

Sleep Quality, Burnout, Coping Styles, and Cognitive Function among Police Personnel

Nishita

Netaji Subhash University of Technology, New Delhi, India

Pratima Kaushik

Ambedkar University Delhi, India

Sleep quality is crucial for physical and mental health, especially in high-stress occupations like law enforcement. The current study investigated the associations between burnout, sleep quality, coping styles, and cognitive function among police personnel in Delhi. A sample of 71 (Male=40, Female=31) police personnel from different ranks (sub-inspector, assistant sub-inspector, constable, and head constable) working an average of 11.75 hours daily, participated in this study. Data was collected using PSQI-Hindi, MBI (translated in Hindi), MoCA-Hindi, and CBAS (Indian Adaptation). Results: Findings revealed that police personnel reported poor sleep quality and a moderate level of burnout. Adaptive coping strategies were more prevalent than maladaptive ones. Contrary to expectations, cognitive function had no significant relationship with burnout or sleep quality. However, maladaptive coping was identified as a key factor influencing both burnout and sleep quality, with sleep quality also playing a crucial role in predicting burnout. Conclusion: The study highlights the role of adaptive coping strategies in helping police personnel deal with organizational stressors better, leading to low burnout.

Keywords: Police personnel, sleep quality, burnout, coping styles, cognitive function

Law enforcement personnel routinely face occupational hazards that have significant consequences for their physical health, psychological well-being, and interpersonal relationships (Kavya, 2016). These stressors encompass a spectrum of challenges, ranging from working conditions and excessive workloads to the perpetual fear of severe injury or mortality while on duty. Additionally, factors such as the absence of acknowledgment for their contributions, inadequacy of equipment, involvement in shooting incidents, participation in anti-terrorist operations, frequent confrontations with the public, the hierarchical structure within police departments, and a pervasive sense of job dissatisfaction further exacerbate the strain experienced by Indian Police personnel (Selokar, 2011).

Continuous exposure to such stressors can result in a myriad of negative consequences, including an increased degree of stress, depression, and anxiety, as well as an increased susceptibility to burnout and PTSD (Kavya, 2016). Gutshall et al. (2017) found that police officers experienced moderate levels of burnout and had lower working memory scores. To comprehend the current research landscape, it is essential to situate the study within the broader theoretical framework and existing literature. The burgeoning literature within the field of police psychology has underscored the dynamics of occupational stress, sleep problems, quality of life, work performance, burnout, coping, as well as other mental health issues among police personnel (Bell et al., 2015; Battle, 2011;

Chaves & Shimizu, 2020; Gibbons, 2024; Singh et al., 2019).

Police personnel are substantially more likely to experience burnout symptoms such as insomnia, elevated blood pressure, and a lack of effective coping skills (Battle, 2011). Burnout syndrome is a form of persistent stress that includes psychological, physiological, and emotional exhaustion as a result of repeated and sustained exposure to workplace stressors (Fabichak et al., 2014). Emotional exhaustion, a key component of burnout, is triggered by excessive workload, minimal recognition, and excessive dedication (Sherwood et al., 2019). According to Maslach, burnout consists of three elements- depersonalization, lack of personal achievement, and emotional exhaustion (Maslach, 2016). When burnout increases, cognitive ability and decision-making, crucial components of police work, decline (Ramirez, 2019).

According to research, burnout may also be associated with disturbed sleep, non-restorative sleep, and low-quality sleep (Akerstedt et al., 2007; Ekstedt et al., 2006). Police personnel frequently face long working hours, workplace stress, and exposure to risky or distressing situations (Habersaat et al., 2015; Santana et al., 2012). Rajaratnam et al. (2011) found a significant percentage of sleep difficulties among police officers from Canada and the USA. Chaves et al. (2020) reported that a sample of military police from Piauí experienced significant rates of burnout, with more than 70% of the individuals reporting poor sleep quality. In contrast, around 20% of officers were diagnosed with a sleep disorder. Additionally, the dimensions of Burnout, depersonalization, and emotional exhaustion showed a strong association with sleep quality (Chaves et al., 2020).

