EMOTIONAL REACTION TO STRESSFUL EVENTS AMONG YOUNG PEOPLE PREPARING FOR A PROFESSIONAL CAREER AS POLCE OFFICERS

Original Scientific Article

DOI: 10.5937/zurbezkrim2502033C	COBISS.RS-ID 144042497	UDK 159.944:[351.745:378.4.01

Miroslav Đurić[1]
Ministry of the Interior of Republika Srpska, Republika Srpska, BiH

Abstract: This study aimed to determine the extent to which young people preparing for a professional career as police officers demonstrate emotional resilience to stressful events, as well as whether statistically significant differences in emotional resilience to stressful events exist among youth of different genders and ages. The sample consisted of 400 respondents, including 149 students enrolled in the Police High School in Banja Luka and 251 students at the Police Academy of the Republic Srpska Ministry of the Interior. The respondents were between 17 and 27 years of age. Of the total number of respondents, 317 were male and 83 were female. This study was conducted in 2024 in Banja Luka. The COPED/NEG-EMOC-BM-1992 Scale (Милосављевић, 2012) was used to test our hypothesis. The findings indicate that young people preparing for a professional career as police officers exhibit a high level of emotional resilience to stressful events; young women show higher levels of negative emotional reactions to stressful events, while students at the Police High School partially demonstrate higher levels of negative emotional responses to stressful events than students at the Police
Academy.

Keywords: stressful events, gender, age, youth, emotional reaction

Introduction

Police officers, in the course of performing their duties and tasks, are frequently exposed to stressful events, that is, to external stimuli that can increase the burden on the individual. Previous studies show that policing is one of the most stressful occupations (Glavina & Vukosav, 2011).

Stress produces consequences at the emotional level (apathy, aggression, anxiety, etc.), in cognitive functioning (reduced ability to think, solve problems,

1 Corresponding author: Dr Miroslav Đurić, Ministry of the Interior of Republika Srpska, Banja Luka. E-mail: miroslavzdjuric@gmail.com.

etc.), and the health level (decreased immune functioning, increased susceptibility to psychosomatic illnesses), leading to reduced work performance (Pajević, 2006). Some scholars emphasize the following consequences of stress: physical (headache, stomach pain, neck or shoulder pain, muscle tension, elevated blood pressure, etc.); cognitive (forgetfulness, difficulty concentrating, confusion, impaired decision-making, etc.); emotional (excessive worry and irritability, pessimism, low frustration tolerance, etc.); and behavioral (communication difficulties, increased alcohol consumption, sleep and eating disturbances, reduced motivation, etc.) (Delić & Plažanin, 2021).

The stress theories that most clearly explain the negative impact of stressors accompanying certain occupations include Selye's (1956) theory and Lazarus's (1966) theory. The central premise of Selye's theory is that stress reduces the body's physical resistance. This theory is based on the concept of the General Adaptation Syndrome, that is, the body's response to prolonged exposure to stressors, which comprises three stages. In the first stage (the Alarm Stage), which represents the initial phase of stress, the body mobilizes all available resources in order to defend itself from the stressor. In the second stage (the Resistance Stage), chemical and hormonal changes occur within the body that activate physical defense mechanisms. In the third stage (the Exhaustion Stage), the body's reserves become depleted and it ceases its efforts to resist the stressor due to prolonged stress and its inability to cope with it.

Lazarus's (1966) theory is based on the premise that the consequences of stressful events, which can be short-term or long-term consequences, depend on individual characteristics, such as one's beliefs, values, personality traits, and so forth, as well as on environmental factors (the duration of the stressful event, the presence or absence of social support, etc.).

