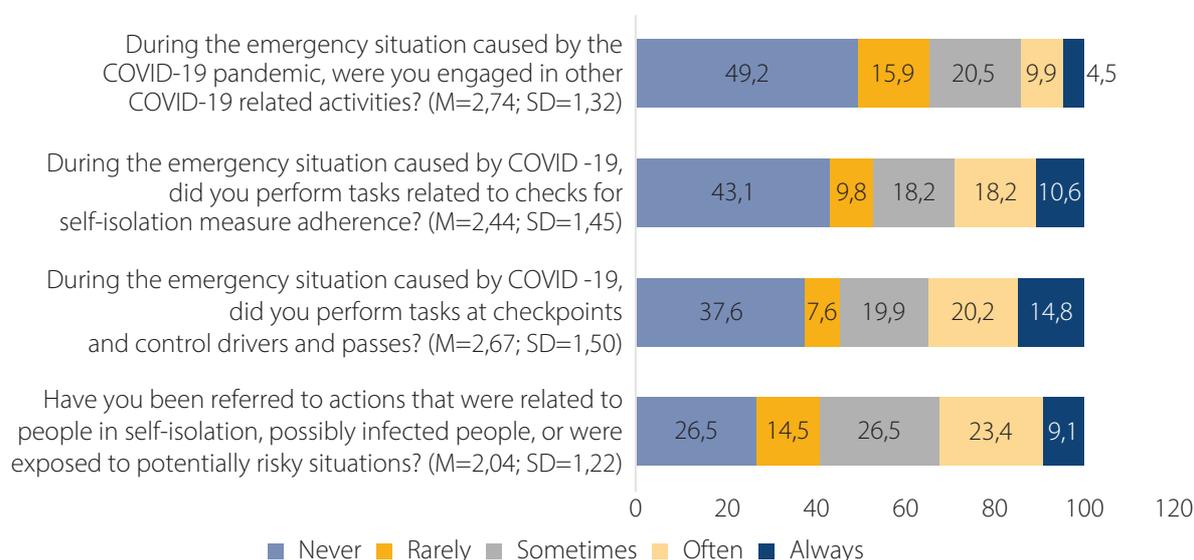
Graph 1. Share of pandemic-related tasks in the total workload of police officers.



Having established that new jobs exhibit a significant proportion of work by police officers during the COVID-19 pandemic, the next logical step is to identify the types of pandemic-related jobs. Based on the results shown in Graph 2, it becomes evident that police officers mostly performed supervision tasks at police checkpoints in order to verify compliance with measures prohibiting leaving the place of residence without a valid pass issued by the competent authority. In all, 54.9% of police officers performed these tasks in an intensity ranging from sometimes to frequently. Police officers were also often engaged in other tasks related to the new situation and monitoring compliance with self-isolation measures. The results indicate that 34.9%

of police officers were occasionally referred to interventions concerning persons who were ordered to self-isolate or were in quarantine due to COVID-19. Understandably, the largest group of police officers were involved in controlling leaving of place of residence, given that at the time when the measure was in force, some 200 police checkpoints were established on the territory of Croatia, requiring police officers to perform control tasks on a 24/7 schedule. This raises the question of maintaining an intervention capacity within the police force and the quality performing regular police tasks, especially if taking into account that the police did not utilize additional resources besides their regular personnel capacities.

Graph 2. Engagement of police officers in new jobs during the COVID-19 pandemic.



The results obtained on the scales in the form of collected assessments of possible sources of stress in the police environment such as new working conditions, expectations at work, interpersonal relationships, control at work, support from superiors, associates and the public, work role, awareness of changes, mistakes made in work and job insecurity, will be presented as a summary of results from the respondents on the given scales (Table 2), without showing the individual results or manifest variables.

The overall results from the respondents on individual scales show that the highest results were obtained on the scale of understanding the work role ($m = 4.0868$; $sd = 0.595$). Given the content of the statements on this scale (e.g., "It is clear to me what is expected of me at work", "I know how to perform work tasks", "I am clear about my obligations and responsibilities", "I understand the goals and purpose of my department (work units)", "My work fits into the overall goal of the work organization"), the conclusion shows a high level of acceptance of new tasks by police officers and an understanding of their purpose.

Table 2. Scaled results from respondents in terms of sources of stress in the police environment.