Fortier-Brochu (2012) found that participants with sleep complaints, such as difficulty initiating, maintaining sleep, or

waking up early, exhibited altered cognitive abilities. Poor sleep quality was found to have an impact on memory and executive functioning (Fortier-Brochu, 2012). Many job circumstances, including irregular shift work, night shifts, and long work hours, can influence workers' sleep quality (Magnavita et al., 2017). Research has revealed that poor sleep quality is associated with an increased incidence of work-related accidents (Uehli et al., 2014). Research suggests a bi-directional relationship between job stress and sleep quality (Kim et al., 2011; Van Laethem et al., 2015). Recurrent sleep deprivation may impair mental capacities and induce physical fatigue, causing a state of isolation, trouble engaging in social events, and elevated levels of stress (Silva et al., 2014).

Active coping involves purposeful actions, such as taking steps to improve the situation, planning, and engaging in problem-focused efforts, along with adaptive strategies like positive reframing and acceptance. In contrast, maladaptive coping is characterized by passive or avoidant responses, including aggression, substance use, behavioral disengagement, self-blame, and denial (Gupta et al., 2019). According to Kaiseler et al. (2014), how police recruits appraise stress and cope with it plays a key role in determining their level of work engagement. This research endeavours to examine the relationship among cognitive function, sleep quality, burnout, and coping styles among Police personnel in Delhi. It also aims to examine the effects of coping styles and sleep quality on burnout, as well as the impact of coping styles on sleep quality itself. By examining the aforementioned factors, this study aims to contribute significant knowledge that can inform interventions, support mechanisms, and policies designed to improve functioning and enhance the overall working environment for police officers.

Hypotheses

- H1: There will be a significant relationship between burnout, cognitive function, coping styles, and sleep quality of police personnel.
- H2: Sleep quality and maladaptive coping style will significantly predict burnout among police personnel.
- H3: Coping styles will significantly impact sleep quality among police personnel.

Method

Participant Characteristics

The current study obtained responses from 40 male and 31 female participants (N = 71) from various ranks, including Constables (57.7%), Head Constables (32.4%), Assistant Sub-Inspectors (7.0%), and Sub-Inspectors (2.8%). The inclusion criteria were— police personnel serving in the current rank for at least two years in the police station. The mean age of the police personnel was 33.3 years (SD= 9.23). The education level of participants was as follows: Graduate (69%), postgraduate (23%), and higher secondary education (5.6%). The average working hours of the police personnel were 11.75 hours (SD=4.05) per day.

Sampling technique

For the present study, purposive sampling was utilized. This sampling approach targeted participants who met specific criteria, including a tenure of at least two years in the police force, to ensure representation of individuals with relevant experience. By focusing on this subgroup, the study aimed to gather insights relevant to police personnel who are familiar with the job demands.

Materials

Participants filled out a questionnaire consisting of a consent form and a

Sociodemographic sheet along with four scales in the Hindi language assessing Burnout, Coping Style, Sleep quality, and Cognitive function.

The Sociodemographic sheet: It was prepared by the authors. It included participants' age, gender, rank, daily working hours, education level, marital status, socio-economic status, social category, years of service, and shift type.

The Pittsburgh Sleep Quality Index (PSQI) (Buysse, 1989): measures the sleep quality of police personnel. It includes 19 statements and encompasses seven dimensions: subjective sleep quality, sleep duration, sleep latency, habitual sleep efficiency, daytime dysfunction, sleep disturbances, and use of sleeping medication. The PSQI exhibits high internal reliability between PSQI-H and PSQI (Cronbach's alpha = 0.776), as well as test-retest reliability (ICC = 0.979) (Kumar et al., 2021).

Maslach Burnout Inventory (MBI) (Maslach et al., 1970): measures the level of burnout. To ensure better understanding among police personnel, the test was meticulously translated and back-translated into Hindi. Additionally, the translated version underwent scrutiny by an expert proficient in the Hindi language. The results obtained for each MBI dimension were classified as 'high' or 'low'. Cronbach's Alpha determined that the Maslach Burnout Inventory (MBI) has reliability coefficients of 0.86. The concurrent validity coefficients among peer judgments of burnout and MBI range from 0.20 to 0.56 across different service worker populations.