The findings of relevant international studies have shown that stress in police work can negatively impact multiple aspects of life. For example, the study by Neylan et al. (2002) found that police officers—regardless of whether they worked rotating or fixed daytime shifts—had significantly poorer sleep quality and shorter average sleep duration than the respondents in the control group. A study involving police officers demonstrated that stress was associated with sleep difficulties and lower scores on perceived health (Gerber et al., 2010). The study by Garbarino et al. (2013) demonstrated that job-related stress can negatively affect the mental health of police officers. Another study, which included 1,072 police officers, showed that exposure to high-risk situations (critical incidents), workplace discrimination, lack of cooperation among coworkers, and job dissatisfaction were significantly associated with adverse outcomes, including depression and intimate partner violence (Gershon et al., 2009). A study involving 105 police officers over the age of 50 revealed that the most important risk factors associated with perceived occupational stress were excessive alcohol consumption, gambling, anxiety, depression, symptoms of burnout and post-traumatic stress, aggressive behavior, and so on (Gershon et al., 2002). According to the findings of a study involving 852 police officers in New South

Wales, 48% of male and 40% of female respondents reported excessive alcohol consumption, while 12% of male and 15% of female respondents reported experiencing moderate to severe stress symptoms (Richmond et al., 1998).

According to Sheehan and Van Hasselt (2003), the greatest sources of stress in the policing profession is inappropriate training, insufficient supervision, lack of recognition for work performance, inadequate opportunities for promotion, insufficient salaries and financial incentives, insensitivity to family and personal problems, extended working hours, prolonged absences from home, media scrutiny, and so on. The same authors argued that these factors may lead to transient symptoms such as sleep difficulties, eating disorders, and reduced emotional responsiveness, but they may also result in acute or post-traumatic stress disorders.

To perform their duties effectively and preserve their health, police officers are expected not to exhibit high levels of negative emotional reactions to stressful stimuli. Therefore, during the selection of police officer candidates, it is necessary to consider their level of emotional resilience to stressful events, while police officer students should be educated on how to respond appropriately to stressful stimuli during the training. Argues that, in addition to psychological, medical, and motor-skill assessments, the selection of candidates for police training should include interviews and situational testing of stress resilience (Трстењак и Дундовић, 2024).

Bothe male and female candidates apply for admission to police training programs. One of the issues that arises is whether there is a difference in emotional responses to stressful events between males and females. According to Милосављевић et al., (2000) numerous studies have shown that females exhibit high levels of anxiety in response to threats and dangers than males and different explanations have been offered for this – while some scholars argue that women have genetic predispositions toward higher fear, others attribute this to gender-role socialization, according to which women are permitted greater expression of fear than men. The study by McCarty et al. (2007) demonstrated that male and female police officers did not report significantly different levels of stress and burnout at work. Separate multivariate analyses in the same study showed that although there were similar predictors of stress for both male and female officers, differences were found in the models, which, according to the study, suggests that female police officers may experience certain unique stressors within the policing organization.

Empirical section

Research problem

The central research problem of this study is the following: How much are young people preparing for a professional career as police officers emotionally

resilient to stressful events and do gender and age have a statistically significant impact on the level of their emotional resilience to stressful events?

Hypotheses

The following hypotheses were formulated in this study:

1. Young people preparing for a professional career as police officers exhibit a high level of emotional resilience to stressful events;
2. There is no statistically significant difference in emotional reactions to stressful events between male and female young people preparing for a professional career as police officers;
3. There is no statistically significant difference in emotional reactions to stressful events among young people of different ages preparing for a professional career as police officers.

Research objectives

To answer the research question and test the proposed hypotheses, the following objectives were carried out:

1. To assess the level of emotional reactions to stressful events among young people preparing for a professional career as police officers;
2. To determine whether there is a statistically significant difference in the level of emotional reactions to stressful events between male and female young people preparing for a professional career as police officers;
3. To determine whether there is a statistically significant difference in the level of emotional reactions to stressful events among young people of different ages preparing for a professional career as police officers.

Research aims

The main aim of this study is to assess the emotional resilience of young police officer students to stressful events and determine whether statistically significant differences in emotional resilience to stressful events exist between young people of different genders and ages.

Variables

Gender and age represent the independent variables, while the dependent variable is the level of emotional reactions to stressful events.

The independent variables are categorical, whereas the dependent variable is continuous.

The gender variable has two categories: male and female

The age variable also consists of two categories: The first category includes respondents aged 17–18 (students at the Police High School in Banja Luka). The second category includes respondents aged 19–27 (students at the Police Academy in Banja Luka).