Descriptive Statistics					
Overall results on the scales:	N	Min.	Max.	Mean	Std. Dev.
New working conditions	971	1.00	5.00	3.4399	.59261
Requirements and work intensity	973	1.00	5.00	2.7220	.82882
Interpersonal relationships	984	1.00	5.00	2.3037	.86594
Self-control over work	982	1.00	5.00	3.0589	.84487
Supervisor support	984	1.00	5.00	3.5533	.86732
Associate support	987	1.00	5.00	3.7163	.83392
Public support	985	1.00	5.00	2.6531	.87886
Understanding the work role	986	1.00	5.00	4.0868	.59535
Awareness of change	985	1.00	5.00	3.2079	.77900
Work errors	985	1.00	5.00	2.1948	.72430
Job uncertainty	981	1.00	5.25	2.7123	.73217

The results obtained on the scales measuring support from superiors, associates and the public are interesting. In the new circumstances caused by the pandemic, police officers estimate that the greatest support comes from their colleagues ($m = 3.7163$; $sd = 0.83392$), followed by managers ($m = 3.5533$; $sd = 0.86732$), with the least support coming from the public ($m = 2.6531$; $sd = 0.87886$). This result is as expected given the existing collegial solidarity among police officers in difficult and demanding circumstances, and that fact that most of the measures taken against citizens were repressive control and surveillance measures, which often lack public support. Therefore, the survey result on trust in institutions (Ahrendt et al., 2021) is understandable, indicating that the level of public trust in the police in Croatia decreased during the pandemic, and clearly felt by police officers in terms of lack of support.

Above-average results were obtained on the scale for newly created working conditions ($m = 3.4399$; $sd = .59261$). This means that respondents expressed a high level of agreement with statements that there were changes in tactics and methodology in the new circumstances, and in addition to regular tasks they were engaged in other pandemic-related tasks and organizational changes happened in the new situation. Hence, the clear conclusion is the significant impact of the pandemic crisis on the work of the police in organizational and operational terms.

A slightly above-average result was obtained on the scale relating to knowledge of changes ($m = 3.2079$; $sd = 0.77900$), meaning that respondents generally agreed with the statement that I have enough oppor-

tunities to ask superiors about changes in work, that they are always asks for an opinion on changes in work, it is clear to me how they will work in practice and that they are regularly referred to changes. This is an important component in all situations that require flexibility by police in adapting to new circumstances.

The results also show a slightly above-average level of agreement with the statements on the scale relating to self-control at work ($m = 3.0589$; $sd = 0.84487$), meaning that police officers in the new circumstances to some extent retained control over their working hours and manner of performing assigned tasks.

Average results on the scale relating to requirements and work intensity ($m = 2.7220$; $sd = .82882$) support the claim that there was only a slight shortening of deadlines for completion of work tasks, coinciding with an increase in workloads and that police officers were not forced to neglect other work tasks due to increasing workloads. This indicates available opportunities for new tasks within the workload of police officers in Croatia, i.e., an increase in pandemic-related tasks coincided with a decrease in other segments of police work. This is also pointed out in the introduction to this paper, where work related to public gatherings, securing large gatherings and the like during the pandemic was reduced.

On the scale relating to job insecurity, average results were also obtained ($m = 2.7123$; $sd = 0.73217$), meaning that police officers did not experience a significant increase in concern about job retention, nor fear of changes in working conditions or salary reductions.

Slightly below-average results were obtained on the scale relating to interpersonal relationships ($m = 2.3037$; $sd = 0.86594$). Statements provided in this context have a negative connotation. This implies a slight disagreement among respondents against the statement that the new circumstances led to an increase in tension or disagreement among colleagues, or weaker communication among colleagues, an increase in conflicts with colleagues, managers and other associates. In general, there is no evidence of a deterioration in interpersonal relations among police officers related to circumstances brought on by the pandemic.

Finally, the level of agreement among respondents with statements on the scale relating to errors in work is low ($m = 2.1948$; $sd = 0.72430$). Given the way the statements were defined, the conclusion is that respondents do not agree that with the notion that, given the current emergency, they make more mistakes at work, that mistakes are due to fear of exposure to the COVID-19 infection, or that they failed to fully adapt to the new situation.