Montreal Cognitive Assessment-Hindi (MoCA) (Kaul et al., 2022): was employed to measure the Cognitive function of police personnel. It examines several areas of cognition, including executive functions, attention, visuospatial abilities, memory, language and vocabulary, conceptual thinking, working memory, and orientation. A

cumulative score of 26 or more is considered normal cognitive function. The H-MoCA content is validated with a CVR of 0.99 based on a qualitative examination and a content validation ratio. The scale demonstrates moderate internal consistency ($\alpha = 0.64$) and substantial test-retest reliability (ICC = 0.87).

Coping Behavior Assessment Scale (Indian Adaptation) (Srivastava et al., 2017): was employed to measure the dominant coping style among police personnel. The scale consists of 28 items which assesses coping in reaction to the adversities experienced by individuals. The higher the score for the dimension, the more likely the person will utilize that coping style. The scale is highly reliable, with a Cronbach's α of 0.82. The test-retest for equivalent forms is 0.76.

Research Design

For the present investigation, a cross-sectional descriptive research methodology was adopted, an observational approach through which data are collected from a sample at a specific point in time.

Procedure

First, permission was obtained from the respective Station House Officers of the police stations in various districts of Delhi,

stating the purpose, objectives, and relevant information about the study. Then, potential participants were approached in person based on specific inclusion criteria, which included being a sworn police officer for at least two years. Before the study's initiation, informed consent was obtained. Later, participants were provided with instructions for each questionnaire in the survey to ensure clarity and understanding.

After participants had completed the survey questionnaires, the data were input and cleaned using Excel to prepare them for analysis. Finally, statistical analysis was conducted using SPSS 25. Pearson Correlation was performed to test for association among burnout, coping style, sleep quality, and cognitive function. Furthermore, linear regression was used to assess the effect of coping styles on sleep quality and the effect of both coping styles and sleep quality on burnout.

Results

The present study's objectives are: a) to assess the impact of coping style and sleep quality on burnout; b) to assess the effect of coping style on sleep quality. Table 1 portrays the Mean (SD) and interpretation of the study variables and their respective dimensions.

Table 1. Means, Standard deviation, and Interpretation of study variables

Variable(N=71)	Dimensions	M	SD	Interpretation
Cognitive Function		23.2	2.98	Mild Cognitive Impairment
Sleep Quality	Total Sleep Quality Index	5.52	2.52	Poor sleep quality
	Subjective Sleep Quality	.82	.64	No difficulty
	Sleep Latency	1.28	.94	Low difficulty
	Sleep duration	.97	.51	No difficulty
	Habitual Sleep Efficiency	.15	.4	No difficulty
	Sleep disturbances	1.07	.59	Low difficulty
	Use of sleeping medication	.11	.4	No difficulty
	Daytime dysfunction	1.11	.8	Low difficulty
Burnout	Emotional Exhaustion	12.63	7.53	Low burnout

Coping Styles	Depersonalization	5.31	6.18	Low burnout
	Personal Achievement	33.56	11.87	Moderate burnout
	Adaptive Coping	42.56	6.48	Moderate
	Maladaptive Coping	20.96	4.73	Low

Table 2 shows an Intercorrelation matrix presenting the association between Burnout, Sleep Quality, Cognitive Function, and Coping Styles. Results indicate a statistically significant relation between Emotional

Exhaustion and Maladaptive Coping ($r = .47$, $p < .01$); Emotional Exhaustion and Sleep Quality ($r = .39$, $p < .01$); Maladaptive Coping and Sleep Quality ($r = .52$, $p < .01$).

Table 2. Inter-correlation matrix showing the relationship between Burnout, Coping styles, Sleep Quality, and Cognitive Function

Variables (N=71, df=2)	I	II	III	IV	V	VI	VII
Emotional Exhaustion I	-	-	-	-	-	-	-
Depersonalization II	.66**	-	-	-	-	-	-
Personal Achievement III	0.22	0.04	-	-	-	-	-
Adaptive Coping IV	0.12	0.07	0.08	-	-	-	-
Maladaptive Coping V	.47**	.41**	0.1	.53**	-	-	-
Sleep Quality VI	.39**	.34**	0.12	0.07	.52**	-	-
Cognitive Function VII	-0.023	0.11	0.18	0.1	0.13	-0.02	-

**Value is significant at the 0.01 level

A linear regression analysis was performed to predict Emotional Exhaustion (a dimension of burnout) based on Maladaptive Coping and Sleep Quality (Table 3). A significant regression equation was found between Maladaptive Coping and Emotional Exhaustion ($F(2, 68) = 19.834$, $p < .000$), with an R^2 of .223; and between Sleep Quality and Emotional Exhaustion ($F(2, 68) = 12.527$, $p < .001$), with an R^2 of .154.