An emotional reaction to stressful events is operationally defined as the score obtained on the COPED/NEG-EMOC-BM-1992 Scale (Милосављевић, 2012). A higher score on the Scale indicates a higher level of negative emotional response to stressful events.

Method

Sample

In this study, the sample consisted of 400 participants, of whom 149 (37.3%) were students at the Police High School in Banja Luka and 251 (62.7%) were students at the Police Academy within the Ministry of the Interior of Republika Srpska. Respondents aged from 17 to 27 years. The respondents aged from 17–18 years were students at the Police High School while the remaining respondents were students at the Police Academy. Of the total sample, 317 respondents (79.2%) were male and 83 respondents (20.8%) were female. A more detailed overview of the sample structure by gender and age is shown in Table 1.

Table 1: The sample structure by gender and age of respondents

			Gender		Total
			Male	Female	
Age	17-18	N	104	45	149
		% of gender within age group	69.8	30.2	100.0
		% of age within gender group	32.8	54.2	37.3
		% of the total	26.0	11.3	37.3
	19-27	N	213	38	251
		% of gender within age group	84.9	15.1	100.0
		% of age within gender group	67.2	45.8	62.7
		% of the total	53.3	9.5	62.7
	Total	N	317	83	400
		% of age within gender group	100.0	100.0	100.0
		% of the total	79.2	20.8	100.0

Instrument

To measure the dependent variable (emotional reactions to stressful events), the COPED/NEG-EMOC-BM-1992 Scale was used (Милосављевић,

2012). The scale consists of ten items, each representing a specific form of negative emotional response to stressful events. It is a five-point Likert-type scale. Respondents were instructed to select one of the five response options, ranging from "never happens to me" to "always happens to me." The scale reliability, measured using Cronbach's alpha coefficient, is α=.90. In the present study, the scale reliability, measured using Cronbach's alpha coefficient, was α=.83.

Procedure

The study was conducted in 2024 at the premises of the Police Education Directorate of the Ministry of the Interior of Republika Srpska in Banja Luka.

The research was anonymous, and participation was voluntary and free of charge. Data collection was carried out in group settings.

Respondents were asked to provide information about their sex and age and to complete the COPED/NEG-EMOC-BM-1992 Scale.

Instructions for completing the Scale were provided both orally and in writing.

Data processing

To test the normality of the distribution of scores on the COPED/NEG-EMOC-BM-1992 Scale, the Kolmogorov–Smirnov test was used. It has been determined that the conditions required for the application of parametric statistics were not met (*Statistic=.163–.454; p=.000*). Descriptive statistics and the Mann–Whitney U test were used to test the hypotheses.

Finding and discussion

Level of emotional response to stressful events

Table 2 shows the frequencies and percentages of respondents' emotional response to stressful events, the arithmetic mean and standard deviations. The data show that, for eight out of ten items, the majority of respondents reported never experiencing negative emotional reactions to stressful events, and that the number of respondents who do experience such reactions decreases along the scale from "never happens to me" to "always happens to me." For only two items, which reflect milder forms of negative emotional response to stressful events ("I get goosebumps" and "my heart starts pounding"), the majority of respondents stated they occur sometimes.

The mean for all items is below the theoretical average (M = 1.35–2.74), and the degree of agreement among respondents is high (SD = .71–1.23) (Table 2).

Table 2: Descriptive statistics pertaining to the levels of emotional response to stressful events among respondents

Item		Never happens to me	Rarely happens to me	Sometimes happens to me	Happens to me	Always happens to me	M	SD
My head feels numb	f	306	57	30	6	1	1.35	.71
	%	76.5	14.2	7.5	1.5	.3		
I get goosebumps	f	111	103	117	59	10	2.39	1.11
	%	27.8	25.8	29.3	14.8	2.5		
I freeze up	f	160	103	93	39	5	2.07	1.06
	%	40.0	25.8	23.3	9.8	1.3		
My vision goes dark	f	259	71	45	16	9	1.61	.99
	%	64.8	17.8	11.3	4.0	2.3		
I feel like the floor is dropping under my feet	f	289	63	32	12	4	1.45	.84
	%	72.3	15.8	8.0	3.0	1.0		
I turn pale	f	214	97	53	30	6	1.79	1.03
	%	53.5	24.3	13.3	7.5	1.5		
My heart starts pounding	f	80	95	108	83	34	2.74	1.23
	%	20.0	23.8	27.0	20.8	8.5		
My mouth gets dry	f	166	111	89	27	7	2.00	1.03
	%	41.5	27.8	22.3	6.8	1.8		
I feel like I am running out of breath	f	248	81	50	16	5	1.62	.94
	%	62.0	20.3	12.5	4.0	1.3		
I start trembling	f	222	95	56	18	9	1.74	1.01
	%	55.5	23.8	14.0	4.5	2.3		

