Natural Resources for Human Health
eISSN: 2583-1194

Original Research

Received 05 July 2026
Revised 11 Aug 2026
Accepted 25 Aug 2026

Natural Resources for Human Health 2026, Vol.6(19s):1372–1382

KEYWORDS:
mental health, security forces, suicide, stress, burnout, organizational well-being, resilience.

Mental Well-being and Suicidal Ideation in Spain's State Security Forces and Corps: An Exploratory Cross-Sectional Study

Víctor Rodríguez González[1], Claudio Paya Santos[2], Javier Diz-Casal[3], Rafael Canorea-García[4], Neidy Zenaida Domínguez Pineda[5], Juan Carlos Fernández-Rodríguez[6]

[1]Isabel I of Castile University, Spain
victor.rodriguez.gonzalez@ui1.es, https://orcid.org/0000-0002-5348-9730
[2]Valencia International University, Spain
claudio.paya@professor.universidadviu.com, https://orcid.org/0000-0002-1908-9960
[3]Valencia International University, Spain
jdizca@professor.universidadviu.com, https://orcid.org/0000-0003-1332-8905
[4]ESIC University, Spain
rafael.canorea@esic.university, https://orcid.org/0000-0002-6637-4369
[5]Valencia International University, Spain
neidyz.dominguez@professor.universidadviu.com, https://orcid.org/0000-0002-8574-2606
[6]Miguel de Cervantes European University, Spain
jcfernandez@uemc.es, https://orcid.org/0000-0003-3312-861X
Correspondence Author: Claudio Paya Santos

ABSTRACT:

This article reports the results of an exploratory cross-sectional study conducted with 1,456 members of the Spanish State Security Forces and Corps (FCSE). The study assessed mental health outcomes, with particular emphasis on suicidal ideation, depressive symptoms, post-traumatic stress, burnout, substance use, and additional psychosocial variables. Findings indicate worrisome levels of emotional distress, professional demotivation, sleep disturbances, and institutional barriers to accessing psychological support. The discussion addresses preventive measures, structural intervention proposals, and the development of a comprehensive organizational well-being framework adapted to the specific demands of policing contexts. This work seeks to contribute to the visibility of a pressing issue and to promote evidence-based public policies.

1. INTRODUCTION

Mental health has emerged in recent decades as a fundamental dimension of human well-being, especially in occupations involving high exposure to psychosocial risk factors (González, 2023). Spain's State Security Forces and Corps (FCSE) perform an essential function in protecting citizens' rights, freedoms, and safety (Soriano & Giner, 2025). However, fulfilling these roles entails multiple physical, emotional, and psychological challenges that can severely affect officers' quality of life.

In the Spanish context, security professionals face potentially traumatic situations on a daily basis, such as emergency management, confrontation with violence, assistance to victims of crime or disaster, and intervention in social conflicts (Pastor). In addition, they must maintain strict emotional control, work under high demand and often limited resources, and cope with the pressure of public and media scrutiny. This combination of factors makes the police profession one of the most vulnerable

to psychological disorders such as post-traumatic stress disorder (PTSD), anxiety, depression, burnout syndrome, and, in more severe cases, suicidal ideation and behavior (Caballero & Sánchez, 2018).

Numerous international studies have addressed this issue. Research in Canada, the United States, and Europe has shown that police officers exhibit higher rates of chronic occupational stress and mental disorders compared with other professions (Carleton et al., 2018; O'Hara & Violanti, 2009; Shane, 2010). These authors developed a conceptual model of local police officers' occupational stress following Marmot and Madge's (1987) approach, previously used in a study of occupational stress among police officers (Brown & Campbell, 1990). In this model, the stressor is regarded as a probable external source that produces an adverse individual reaction. According to several police stress researchers (Violanti et al., 1989), specific work-related stressors varied across organizations. Some organizational stressors stem from government and police leadership, while others derive from daily activities that are harmful due to exposure to risk and danger.

In Spain, however, this phenomenon has traditionally remained invisible, and there are few extensive empirical studies that comprehensively examine the mental health of police corps.

Compounding this is an institutional culture characterized by hierarchy, discipline, and emotional self-censorship, in which displaying vulnerability is perceived as a weakness incompatible with the ideal of strength associated with the police role (Bell & Eski, 2016). This reality hinders the early identification and treatment of psychological symptoms, delays professional intervention, and increases the risk of progressive deterioration of officers' emotional state (Rodríguez, 2023).

Following Segovia (2020), from 2001 to 2020 there were 235 suicide cases in the Guardia Civil and 160 in the National Police, meaning 395 deaths by suicide occurred across the two police corps. By 2024, the cumulative figure had increased significantly: from 2020 to 2024, the Guardia Civil recorded 327 suicide cases and the National Police 200, with 2021 — the year following the COVID-19 lockdown — being, to date, the year with the highest number of suicides among the FCSE, accounting for 30 cases in the Guardia Civil and 15 in the National Police. In most cases (71%), officers used their service weapon (Villegas, 2018); however, this is not an isolated finding. According to a study by Kaplan et al. (2009), possessing a firearm significantly increases the risk of suicidal ideation, making it the most common method used to carry out suicide in the United States.