Maladaptive Coping and Sleep Quality were significant predictors of burnout. Table 4 presents a linear regression analysis to examine the effect of Maladaptive Coping on Sleep Quality. The analysis revealed a statistically significant regression equation ($F(1, 69) = 25.363$, $p < .000$), with an R^2 of 0.269. Maladaptive Coping was a significant predictor of Sleep Quality.

Table 3. Regression Coefficients of Maladaptive Coping and Sleep Quality on Emotional Exhaustion

Dependent Variable →	Emotional Exhaustion	
Independent Variable ↓ (N=71, df=1,69)	B Coefficient (t value)	R Square (F ratio)
Maladaptive Coping	.473 (4.45) **	.223 (19.83) **
Sleep Quality	.392 (3.54) **	.154 (12.53) **

**Value is significant at the 0.01 level

Table 4. Regression Coefficients of Maladaptive Coping on Sleep Quality

Dependent Variable 	Sleep Quality	
Independent Variable	B Coefficient (t value)	R Square (F ratio)
 (N=71, df=1,69)		
Maladaptive Coping	.518 (5.04)**	.269 (25.36)**

**Value is significant at the 0.01 level

Discussion

The current research examines the relationship between sleep quality, burnout, coping style, and cognitive function in police personnel. The findings indicate Minor Cognitive Impairment among police personnel. In a study, Bell et al. (2015) found that law enforcement agents who worked more than 12 hours had lower concentration and cognitive function than officers working 10 hours a day. The police personnel may have performed poorly in the cognitive function tasks due to fatigue caused by long working hours and boredom resulting from the lengthy questionnaires of the study. Furthermore, the mean Global score of the PSQI indicated poor sleep quality. A study by Rajaratnam et al. (2011) found a significant prevalence of sleep difficulties among police officers in Canada and the USA.

Overall, the police personnel in the sample reported low levels of burnout. Possible explanations for these findings include health-protective variables, including individual (personality qualities and coping strategies) and organizational resources (Martinussen, 2007). Several studies have reported a significant enhancement in mental health, reduced stress arousal, and somatic signs (Arnetz et al., 2013; Weltman et al., 2014), as well as progress in factors such as coping skills, social interactions, and police officers' job effectiveness, due to organizational training (McCraty & Atkinson, 2012). To become a police officer in Delhi, aspirants must undergo a rigorous selection

process and 9 months of training at the Delhi Police Academy (Basic Training of Recruit Constables, 2022). The group's lower burnout may be attributed to the effects of selection and training.

Finally, police personnel reported using a low amount of Maladaptive coping and a moderate amount of Adaptive coping. The officer's utilization of more efficient coping techniques could be linked to numerous favourable coping opportunities associated with a higher educational and social background, access to various facilities, and receiving good support from social networks (Singh et al., 2019). Another possible explanation is that police officers may hesitate to disclose maladaptive coping behaviors due to concerns about how it could affect their professional image and standing within the department, including fears of being perceived as unfit for duty or facing disciplinary consequences, which may lead to underreporting.

H1 suggested that there is a significant association between burnout, cognitive function, coping styles, and sleep quality among police personnel. The results indicate a moderate positive correlation between Maladaptive Coping and Emotional Exhaustion. In a study by Gibbons (2024), venting (a component of maladaptive coping) of negative emotions was indicated to impact emotional exhaustion significantly. This is because expressing complaints or difficulties can lead to feelings of increased distress or inadequacy, especially if those around them

are indifferent or respond in a way that suggests it is a sign of weakness.