Based on our findings, it can be concluded that the first hypothesis has been confirmed: young people preparing for a professional career as police officers exhibit a high level of emotional resilience to stressful events.

This outcome indicates that the selection of candidate for admission to the Police High School in Banja Luka and the Police Academy of the Ministry of Internal Affairs of the Republic of Srpska is well-conceived and effectively implemented, at least from the perspective of their emotional responses to stressful events. Considering that the respondents are currently being trained to become police officers, which includes further training to respond adequately to stressful situations, the findings of this study are encouraging. In other words, upon completion of their training, young people are likely be able to respond appropriately to stressful events, at an emotional level, thereby contributing to their own well-being, to the efficiency of the institution in which they will be employed, and to the broader community in which they live and work.

The level of emotional response to stressful events among male and female respondents

The Mann–Whitney U test was used to examine the significance of differences in emotional responses to stressful events among male and female respondents. The analysis revealed that female respondents, at a significance level of .001, exhibited stronger negative emotional reactions, specifically experiencing shivering, paleness, a pounding heart, shortness of breath, and trembling. Additionally, at a significance level of .01, they were more likely to get goosebumps, experience darkening vision, and feeling like the floor is dropping under their feet, compared to male participants (Table 3).

Given that statistically significant differences in the emotional response to stressful events among male and female respondents were identified in eight out of ten items – female respondents exhibited significantly higher levels of negative emotional reactions than male respondents – we may conclude that the hypothesis stating that there is no statistically significant difference in the emotional response to stressful events among male and female young people preparing for a professional career as police officers was not confirmed.

This study demonstrated that young women preparing for a professional career as police officers generally show higher levels of negative emotional reactions to stressful events. However, this does not necessarily imply that female respondents will perform police duties less effectively. Although stress disrupts the body's homeostasis, it also prepares the body for better adaptation (Десимировић, 1997).

Our findings are consistent with the finding of several previous studies. Reported that there is no unequivocal explanation as to why females exhibit higher levels of anxiety in response to threats and danger than males Милосављевић et al. (2000). They add that, according some scholars, women have genetic predispositions for stronger fear responses, while, according to others, this is a consequence of internalized gender-role socialization, whereby women are afforded greater opportunity or social permission to express fear than men.

Table 3: The impact of respondents' gender on emotional response to stressful events

Item	Gender	M	SD	Mean Rank	Mann-Whitney U Statistic	p
My head feels numb	Male	1.32	.65	198.60	14225.500	.437
	Female	1.44	.86	206.34		
I get goosebumps	Male	2.29	1.09	191.73	12149.500	.006**
	Female	2.66	1.14	227.53		
I freeze up	Male	1.94	1.00	188.87	11286.000	.000***
	Female	2.44	1.18	236.34		
My vision goes dark	Male	1.50	.81	193.20	12592.500	.009**
	Female	1.96	1.34	223.01		

I feel like the floor is dropping under my feet	Male	1.35	.70	193.53	12693.000	.007¨
	Female	1.73	1.14	221.98		
I turn pale	Male	1.64	.90	186.46	10558.000	.000¨¨
	Female	2.28	1.25	243.77		
My heart starts pounding	Male	2.58	1.16	186.98	10714.000	.000¨¨
	Female	3.22	1.34	242.17		
My mouth gets dry	Male	1.93	.98	195.44	13270.500	.105
	Female	2.18	1.18	216.09		
I feel like I am running out of breath	Male	1.50	.81	188.91	11299.000	.000¨¨
	Female	2.00	1.17	236.20		
I start trembling	Male	1.63	.91	189.35	11430.500	.000¨¨
	Female	2.10	1.19	234.86		

¨¨Statistically significant at the level of statistical significance .001

¨ Statistically significant at the level of statistical significance.01

Levels of emotional response to stressful events among respondents of different ages

To test the third hypothesis, which stated that there would be no statistically significant difference in emotional responses to stressful events among young people of different ages who are preparing for a professional career as police officer, the Mann–Whitney U test was used.