These figures, though painful, represent only the tip of the iceberg of an underlying mental health crisis, one frequently ignored or minimized by organizational structures. Building on this problem, the present work seeks to contribute to scientific knowledge through a large-scale cross-sectional study aimed at describing the mental health status of FCSE officers in Spain, identifying risk and protective factors, and proposing institutional strategies for preventing suicidal ideation and promoting emotional well-being. This effort aims to make an urgent reality visible and to promote a paradigm shift in how institutions address the psychosocial health of their members.

According to Chae and Boyle (2012), the factors most consistently identified in the scientific literature as predisposing officers to police suicide are:

- Organizational stress
- Experiencing a serious traumatic incident
- Shift work and atypical working hours
- Relationship/partner problems
- Alcohol and/or other substance use and abuse

2. THEORETICAL FRAMEWORK

Understanding mental well-being and its deterioration in high-demand occupational contexts such as the FCSE requires a multidisciplinary approach that integrates contributions from clinical psychology, the sociology of work, occupational medicine, and organizational studies. This theoretical framework is organized around five axes: the occupational stress model, the interpersonal theory of suicide, occupational burnout, protective coping factors, and institutional culture within police corps.

2.1. Occupational Stress in Security Corps

Occupational stress has been defined as the worker's negative psychological response to demands that exceed their coping capacity (Lazarus & Folkman, 1984; Patlán, 2019). In the case of the FCSE, these demands are not only high but also constant and unpredictable. Brown and Campbell (1990) developed a specific model for police officers, distinguishing between organizational stressors (lack of support, structural changes, hierarchical pressure) and operational stressors (confrontation with violence, witnessing death, shift work). It has also been shown that both traumatic and organizational factors generate high levels of stress (Violanti & Aron, 1995).

Various empirical studies have shown that officers experiencing high levels of stress present a higher prevalence of insomnia, irritability, attention problems, substance abuse, and mood disturbances (Collins & Gibbs, 2003), in addition to significant psychophysiological disorders (Luceño-Moreno et al., 2021). It is therefore important to consider stress as a major risk factor for the mental health of police officers (Ruiz et al., 2024).

2.2. Interpersonal Theory of Suicide

Proposed by Joiner (2005), this theory holds that suicidal risk increases when three factors combine: (1) the perception of being a burden to others, (2) the feeling of not belonging, and (3) the acquired capability for suicide, often derived from habituation to pain and risk. Among police corps, constant exposure to extreme situations may reinforce this third factor. Repeated exposure to traumatic events arising from professional activity increases the risk of self-harm ideation by up to tenfold (Violanti, 2004). Likewise, the perception of institutional abandonment and the inability to share emotions within the group can foster social isolation (Sanz et al., 2024).

According to Echeburúa (2015), there is a direct correlation between feelings of hopelessness and suicidal behavior, with suicidal ideation being an early manifestation of such deterioration. This makes it easier for expressions or perceptions of hopelessness regarding one's professional future to emerge. Likewise, depressive symptoms and feelings of hopelessness (DeFilippo et al., 2000) are strongly associated with suicidal thoughts in this group. Research shows that police officers tend to drink as a way of coping with everyday distress and the stress inherent to their profession.

Regarding activity-related stressors, Shane (2010) analyzes police issues including long working hours and repetitive tasks without sufficient training. These stress factors can generate vulnerabilities and high stress levels stemming from emergency situations experienced, which can have serious long-term psychological consequences (Crank, 2004; Burk & Mikkelsen, 2007). A history of trauma, particularly in childhood or during professional service, also increases this risk (Polak et al., 2012; Brewin et al., 2022).

Polak et al. (2007) conducted a study of 90 police cadets and found that individuals reporting childhood trauma showed a greater skin conductance response prior to any dangerous event experienced, demonstrating how such childhood suffering can ultimately lead to changes in emotional and psychophysiological responses.

Police culture, grounded in resilience, emotional control, and hierarchical discipline, generates an institutional paradox: complex psychological competencies are demanded of officers, yet any display of emotional weakness is symbolically sanctioned. This phenomenon, described by Bell and Eski (2016), acts as an invisible barrier that prevents many officers from seeking help or sharing their distress.

The presence of internal stigma reinforces fears of marginalization, reassignment, or loss of one's service weapon. These fears, whether real or imagined, encourage the concealment of symptoms and feed a spiral of emotional deterioration that can lead to suicidal ideation or self-destructive behavior (Violanti & Aron, 1995; James et al., 2017).