Sleep quality was weakly correlated to burnout, Depersonalization, and Emotional Exhaustion. These findings coincide with research on military police officers conducted by Chaves et al. (2020), which found that Emotional exhaustion showed a moderate relationship with sleep quality. The results of the present study also indicate a moderate positive correlation between Depersonalization and Maladaptive Coping. Venting (component of Maladaptive Coping) was found to be the most powerful predictor of depersonalization in a study by Gibbons (2024). Finally, maladaptive coping is moderately positively correlated with sleep quality. Furman et al. (2018) found that maladaptive strategies for coping have been linked to elevated stress levels and lower sleep quality. Since a significant correlation was found among sleep quality, burnout, and coping styles, but not with cognitive function, H1 is partially accepted.

H2 suggested that coping styles and sleep quality significantly predict burnout in police personnel. Maladaptive Coping and Sleep Quality were found to be significant predictors of burnout. This is because voicing complaints or difficulties, which pertain to the venting component of maladaptive coping, can make one feel inadequate if those around them are apathetic, leading to signs of emotional exhaustion (Gibbons, 2024). A study by Ekstedt (2006) found that individuals with burnout symptoms experienced more sleep fragmentation and lower habitual sleep efficiency. Sleep disturbances are a hallmark of occupational burnout. Impaired sleep may contribute to the development of weariness or exhaustion in burnout. H2 is accepted because Sleep Quality and Maladaptive coping are significant predictors of emotional exhaustion among Police personnel.

H3 suggested that coping styles have a significant impact on sleep quality among police personnel. Maladaptive Coping was found to significantly impact sleep quality. A study found that using a passive coping style significantly impacted sleep quality among police officers (Hartley, 2014). H3 is accepted because Maladaptive Coping is a significant predictor of Sleep Quality in Police personnel.

Implications and Future Suggestions

The findings emphasize the importance of addressing the occupational health and well-being of police personnel in India. Despite the demanding nature of their work, participants demonstrated resilience and adaptive coping strategies that may protect against burnout and cognitive decline, highlighting the role of both individual and organizational protective factors. Future research should further examine the relationships among occupational stressors, coping strategies, and cognitive functioning, preferably through longitudinal designs. Additionally, exploring the moderating role of individual differences such as personality traits and resilience may help inform more targeted and personalized interventions for police personnel.

Limitations

This study has several limitations. Survey length and the demanding nature of police work may have led to respondent fatigue and reduced response accuracy. The use of self-report measures increases the risk of bias due to social desirability and recall errors. The cross-sectional design limits causal interpretations, and the small sample size, combined with non-random district selection, restricts generalizability.

Conclusion

This study aimed to examine the relationships among sleep quality, burnout, coping styles, and cognitive functioning in

police personnel. Significant associations were found among sleep quality, burnout, and coping styles; however, cognitive functioning did not show a meaningful relationship with these variables. It was also found that both Maladaptive Coping and Sleep Quality were significant predictors of burnout. The analysis also demonstrated that Maladaptive Coping significantly impacted sleep quality. Overall, the findings underscore the interrelated nature of sleep quality, burnout, and coping styles among police personnel, underscoring the importance of reducing maladaptive coping and enhancing sleep quality to prevent burnout.