The findings indicate that respondents aged 17–18 (students at the Police High School) exhibited significantly higher levels of negative emotional reactions, at the .001 significance level, specifically – their vison goes dark and they feel like the floor is dropping under their feet – compared to respondents aged 19–27 (Police Academy students). Furthermore, it was found that, at the .01 significance level, respondents aged 17–18 were more likely to freeze up and to experience a strong pounding of the heart, and, at the .05 significance level, to turn pale, than respondents aged 19–27 (Table 4).

Given that five out of ten items showed a statistically significant difference in emotional response to stressful events among respondents of different ages – respondents aged 17–18 exhibited significantly higher levels of negative emotional reactions than those aged 19–27 – we may conclude that the hypothesis stating that there is no statistically significant difference in emotional response to stressful events among young people of different ages who are preparing for a professional career as police officers was partially confirmed.

These findings may be explained by the fact that older respondents are generally more emotionally mature. According to the developmental periodization accepted in contemporary developmental psychology, and most commonly used in our region, young people aged 17–18 fall within late adolescence, that

is, the late school age, whereas young people aged 18–24 fall within early adulthood, and those over 25 within middle adulthood (Жиропађа и Миочиновић, 2007).

Table 4: The impact of respondents' age on the level of emotional responses to stressful events

Item	Age	M	SD	Mean Rank	Mann-Whitney U Statistic	p
My head feels numb	17-18	1.41	.76	206.13	18640.500	.254
	19-27	1.31	.66	196.26		
I get goosebumps	17-18	2.47	1.09	206.43	18587.500	.356
	19-27	2.33	1.13	196.02		
I freeze up	17-18	2.25	1.09	217.94	16608.000	.006¨
	19-27	1.94	1.03	187.34		
My vision goes dark	17-18	1.82	1.11	222.96	15745.500	.000‴
	19-27	1.47	.86	183.56		
I feel like the floor is dropping under my feet	17-18	1.64	.96	221.36	16019.500	.000‴
	19-27	1.31	.72	184.76		
I turn pale	17-18	1.97	1.13	214.18	17254.500	.024˙
	19-27	1.67	.93	190.18		
My heart starts pounding	17-18	2.96	1.23	220.30	16203.000	.002¨
	19-27	2.59	1.22	185.57		
My mouth gets dry	17-18	2.04	1.08	203.79	19042.500	.602
	19-27	1.97	1.00	198.02		
I feel like I am running out of breath	17-18	1.67	.96	204.34	18948.000	.506
	19-27	1.59	.92	197.61		
I start trembling	17-18	1.88	1.11	210.20	17940.000	.106
	19-27	1.65	.91	193.18		

‴Statistically significant at the level of statistical significance .001

¨ Statistically significant at the level of statistical significance .01

˙ Statistically significant at the level of statistical significance .05

Conclusion

Based on our findings, the following conclusions can be drawn:

1. The hypothesis proposing that young people preparing for a professional career as police officers exhibit a high level of emotional resilience to stressful events was confirmed.

This finding suggests that the selection of candidates for admission to the Police High School in Banja Luka and the cadet candidates to the Police Academy of the Ministry of the Interior of Republika Srpska is well designed and effectively implemented, at least from the perspective of candidates' emotional

response to stressful events. When this is considered alongside the fact that the respondents are undergoing the police training program in which they continue to develop competencies necessary for appropriate response to stressful events, the findings can be viewed as encouraging. More precisely, these findings imply that, upon completing their training, young police officers will be capable of responding to stressful events in an emotionally appropriate manner, thereby contributing to their own well-being, to the efficiency of the institution in which they will be employed, and to the broader community in which they live and work.