The results on the consequences of stress that police officers experience due to exposure to various circumstances and working conditions, show that as many as 79.5% of surveyed police officers stated that they experience mild consequences of stress. The second category of police officers who developed moderate symptoms of stress accounted for 15.6% of respondents, while the third category referring to more severe symptoms of stress accounted for 4.8% of surveyed police officers. Given the symptoms described above, these results show that police stress is extremely present, dangerous to the health of police officers, and that mitigating the effects of stress should be a continuous obligation. Further research within this project will draw further light on working conditions, demands and intensity of work, interpersonal relationships, self-control over work, support from superiors, associates and the public, an understanding of work roles, awareness of changes, work mistakes and job insecurity in crisis situations, related to police stress and the potential to reduce police stress in terms of these aspects.

CONCLUSION

Based on the results of this study, the conclusion is that the crisis caused by the COVID-19 pandemic has significantly affected police organizations as well as policing. The impacts are visible in each police officer at both the organizational and individual level. In addition to work traditionally performed by the police prior to the outbreak of the COVID-19 pandemic, new tasks have emerged for police officers, primarily related to implementation of measures to prevent the spread of the COVID-19 infection. However, due to significant changes in all segments of life and work, a significant reduction in all economic and social activities, certain segments of police work underwent a decline in the number of activities. This primarily refers to public gatherings and mass events.

Though other activities have largely introduced new forms of work, primarily teleworking or working from home, these forms of work have not been introduced into the police force in Croatia, and is the reason a significant number of police officers have had contact with infected and isolated persons due to self-isolation measures. Hence, the impact of this crisis should be viewed not only in terms of organizational changes in the police force, but also as risks to the health of police officers.

On the other hand, in terms of the data on the exposure of police officers to stress, this crisis should also be viewed as an occupational health issue. Almost 20% of police officers stated that they felt moderate or severe symptoms caused by stress in the workplace, which is extremely worrying not only due to the effects of stress on overall health, but also on the work efficiency of police officers.

In considering the observed characteristics of police work, the conclusion can be drawn that police officers, regardless of the new circumstances, have been able to maintain a high level of understanding of their work roles, a high level of support from colleagues, and a somewhat lower level of support from managers, with public support ranked the lowest. The new tasks led to changes in tactics and methodology of police work. Police officers were well informed of the changes and the ability to retain control in performing their tasks as well as managing their activities. This COVID-19 crisis did not instill a fear of job loss or negative changes stemming from working conditions did not increase

among police officers. There was also no disruption of interpersonal relationships or tensions among colleagues.

This paper has practical value as it facilitates understanding ongoing changes in the police force due to current global crisis while emphasizing the importance of occupational health in the police force and pointing out the need for additional training in overcome stress experienced by police officers (Frenkel et al., 2020).

When taking into account the new tasks assigned to police officers and their part in overall police operations, the argument stands that organizational change and rapid adaptation of the police organization to new challenges were necessary. Accordingly, future crises are a realistic expectation, crises that will impose new challenges and tasks for police organizations. This lesson was learned from the crisis caused by the great migrant wave in Europe in 2015, as well as the crisis of the COVID-19 pandemic. The issue of increasing police intervention capabilities in crisis situations should be addressed by strategic management. Given that the increased scope of work often involved simpler tasks, such as traffic and passenger checks, securing certain areas or monitoring implementation of imposed measures, which does not represent high-risk and incidental tasks, a possible solution is to organize and engage a reserve (auxiliary) police force. This type of reserve police force does not currently exist in Croatia. Hypothetically, this force could be assigned tasks that are less demanding in terms of complexity and danger, but still require police involvement. When a crisis occurs requiring more intensive engagement, the police force face a double challenge: responding adequately

to the actual crisis and also maintaining an intervention capacity and quality of service as is customary in all other areas of their activities.

Furthermore, occupational stress reduction programs should be implemented at all levels of the police organization, and police management must be more qualified to recognize stress and burnout among its employees. The recommendation is that police management become more aware of the importance of certain predictors of stress in the work environment. They should be able to create a supportive work environment, providing police officers with adequate support at all levels, understanding their roles and the expectations placed on them. Police officers should be aware of all organizational changes and adequately prepared in applying new tactics and methods of work. Each of these aspects can contribute to either increasing or decreasing stress at work. In conclusion, other lessons learned during the crisis need to be integrated into police training and education.

The presented research also has certain limitations. First, there are no pre-crisis indicators, hence the intensity and extent of changes that have taken place cannot be shown. Furthermore, additional analyzes are required to show the predictive power of certain aspects of the police work environment that contribute to the onset of occupational stress.

Given that this research was conducted during the first wave of the COVID-19 pandemic, conducting longitudinal research would be useful in showing further changes to the observed phenomena during the crisis, in this case caused by the COVID-19 pandemic.

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