References

- Akerstedt, T., Kecklund, G., & Gillberg, M. (2007). Sleep and sleepiness in relation to stress and displaced work hours. *Physiology & Behavior*, 92(1-2), 250-255. <https://doi.org/10.1016/j.physbeh.2007.05.044>
- Arnetz, B.B., Arble, E., Backman, L., Lynch, A., Lublin, A. (2013). Assessment of a prevention program for work-related stress among urban police officers. *International Archives of Occupational and Environmental Health*, 86(1), 79–88. <https://doi.org/10.1007/s00420-012-0748-6>
- Battle, L. (2011). Compassion fatigue, compassion satisfaction, and burnout among police officers who have experienced previous perceived traumas (Doctoral dissertation, University of Memphis). *Dissertation Abstracts International*, 73, 2296.
- Bell, L. B., Virden, T. B., Lewis, D. J., & Cassidy, B. A. (2015). Effects of 13-hour 20-minute work shifts on law enforcement officers' sleep, cognitive abilities, health, quality of life, and work performance. *Police Quarterly*, 18(3), 293–337. <https://doi.org/10.1177/1098611115584910>
- Buysse, D. J., Reynolds, C. F., 3rd, Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: A new instrument for psychiatric practice and research. *Psychiatry Research*, 28(2), 193–213. [https://doi.org/10.1016/0165-1781\(89\)90047-4](https://doi.org/10.1016/0165-1781(89)90047-4)
- Chaves, M. S. R., & Shimizu, I. S. (2020). Burnout syndrome and sleep quality among military police officers in Piauí. *Revista brasileira de medicina do trabalho : publicacao oficial da Associacao Nacional de Medicina do Trabalho-ANAMT*, 16(4), 436–441. <https://doi.org/10.5327/Z1679443520180286>
- Ekstedt, M., Söderström, M., Akerstedt, T., Nilsson, J., Søndergaard, H. P., & Aleksander, P. (2006). Disturbed sleep and fatigue in occupational burnout. *Scandinavian Journal of Work, Environment & Health*, 32(2), 121–131. <https://doi.org/10.5271/sjweh.987>
- Fabichak, M., & Teixeira, M. A. P. (2014). Burnout syndrome: A review of the literature. *Revista Médica de Minas Gerais*, 24(1), 122–128.
- Fortier-Brochu, E., Beaulieu-Bonneau, S., Ivers, H., & Morin, C. M. (2012). Insomnia and daytime cognitive performance: A meta-analysis. *Sleep Medicine Reviews*, 16, 83–94.
- Furman, M., Joseph, N., & Miller-Perrin, C. (2018). Associations between coping strategies, perceived stress, and health indicators. *Psi Chi Journal of Psychological Research*, 23(1), 61–72. <https://doi.org/10.24839/2325-7342.jn23.1.61>
- Gibbons, C. (2024). Stress, coping, burnout and mental health in the Irish Police Force. *Journal of Police and Criminal Psychology*. <https://doi.org/10.1007/s11896-023-09638-7>
- Gupta, B., Singh, S., Sharma, D., & Mishra, P. (2019). A Study of stress, coping, social support, and mental health in police personnel of Uttar Pradesh. *Indian Journal of Occupational and Environmental Medicine*, 23(2), 73. https://doi.org/10.4103/ijoem.ijoem_184_18

- Gutshall, C. L., Hampton, D. P., Sebetan, I. M., Stein, P. C., & Broxtermann, T. J. (2017). The effects of occupational stress on cognitive performance in police officers. *Police Practice and Research, 18*(5), 463–477. <https://doi.org/10.1080/15614263.2017.1288120>
- Habersaat, S. A., Geiger, A. M., Abdellaoui, S., & Wolf, J. M. (2015). Health in police officers: Role of risk factor clusters and police divisions. *Social Science & Medicine, 143*, 213–222. <https://doi.org/10.1016/j.socscimed.2015.08.043>
- Hartley, T. A., Violanti, J. M., Sarkisian, K., Fekedulegn, D., Mnatsakanova, A., Andrew, M. E., & Burchfiel, C. M. (2014). Association Between Police-Specific Stressors and Sleep Quality: Influence of Coping and Depressive Symptoms. *Journal of Law Enforcement Leadership and Ethics, 1*(1), 31–48.
- Kavya, C. N., & Chandrashekar, E. (2016). A sociological study on occupational stress and health problems among female police constables in Karnataka. *International Journal of Applied Research, 2*, 487–491.
- Kaiseler, M., Passos, F., Queirós, C., & Sousa, P. (2014). Stress Appraisal, coping, and work engagement among police recruits: an Exploratory study. *Psychological Reports, 114*(2), 635–646. <https://doi.org/10.2466/01.16.pr0.114k21w2>
- Kim, H. C., Kim, B. K., Min, K. B., Min, J. Y., Hwang, S. H., & Park, S. G. (2011). Association between job stress and insomnia in Korean workers. *Journal of Occupational Health, 53*(3), 164–174. <https://doi.org/10.1539/joh.10-0032-oa>
- Kumar, A., Handa, R., Upadhyaya, S. K., & Gupta, S. J. (2021). Validation of Hindi version of the Pittsburg Sleep Quality Index. *The Journal of the Association of Physicians of India, 69*(4), 11–12.
- Magnavita, N., & Garbarino, S. (2017). Sleep, Health and Wellness at Work: A Scoping Review. *International Journal of Environmental Research and Public Health, 14*(11), 1347. <https://doi.org/10.3390/ijerph14111347>
- Martinussen, M., Richardsen, A. M., & Burke, R. J. (2007). Job demands, job resources, and burnout among police officers. *Journal of Criminal Justice, 35*(3), 239–249. <https://doi.org/10.1016/j.jcrimjus.2007.03.001>
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA), 15*(2), 103–111. <https://doi.org/10.1002/wps.20311>
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology, 52*, 397–422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- McCraty, R., Atkinson, M. (2012). Resilience training program reduces physiological and psychological stress in police officers. *Global Advances in Health and Medicine, 1*(5), 44–66. <https://doi.org/10.7453/gahmj.2012.1.5.013>
- Rajaratnam, S. M., Barger, L. K., Lockley, S. W., Shea, S. A., Wang, W., Landrigan, C. P., O'Brien, C. S., Qadri, S., Sullivan, J. P., Cade, B. E., Epstein, L. J., White, D. P., Czeisler, C. A., & Harvard Work Hours, Health and Safety Group (2011). Sleep disorders, health, and safety in police officers. *JAMA, 306*(23), 2567–2578. <https://doi.org/10.1001/jama.2011.1851>
- Ramirez, M. (2019). Job burnout among female police officers. (Doctoral dissertation, Alliant International University). *ProQuest Dissertations & Theses Global*.
- Santana, Â. M., Gomes, J. K., De Marchi, D., Gironcoli, Y. M., de Lima Rosado, L. E. F. P., Rosado, G. P., & de Andrade, I. M. (2012). Occupational stress, working conditions, and nutritional status of military police officers. *Work, 41*, 2908–2914. <https://doi.org/10.3233/wor-2012-0543-2908>