2.3. Burnout Syndrome and Professional Exhaustion

Burnout, described by Maslach and Jackson (1981), involves a state of emotional exhaustion, depersonalization, and reduced personal accomplishment. Within police corps, a strong presence of this syndrome has been identified, particularly when institutional recognition is lacking or when job duties lack meaning or visible impact (Shane, 2010).

Longitudinal studies indicate that burnout not only reduces work performance but also increases absenteeism, physical illness, and deterioration of family relationships (Burke & Mikkelsen, 2007). Mid-level officers and patrol officers tend to be the most affected, owing to their direct contact with the public and the administrative burden they carry.

According to a study by Hyemin et al. (2013), many police officers are frequently under stress and experience burnout syndrome throughout their careers (Palacios & Liz, 2022). Police work involves duties and contexts whose content, while not as extreme as the most severe classified cases, still require significant emotional labor (enduring insults, involvement in high-risk teams, protecting murderers or sexual offenders from possible attacks…).

In a systematic review by Stanley et al. (2016), 12 studies of suicidal ideation among police officers from different countries were reviewed. The authors cite a study of 3,272 Norwegian police officers in which 24% of participants reported having thought that life was not worth living, and 6.4% had seriously considered the possibility of suicide at some point.

2.4. Protective Factors: Resilience, Social Support, and Positive Coping

Various studies have identified factors that mitigate the negative effects of occupational stress. Resilience, understood as the capacity to adapt positively to adversity, has proven key to preserving police officers' mental health (Luthar & Brown, 2007). Another essential protective factor is social support, both within the work environment and outside it, whether from family or friends (Farfán et al., 2019).

In terms of coping, problem-solving-oriented styles and cognitive restructuring have a positive impact on emotional adaptation. Burke and Mikkelsen (2007) found that officers who used active strategies (planning, seeking support, positive reappraisal) reported fewer depressive symptoms and lower suicidal ideation than those relying on avoidance or denial strategies.

2.5. Organizational Culture and Barriers to Intervention

Traditional police culture is characterized by values such as loyalty, discipline, emotional toughness, and operational autonomy. While these principles are functional for carrying out demanding tasks, they can become obstacles when they inhibit the expression of emotional distress or hinder access to professional help (Bell & Eski, 2016).

Fear of being stigmatized, reassigned, or disarmed is one of the main reasons many officers do not disclose their psychological difficulties. Studies by Garbarino et al. (2013) reveal that only a minority seek psychological assistance despite showing evident symptoms. As a result, various professional associations are calling for structural reform that normalizes mental health care as part of training and organizational culture (Payá et al., 2024).

3. METHODOLOGY

3.1. Study Design

This study adopts a quantitative approach with a cross-sectional, descriptive-exploratory design. This methodology was chosen to analyze, in a broad and precise manner, the mental health status of members of Spain's State Security Forces and Corps (FCSE), identifying the presence of symptoms related to stress, anxiety, depression, burnout, and suicidal ideation, as well as institutional perceptions and working conditions. The cross-sectional approach makes it possible to obtain a representative "snapshot" of the situation at a given point in time, without seeking to establish causal relationships.

The cross-sectional nature of the study precludes establishing causal relationships between variables. While significant correlations are identified among stress, depressive symptoms, substance use, and suicidal ideation, it cannot be claimed that one variable directly causes another. Future longitudinal studies could offer a more precise view of how these factors evolve over time.

3.2. Participants

The sample consisted of 1,456 professionals from various security corps: the National Police, the Guardia Civil, Local Police, the Mossos d'Esquadra, the Policía Foral, and regional and municipal corps. Participation was voluntary and anonymous. A non-probabilistic, convenience-based selection method was used, through dissemination on professional social networks, union associations, and police well-being platforms.

The distribution by corps is as follows:

Table 1. Distribution of the sample across the different security corps

Corps	Frequency	Percentage
Guardia Civil (Civil Guard)	743	51.0

Cuerpo Nacional de Policía (National Police Corps)	536	36.8
Policía Local (Local Police)	132	9.1
Ertzaina	2	.1
Mossos d'Esquadra	38	2.6
Hospital	1	.1
Firefighter	1	.1
Security guard	1	.1
Military Police	1	.1
Port Police	1	.1
TOTAL	1,456	100.0

Source: Own elaboration

Participants' ages ranged from 22 to 59 years, with a mean of 38.4 years (SD = 7.2). 78% were men and 22% women, consistent with the gender distribution within Spanish police corps. Average professional experience was 14.6 years. Regarding marital status, 63% identified as married or in a relationship, and 37% as single, separated, or divorced. 45% reported having children.

The use of convenience sampling, based on voluntary participation through digital channels, limits the statistical representativeness of the sample. Although the diversity of corps and regions represented is broad, it cannot be assured that the participants' profile is fully generalizable to the entirety of Spain's State Security Forces and Corps (FCSE).