2. The hypothesis proposing that there is no statistically significant difference in emotional responses to stressful events among male and female respondents preparing for a professional career as police officers was not confirmed. Young female respondents generally exhibit higher levels of negative emotional reactions to stressful events. However, this does not necessarily imply that female respondents will perform official duties less effectively. Although stress disrupts the organism's homeostasis, it also prepares the body to better adapt.

3. The hypothesis proposing that there is no statistically significant difference in emotional response to stressful events among young people of different ages preparing for a professional career as police officers was partially confirmed. Police High School students exhibit somewhat higher levels of negative emotional response to stressful events compared to Police Academy students. Police Academy students are in early or middle adulthood, whereas Police High School students are in late adolescence, that is, late school age. Consequently, Police Academy students display slightly lower levels of negative emotional reactions to stressful events than Police High School students

Reference

Delić, M. & Plažanin, S. (2021). *Što je stress? I kako se nositi s njime?* Zaprešić: CeZam. https://czmz.hr/wp-content/uploads/2021/06/Prirucnik_Sto-je-stres-i-kako-se-nositi-s-njime.pdf.

Десимировић, В. (1997). *Медицинска психологија са основама психопатологије.* Наука.

Garbarino, S., Cuomo, G., Chiorri, C., & Magnavita, N. (2013). Association of work-related stress with mental health problems in a special police force unit. *BMJ Open, 3*(7), 1–12.

Gerber, M., Hartmann, T., Brand, S., Holsboer-Trachsler, E., & Pühse, U. (2010). The relationship between shift work, perceived stress, sleep and health in Swiss police officers. *Journal of Criminal Justice, 38*(6), 1167–1175.

Gershon, R. R., Lin, S., & Li, X. (2002). Work stress in aging police officers. *Journal of Occupational and Environmental Medicine, 44*(2), 160–167.

Gershon, R. R., Barocas, B., Canton, A. N., Li, X., & Vlahov, D. (2009). Mental, physical, and behavioral outcomes associated with perceived work stress in police officers. *Criminal Justice and Behavior, 36*(3), 275–289.

Glavina, I., & Vukosav, J. (2011). Stres u policijskoj profesiji. *Policija i sigurnost, 20*(1), 32–46.

Lazarus, R. S. (1966). *Psychological stress and the coping process.* McGraw-Hill.

McCarty, W. P., "Solomon" Zhao, J., & Garland, B. E. (2007). Occupational stress and burnout between male and female police officers: Are there any gender differences? *Policing: An International Journal of Police Strategies & Management, 30*(4), 672–691

Милосављевић, Б. (2012). *Стрес, животне драме и контексти човјекових значења и нада.* Филозофски факултет.

Милосављевић, Б., Савић, Ј., Гутовић, В. & Кутлача, М. (2000). Милосављевић, Б. и Савић, Ј. (Ur.), *Дјеца у рату и послије рата*. Бања Лука: Народна и универзитетска библиотека Републике Српске и Центар за развој и евалуацију психосоцијалних програма – Одсјек за психологију Филозофског факултета.

Neylan, T. C., Metzler, T. J., Best, S. R., Weiss, D. S., Fagan, J. A., Liberman, A., Rogers, C., Vedantham, K., Brunet, A., Lipsey, T. L., & Marmar, C. R. (2002). Critical incident exposure and sleep quality in police officers. *Psychosomatic Medicine, 64*(2), 345–352.

Pajević, D. (2006). *Psihologija rada.* Liber.

Richmond, R. L., Wodak, A., Kehoe, L., & Heather, N. (1998). How healthy are the police? A survey of life-style factors. *Addiction, 93*(11), 172–173.

Selye, H. (1956). *The stress of life*. McGraw-Hill.

Sheehan, D. C., & Van Hasselt, V. B. (2003). Identifying law enforcement stress reactions early. *FBI L. Enforcement Bulletin, 72*, 12–17.

Трстењак, И. и Дундовић, К. (2024). Утјецај стреса и психосоцијална заштита полицијских службеника. *Полиција и сигурност*, *33*(4), 394–408.

Жиропађа, Љ. и Миочиновић, Љ. (2007). *Развојна психологија.* Чигоја штампа.

Paper received on: 16/5/2025
Paper accepted for publishing on: 18/11/2025