- Selokar, D., Nimbarte, S., Ahana, S., Gaidhane, A., & Wagh, V. (2011). Occupational stress among police personnel of Wardha city, India. *The Australasian Medical Journal*, 4(3), 114–117. <https://doi.org/10.4066/AMJ.2011.562>
- Sherwood, L., Hegarty, S., Vallières, F., Hyland, P., Murphy, J., Fitzgerald, G., & Reid, T. (2019). Identifying the Key Risk Factors for Adverse Psychological Outcomes Among Police Officers: A Systematic Literature Review. *Journal of Traumatic Stress*, 32(5), 688–700. <https://doi.org/10.1002/jts.22431>
- Singh, S., Gupta, B., Sharma, D., & Mishra, P. C. (2019). A Study of Stress, Coping, Social Support, and Mental Health in Police Personnel of Uttar Pradesh. *Indian Journal of Occupational and Environmental Medicine*, 23(2), 73–78. https://doi.org/10.4103/ijoem.IJOEM_184_18
- Uehli, K., Mehta, A. J., Miedinger, D., Hug, K., Schindler, C., Holsboer-Trachsler, E., Leuppi, J. D., & Kunzli, N. (2014). Sleep problems and work injuries: a systematic review and meta-analysis. *Sleep medicine reviews*, 18(1), 61–73. <https://doi.org/10.1016/j.smrv.2013.01.004>
- Van Laethem, M., Beckers, D. G., Kompier, M. A., Kecklund, G., van den Bossche, S. N., & Geurts, S. A. (2015). Bidirectional relations between work-related stress, sleep quality and perseverative cognition. *Journal of Psychosomatic Research*, 79(5), 391–398. <https://doi.org/10.1016/j.jpsychores.2015.08.011>
- Weltman, G., Lamon, J., Freedy, E., Chartrand, D. (2014). Police department personnel stress resilience training: An institutional case study. *Global Advances in Health and Medicine*, 3(2):72–79. <https://doi.org/10.7453/gahmj.2014.015>

Nishita, Department of Humanities and Social Sciences, Netaji Subhash University of Technology, New Delhi, India

Pratima Kaushik, Associate Professor, School of Human Studies, Ambedkar University Delhi, India. Corresponding Author's Email: drpratima.2209@gmail.com