3.3. Instruments

A self-administered questionnaire was designed for data collection, structured into several sections. The questionnaire included closed-ended items and Likert-type scales, organized into five thematic blocks:

- Sociodemographic and occupational data: age, sex, police corps, shift, years of service, marital status, children, education.
- Emotional state and psychological symptoms: frequency of stress, anxiety, sadness, hopelessness, irritability, insomnia.
- Substance use: alcohol, tobacco, illicit drugs, self-medication.
- Institutional support and interpersonal relationships: perception of superiors, colleagues, visibility of mental health, stigma.
- Suicidal ideation: thoughts related to death, wish to disappear, self-harm ideation, risk behaviors.

The questionnaire was piloted with 30 officers from different corps to assess its comprehensibility and reliability. The overall Cronbach's alpha obtained was 0.682, indicating acceptable internal consistency for exploratory studies (Nunnally, 1978; Santos et al., 2018), and close to the acceptable value of 0.70 cited by other authors for various standardized assessment tools (Campo-Arias & Oviedo, 2008).

Although the questionnaire showed acceptable internal consistency ($\alpha = 0.682$), it did not include validated clinical scales for diagnostic purposes. This limits the ability to identify specific clinical conditions. Incorporating standardized instruments would improve the precision and comparability of the findings.

Despite these limitations, the data obtained constitute a solid basis for initiating organizational change processes, raising awareness among policymakers, and encouraging new lines of research.

3.4. Procedure

Data collection was carried out online over a three-month period. A secure digital platform was used to guarantee the confidentiality and anonymity of responses. Participants were provided in advance with an information sheet outlining the

study's objectives, and informed consent was obtained. It was made clear that participants could withdraw from the questionnaire at any time without consequence.

External variables such as unit type (patrol, investigation, riot control), workload, or the number of recent critical interventions were not controlled for. These factors may significantly influence officers' emotional state and should be considered in future research.

As this was a self-administered questionnaire, the data depend on respondents' honesty and self-perception. It is possible that some participants minimized or exaggerated their symptoms for personal reasons, fear of stigma, or lack of emotional awareness. This bias is common in psychological studies and should be taken into account when interpreting the results.

The study was approved by the Ethics Committee of Universidad Isabel I, in compliance with the principles of the Psychologist's Code of Ethics and the Declaration of Helsinki for research involving human subjects.

3.5. Data Analysis

Data were processed using SPSS software (version 25). A statistical significance level of 95% ($p < 0.05$) was established. The results presented in this article correspond to the initial descriptive phase of the study.

To carry out an adequate analysis of the data, the relevant normality tests were performed.

The Kolmogorov–Smirnov test was applied. This one-sample goodness-of-fit test allows the degree of agreement between the distribution of a data set and a specific theoretical distribution to be measured. Its purpose is to indicate whether the data originate from a population with the specified theoretical distribution — that is, whether the observations could reasonably come from that distribution. In other words, it allows the normal distribution of a variable to be verified.

The Lilliefors correction was applied, an improvement over the sole use of the Kolmogorov–Smirnov test (Pedrosa et al., 2014).

In our study, since in all cases the data show a significance level ≥ .05 with respect to the dependent (sociodemographic) variables considered, we accept the normality of the data obtained.

4. RESULTS

4.1. Emotional State and Psychological Symptoms

34.5% of the sample reported feeling demotivated in their job, and this figure rises when adding the 35.8% who feel demotivated on some occasions. Regarding whether they feel frustrated at work (despite liking their job), 31.5% answered yes, plus 36.5% who feel this way on some occasions.

In addition, there is the mental burden imposed by bureaucratic processes: 48.6% of respondents report that bureaucratic processes constitute a mental burden, plus a further 24.7% who say this is the case on some occasions.

25.6% of the sample report ongoing family problems caused by work, and a further 17.5% report occasional problems, always for work-related reasons.

There does not appear to be a persistent feeling of sadness among most of the sample, with 8.7% responding affirmatively to its presence, and a higher percentage, 24.4%, reporting that it occurs on some occasions.

Overall, 15% of the sample report currently being in psychological or psychiatric treatment, and 5.4% have been or are occasionally.

4.2. Suicidal Ideation

10.5% of participants admitted having had suicidal thoughts at some point, a figure that exceeds the estimated national average for the general population. Of these, 6.8% currently experience such thoughts, and 3.7% experienced them more than six months ago.

Regarding self-harming behavior, 98.7% report never having engaged in any form of self-injury. Only 1% report having done so, plus a further 0.3% who report having done so more than six months ago.

4.3. Substance Use

Regarding consumption habits, 13.6% reported regular alcohol consumption, defined as more than three times per week (occasional consumption stands at 33.9%). Additionally, 5.1% reported habitual use of illicit substances such as cannabis or cocaine.

4.4. Perception of the Work Environment and Institutional Support

43.8% of officers considered that their professional effort is not valued by their superiors (27.5% occasionally). 48% state that bureaucratic processes represent a significant mental burden (24.9% state this occurs occasionally).

Also relevant to the work environment is exposure to physical assault in the course of duty: in fact, 54.6% of participants have been assaulted while performing their work. Specifically, 39.7% of participants have sustained injuries requiring medical attention.

Regarding the nature of their work, 36% report having experienced a traumatic incident in the past two years. 26.2% have had to use non-lethal force in the course of their duties, and 5% have had to use their firearm in the past six months.

4.5. Protective Factors

On a positive note, 90.3% of respondents reported having hobbies or extracurricular activities that help them disconnect from work, and 80.4% reported maintaining stable social ties outside the police environment. In addition, 66.8% of respondents live in the same province as at least 50% of their family.

5. STATISTICAL AND CORRELATIONAL ANALYSIS

In order to further examine the results obtained, a Pearson correlational statistical analysis was carried out between the main variables assessed. These correlations made it possible to explore associations between psychosocial risk factors, institutional perception, and mental health indicators, including suicidal ideation.

5.1. Emotional State and Psychological Symptomatology

A significant correlation was identified between demotivation and age ($r = -.063$; $p = .016$) and years of service ($r = -.052$; $p = .045$). Regarding frustration, significant associations were found with social groups outside of work ($r = -.052$; $p = .046$) and the presence of leisure-time hobbies ($r = -.055$; $p = .036$). Regarding possible family problems caused by work, significant correlations were found with the same variables as for frustration, with values for social groups outside of work of ($r = -.117$; $p = .000$) and presence of hobbies of ($r = -.074$; $p = .005$). Attendance at psychological/psychiatric treatment among members of the sample again correlates significantly with age ($r = -.096$; $p = .000$) and years of service ($r = -.077$; $p = .004$).

The values for the presence of persistent sadness among members of the sample did not show significant correlations.

5.2. Suicidal Ideation

In this section, the presence of suicidal thoughts again correlates significantly with having a social group outside the work environment ($r = -.094$; $p = .000$) and hobbies outside of work ($r = -.119$; $p = .000$). Other relevant findings among sample members include the presence of traumatic incidents at work in the past two years; this variable shows significant correlations with age ($r = -.067$; $p = .010$), years of service ($r = -.077$; $p = .003$), and hobbies outside of work ($r = -.113$; $p = .000$).

The presence of self-harm shows no correlation with any of the variables considered in this study.

5.3. Sleep Quality

The analysis revealed that poor sleep quality correlates positively with levels of negative psychological symptoms. These results reinforce the importance of adequate rest as a protective factor for psychological balance.

Thus, sleep quality correlates significantly with age ($r = .119$; $p = .000$), years of service ($r = .140$; $p = .000$), hobbies outside of work ($r = .114$; $p = .000$), and social groups outside the work environment ($r = .112$; $p = .000$).

5.4. Perceived Institutional Support and Organizational Factors

Institutional and organizational factors have proven highly relevant as psychosocial risk factors. In our case, rotating shifts correlate with age ($r = .079$; $p = .002$), years of service ($r = .067$; $p = .010$), and the position held over the past two years ($r =$

.139; p = .000). Feeling recognized by superiors correlates with social groups outside of work (r = -.078; p = .003) and with the presence of leisure-time hobbies (r = -.069; p = .008).

Finally, no significant correlations were found regarding the presence of bureaucratic processes that represent an additional workload.

6. CONCLUSIONS

This study provides a comprehensive view of the mental health status of members of Spain's State Security Forces and Corps, shedding light on an issue that has traditionally remained hidden both from the public sphere and within the institutions themselves. The data obtained reflect alarming levels of chronic stress, depressive symptoms, sleep disorders, substance use, and, in particular, a worrying prevalence of suicidal ideation.

The evidence gathered shows that these indicators cannot be explained solely by individual factors, but rather respond largely to a rigid organizational structure, an institutional culture based on the invisibilization of emotional distress, and a lack of specific resources for officers' psychological care. In other words, the psychological suffering of many public security professionals is not an exception but a predictable consequence of unfavorable working conditions and a system that does not always prioritize the well-being of its members.

Despite this bleak picture, the study also identifies personal and social protective factors that can serve as a foundation for designing effective interventions. Individual resilience, family support, participation in leisure activities, and healthy social ties are key elements in buffering the impact of occupational stress (Fernández & Liz, 2018).

The results suggest that many of the risk factors have structural origins. The perception of a lack of institutional support, the invisibilization of emotional suffering, the lack of spaces for psychological containment, and the existence of a culture of silence all favor isolation and progressive burnout.

From an institutional perspective, the findings of this study support the urgency of incorporating mental health as a strategic priority within FCSE personnel policies (Luque et al., 2023). This entails not only strengthening available psychological services but also a deep cultural transformation that promotes empathetic leadership, emotional expression, and the prevention of psychological suffering as an inherent part of police work.

Despite the severity of the indicators, positive elements were also identified that can constitute a solid basis for prevention strategies (Payá & Delgado, 2025). The existence of family support networks, participation in extracurricular activities, and personal resilience emerge as buffering factors against distress (Fernández & Liz, 2018).

The evidence shows that officers with solid emotional bonds and healthy leisure routines present lower levels of anxiety, depression, and suicidal ideation. These data are consistent with the literature on positive coping and reinforce the need to incorporate these elements into institutional well-being programs (Fernández et al., 2023).

This work constitutes a call to action for policymakers, police leadership, unions, and health professionals: it is time to act. Mental health is neither a luxury nor a private matter, but a labor and human right. The lives of those who protect us cannot continue to be at stake.

Future research should expand the sample, use validated clinical instruments, explore the impact of pilot psychological well-being programs, and specifically analyze differences between corps, regions, and operational specialties. Only through robust evidence, institutional commitment, and political will will it be possible to build healthier, fairer, and more humane organizations (Granados et al., 2023).

It is necessary to move toward a healthy, empathetic, and emotionally competent police and security culture for all members of the different corps. Suicide prevention and the promotion of mental well-being and quality of life are not individual responsibilities but, on the contrary, collective challenges that require organizational commitment, transformative leadership, and sustained political will.

REFERENCES

[1] Bell, J. L. & Eski, Y. (2016). Break a leg—It's all in the mind: Police officers' attitudes towards colleagues with mental health issues. Policing: A Journal of Policy and Practice, 10(2), 95–101. https://doi.org/10.1093/police/pav041

[2] Brewin, C. R., Miller, J. K., Soffia, M., Peart, A. & Burchell, B. (2020). Posttraumatic stress disorder and complex posttraumatic stress disorder in UK police officers. Psychological Medicine, 52(7), 1287–1295. https://doi.org/10.1017/S0033291720003025

[3] Brown, J. M. & Campbell, E. A. (1990). Sources of occupational stress in the police. Work & Stress, 4(4), 305–318. https://doi.org/10.1080/02678379008256993

[4] Burk, M., & Mikkelsen, M. (2007). Combining qualitative and quantitative methods: An overview. International Journal of Multiple Research Approaches, 1(1), 3–8. https://doi.org/10.5172/mra.2007.1.1.3

[5] Burke, R. J. & Mikkelsen, A. (2007). Burnout, job stress and attitudes towards the use of force by Norwegian police officers. Policing: An International Journal of Police Strategies & Management, 30(3), 511–528. https://doi.org/10.1108/13639510510597906

[6] Caballero, C. & Sánchez, S. (2018). Mental health in Spain's State Security Forces and Corps. Ciencia Policial, 150, 27–50. https://dialnet.unirioja.es/servlet/articulo?codigo=7390354

[7] Campo-Arias, A. & Oviedo, H. C. (2008). Psychometric properties of a scale: internal consistency. Revista de Salud Pública, 10(5), 831–839. https://doi.org/10.1590/S0124-00642008000500015

[8] Carleton, R. N., Afifi, T. O., Taillieu, T., Turner, S., Mason, J. E., Ricciardelli, R., … & Sareen, J. (2018). Exposures to potentially traumatic events among public safety personnel in Canada. Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du Comportement, 50(2), 67–79.

[9] Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D. M., … & Asmundson, G. J. (2018). Mental disorder symptoms among public safety personnel in Canada. Canadian Journal of Psychiatry, 63(1), 54–64.

[10] Chae, D. H., & Boyle, E. H. (2012). Perceived racial discrimination and mental health among Asian Americans: Does education matter? Journal of Immigrant and Minority Health, 14(3), 380–387. https://doi.org/10.1007/s10903-011-9478-5

[11] Crank, J. P. (2004). Understanding police culture (2nd ed.). Anderson Publishing.

[12] Collins, P. A. & Gibbs, A. C. C. (2003). Stress in police officers: A study of the origins, prevalence and severity of stress-related symptoms within a county police force. Occupational Medicine, 53(4), 256–264. https://doi.org/10.1093/occmed/kqg061

[13] DeFilippo, J., Overholser, J. C., & Marrelli, A. F. (2000). Relations between personality measures and hopelessness in depressed outpatients. Psychological Reports, 86(1), 275–280. https://doi.org/10.2466/pr0.2000.86.1.275

[14] Echeburúa, E. (2015). The many faces of suicide in clinical psychology. Terapia Psicológica, 33(2), 117–126. https://doi.org/10.4067/S0718-48082015000200006

[15] Farfán, J., Peña, M. & Topa, G. (2019). Lack of group support and burnout syndrome in workers of the State Security Forces and Corps. Moderating role of neuroticism. Medicina, 26(5), 536. https://doi.org/10.3390/medicina55090536

[16] Fernández Rodríguez, J. C., & Liz Rivas, L. (2018). Resilience-based treatment following scenarios of social exclusion. Thomson Reuters/Aranzadi, pp. 715–726. https://doi.org/10.5281/zenodo.14559643

[17] Fernández Rodríguez, J. C., Domínguez Pineda, N. Z., Miralles Muñoz, F., & Liz Rivas, L. (2023). Risk behaviors and prevention programs in institutionalized adolescents. Cuadernos de RES PUBLICA en derecho y criminología, (2), 42–56. https://doi.org/10.46661/respublica.8286

[18] 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), e002791. https://doi.org/10.1136/bmjopen-2013-002791

[19] González Trigo, N. A. (2023). The undercover agent facing transnational organized crime. Cuadernos de RES PUBLICA en derecho y criminología, (1), 85–94. https://doi.org/10.46661/respublica.8062

[20] Granados Alos, L., Suriá Martínez, R., Perea Rodríguez, C., Payá Santos, C. A., Sánchez Pujalte, L., & Aparisi Sierra, D. (2023). Effectiveness of a program for the development of socio-emotional competences in people admitted to a penitentiary center. Frontiers in Public Health, (10), 1116802. https://doi.org/10.3389/fpubh.2022.1116802

[21] Hyemin, J., Sihn, K., & Kim, M. J. (2013). Effectiveness of cognitive-behavioral therapy on depressive symptomatology and immune response of patients with depressive disorder: A randomized controlled trial. Journal of Korean Academy of Nursing, 43(2), 259–266. https://doi.org/10.4040/jkan.2013.43.2.259

[22] James, S. M., Honn, K. A., Gaddameedhi, S. & Van Dongen, H. P. A. (2017). Shift work: Disrupted circadian rhythms and sleep—Implications for health and well-being. Current Sleep Medicine Reports, 3, 104–112. https://doi.org/10.1007/s40675-017-0071-6

[23] Joiner, T. E. (2005). Why people die by suicide. Harvard University Press.

[24] Kaplan, M. S., McFarland, B. H., & Huguet, N. (2009). Characteristics of adult male and female firearm suicide decedents: findings from the National Violent Death Reporting System. Injury Prevention, 15(5), 322–327. https://doi.org/10.1136/ip.2008.021162

[25] Lazarus, R. S. & Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company.

[26] Luceño-Moreno, L., Talavera-Velasco, B., Jaén-Díaz, M. & Martín-García, J. (2021). Occupational stress in Spanish police officers: Validating the effort-reward imbalance questionnaire. International Journal of Environmental Research and Public Health, 18(4), 1393. https://doi.org/10.3390/ijerph18041393

[27] Luthar, S. S. & Brown, P. J. (2007). Maximizing resilience through diverse levels of inquiry: Prevailing paradigms, possibilities, and priorities for the future. Development and Psychopathology, 19(3), 931–955. https://doi.org/10.1017/S0954579407000454

[28] Luque Juárez, J. M., Payá Santos, C. A., & Arenas Morales, F. (2023). Context of citizen security policies. Cuadernos de RES PUBLICA en derecho y criminología, (2), 69–82. https://doi.org/10.46661/respublica.8293

[29] Marmot, M. G., & Madge, N. (1987). Contribution of job control and other risk factors to social variations in coronary heart disease incidence. The Lancet, 330(8573), 235–239. https://doi.org/10.1016/s0140-6736(87)90435-3

[30] Maslach, C. & Jackson, S. E. (1981). The measurement of experienced burnout. Journal of Occupational Behavior, 2(2), 99–113. https://doi.org/10.1002/job.4030020205

[31] Naranjo, María Maestre, Santos, Claudio Paya, Alonso, Silvia Arranz, Alos, Lucia Granados, Pineda, Neidy Zenaida Domínguez, Rey, Manuel Nevado, Fernández-Rodríguez, Juan Carlos, Workplace Aggression Against Healthcare Workers: A Cross-Sectional Registry Study Comparing Primary and Specialized Care, Advances in Public Health, 2026, 5959054, 8 pages, 2026. https://doi.org/10.1155/adph/5959054

[32] Nunnally, J. C. (1978). Psychometric theory. McGraw Hill.

[33] O'Hara, A. F. & Violanti, J. (2009). Police suicide: A web surveillance of police suicides using media reports. International Journal of Emergency Mental Health, 11(1), 17–23.

[34] Palacios García, M. A., & Liz Rivas, L. (2022). Harassment or "stalking" offenses in the workplace. Dykinson, pp. 91–102. https://doi.org/10.2307/j.ctv36k5cdb.13

[35] Patlán, J. (2019). What is occupational stress and how is it measured? Revista Salud Uninorte, 35(1), 156–184. https://doi.org/10.14482/sun.35.1.158.72

[36] Pastor Sánchez, J. Á. (2023). Private security in Spain and its legislative evolution. Cuadernos de RES PUBLICA en derecho y criminología, (2), 83–97. https://doi.org/10.46661/respublica.8265

[37] Payá Santos, C. A., & Delgado Morán, J. J. (2025). Cognitive biases: Understanding and mitigating their effects. American Based Research Journal, 14(4). https://doi.org/10.5281/zenodo.15412164

[38] Payá Santos, C. A., Delgado Morán, J. J., Martino, L., García Segura, L. A., Diz Casal, J., & Fernández Rodríguez, J. C. (2023). Fuzzy logic analysis for managing uncertain situations. Review of Contemporary Philosophy, 22(1), 6780–6797. https://doi.org/10.52783/rcp.1132

[39] Pedrosa, I., Juarros-Basterretxea, J., Robles-Fernández, A., Basteiro, J. & García-Cueto, E. (2014). Goodness-of-fit tests in symmetric distributions: which statistic should be used? Universitas Psychologica, 14(1), 245–254. https://doi.org/10.11144/Javeriana.upsy14-1.pbad

[40] Polak, A. R., Witteveen, A. B., Reitsma, J. B., & Olff, M. (2007). The role of perceived threat and objective exposure to violence in post-traumatic stress disorder symptoms among urban police officers. Journal of Occupational Health Psychology, 12(2), 133–141. https://doi.org/10.1037/1076-8998.12.2.133

[41] Polak, A. R., Witteveen, A. B., Reitsma, J. B. & Olff, M. (2012). The role of executive function in posttraumatic stress disorder: A systematic review. Journal of Affective Disorders, 104(1–3), 1–11. https://doi.org/10.1016/j.jad.2012.01.001

[42] Ruiz, A., Blaya-Sánchez, M. A., López-Morales, J. L., Peinado-Portero, A. I., Giner Alegría, C. A., López-Puga, J. & Moya-Faz, F. J. (2024). Psychosocial risk factors and burnout in police officers: A network analysis. Anales de Psicología, 39(3), 478–486. https://doi.org/10.6018/analesps.522361

[43] Rodríguez González, V. (2023). The influence of real-time attention and emotion levels on possible biases in testimonial evidence. Revista Electrónica de Estudios Penales y de la Seguridad: REEPS, (12), 1–22.

[44] Santos, T. C., de Araujo, T. M., & Bernardes, K. O. (2018). Exploratory study of the validity and internal consistency of the work ability index among healthcare workers. Salud Colectiva, 14(4), 713–724. https://doi.org/10.18294/sc.2018.1342

[45] Sanz González, R., Luque Juárez, J. Mª., Martino, L., Liz Rivas, L., Delgado Morán, J. J., & Payá Santos, C. A. (2024). Artificial intelligence applications for criminology and police sciences. International Journal of Humanities and Social Science, 14(2), 139–148. https://doi.org/10.15640/jehd.v14n2a14

[46] Segovia, M. (2020, November 9). 404 suicides since 2001: the hidden drama of the Police, Guardia Civil, and Army. El Independiente. https://www.elindependiente.com/espana/2020/11/08/404-suicidios-desde-2001-el-drama-oculto-de-policia-guardia-civil-y-ejercito/

[47] Shane, J. M. (2010). Organizational stressors and police performance. Journal of Criminal Justice, 38(4), 807–818. https://doi.org/10.1016/j.jcrimjus.2010.05.008

[48] Shane, J. M. (2010). Mental health in the fire service: What does the research tell us? International Journal of Emergency Mental Health, 12(1), 39–47.

[49] Soriano Guillamón, A. & Giner Alegría, C. A. (2025). Computer undercover agent. Comparative law report. Cuadernos de RES PUBLICA en derecho y criminología, (in press), 01–20. https://doi.org/10.46661/respublica.12120

[50] Villegas, M. E. (2018). Psychological first aid for public health emergencies. Journal of Emergency Management, 16(2), 99–103. https://doi.org/10.5055/jem.2018.0365

[51] Violanti, J. M., & Aron, F. (1995). Police stressors: Variations in perception among police personnel. Journal of Criminal Justice, 23(3), 287–294. https://doi.org/10.1016/0047-2352(95)00012-F

[52] Violanti, J. M. (1996). Law enforcement stress: An overview. The American Behavioral Scientist, 39(2), 233–243. https://doi.org/10.1177/0002764296039002009

[53] Violanti, J. M. (2011). Police suicide: Epidemic in blue. Charles C Thomas Publisher.

[54] Violanti, J. M., Burchfiel, C. M., Miller, D. B., Andrew, M. E., & Dorn, J. (1989). Police trauma and cardiovascular disease: Association between PTSD symptoms and metabolic syndrome. International Journal of Emergency Mental Health, 3(4), 213–217.