OCCUPATIONAL STRESS AND QUALITY OF LIFE OF POLICE PERSONNEL DURING COVID-19 PANDEMIC

A Dissertation submitted in partial fulfilment for the award of the degree of Master of Philosophy (M.Phil.) in Psychiatric Social Work to the Central University of Karnataka, Kalaburagi, India.

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DECLARATION

I, **Urmila Bamney**, hereby declare that the thesis titled **"*Occupational Stress and Quality of Life of Police Personnel During Covid-19 Pandemic*"** is an original research work done by me under the guidance and supervision of **Dr. CHANNAVEER R M**, Professor, Department of Social Work, Central University of Karnataka, Kalaburagi. This thesis is submitted to the Central University of Karnataka for the award of the degree of Master of Philosophy in Psychiatric Social Work. I also declare that this thesis or any part of it has not been submitted to any other university for the award of any degree or diploma to me previously.

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By Urmila Bamney

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ABSTRACT

Background: The COVID-19 pandemic substantially interrupted routine and forced frontline workers, particularly police officers, under enormous pressure because of their crucial role in implementing lockdowns, regulating law and order, and monitoring adherence to regulations regarding health. These responsibilities exposed them to increased work stress and had a significant influence on their quality of life (QoL).

Methods: The study adopted a cross-sectional descriptive research design to assess the occupational stress and quality of life among police personnel during the COVID-19 pandemic. The cluster sampling method was used to select 17 police stations, and 23 police personnel, belonging to different ranks, including ASI, HC, PC, were randomly selected. A total of 402 police personnel working under the West Zone of the BBMP division constituted the participants of the study. Study tools such as Socio-demographic datasheet, Organisational Police Stress Questionnaire (PSQ-Org), The Workplace Stress Scale (WPSSP). The World Health Organisation Quality of Life-BREF (WHOQOL-BREF) were used to collect data from the participants. Data was analysed using the SPSS statistical package 26. The tests used were frequency, chi-square, T-test, ANOVA, correlation, and regression. descriptive and inferential statistics.

Results: The study findings revealed significant levels of occupational stress among police personnel during the COVID-19 pandemic. Of 402 participants, 31.3% experienced severe WPS, 51.0% reported moderate stress, and only 17.7% had low stress levels, with an overall mean score of 2.13 (SD = 0.68). OPS was also high, with 49% of respondents showing elevated levels. 39.6% scored high on WHO-QOL physical health, with a mean score of 2.12. Psychological health was highest among PUC-qualified officers (M = 2.14) and lowest among those with postgraduate degrees (M = 1.78). Importantly, workplace stress negatively predicted quality of life ($\beta = –0.17$, $p < .001$), and marital status also showed a significant inverse relationship ($\beta = –0.17$, $p < .01$), indicating that stress and social factors strongly influenced well-being among police personnel during the pandemic.

Conclusion: The COVID-19 pandemic worsened existing work-related stress among the police personnel, affecting their quality of life. This study emphasises the importance of specialised mental health interventions, improved management of resources, and structural changes to promote the well-being of police personnel during disasters.

Keywords:

COVID-19, occupational stress, police personnel, quality of life, frontline workers, mental health, and public health emergency

CHAPTER: I
INTRODUCTION

Human evolution has come across several pandemic situations in the course of history (Akat & Karatas, 2020). The terms pandemic and epidemic have been used interchangeably. According to the internationally accepted definition by the Dictionary of Epidemiology: “an epidemic occurring worldwide or over a very wide area, crossing international boundaries and usually affecting a large number of people” (Qiu et al., 2016). There is an increased risk of illness and death rates occurring due to pandemics, and this can further contribute to socio-economic and political breakdown (Madhav et al., 2017). Throughout history, various pandemic outbreaks such as the ‘Athenian Plague’ (430 B.C.), the ‘Antonine Plague’, the ‘Justinian Plague’, ‘the black death’, ‘the HIV pandemic’, ‘Small Pox’, SARS (mid-2003), ‘Swine Flu’ (2009), ‘Ebola’, ‘Zika’, ‘Disease X’ had longlasting effects on individuals and society as a whole (Huremovic, 2019).

The 21st century observed a major virus outbreak (Xiong et al., 2020). The epidemic was initially witnessed in Wuhan, China, in December 2019 (Nyashanu et al., 2020). The widespread spread of the virus across the globe has led to many people being infected, causing multiple deaths (Usher et al., 2020). A coronavirus outbreak has been announced as a public health emergency by the WHO (Chen et al., 2020), affecting both individuals' and communities' well-being, security, and health (Pfefferbaum & North, 2020). The pandemic has brought about various unparalleled and unpredictable challenges in the history of human civilization, resulting in higher rates of morbidity and mortality for people worldwide (Dawel et al., 2020). Coronavirus-affected individuals will encounter respiratory disease ranging from slight to severe (WHO, 2020), impacting the health of individuals. The commonest signs of COVID-19 comprise fever, coughing, tender throat, as well as difficulty breathing (Singh & Singh, 2020). As of 10 February 2021, the global count of coronavirus-verified cases is 106,555,206, including 2,333,446 deaths (WHO, 2021). On March 11, 2020, the World Health Organisation labelled this condition as a pandemic, urging member nations to take rapid action and increase their illness response, which includes treating, identifying, and limiting transmission (Das, 2020).

COVID-19 in India

India is an enormous nation with a population of over 1.3 billion citizens and is characterized by a diversified demography. In India, municipal regions such as Mumbai, Delhi, Bangalore, Ahmedabad, Chennai, and Kolkata have been implicated in a great percentage of total infections and mortality, at least on the surface (Bhadra et al., 2021). In January, India identified its initial coronavirus case on the 30th 2020 in the Thrissur district of Kerala (Sarkar et al., 2020). It was noted that a twenty-year-old female medical student of Wuhan University of China returned to India on January 23, 2020, after the outbreak of the Coronavirus pandemic in China and presented with complaints such as dry cough as well as a sore throat on 27 January 2020 at the Government Medical College of Thrissur, Kerala (Andrews et al., 2020). Later in a month or two, this virus rapidly blew out across all parts of the country (M. K & Bhatnagar, 2020).

The consequences of the pandemic at the earliest stages were unknown to many people. Later, with an increased number of instances and fatalities, the seriousness of the virus was obvious (Iqbal & Dar, 2020). The first two cases of death were reported in India on 14 March 2020, the deceased were above 65 years with pre-existing illnesses (Siddiqui et al. 2020). In India, it took 15 days for the number of new coronavirus cases to rise from 100 to 1000, whereas it took only 4 days in Turkey (Tiwari et al., 2020).

To slow the propagation of the infectious disease, the Government of India imposed a nationwide curfew by ordering quarantine, isolation, and social distancing for three weeks starting from the 24th of March, 2020 (Pulla, 2020). It included the closure of schools, offices, industries, places of worship, playgrounds, and travel restrictions (Joshi et al., 2020). This lockdown had access only to necessary amenities like groceries, banking, and health care services (Tagat & Kapoor, 2020). In contemporary society, where people are expeditiously communicating and travelling are compelled to stay at home, leading to resentment and uncertainty. The decreased subjective well-being contributes to various psychological responses, including loneliness, frustration, anxiety, boredom, and uncurbed fear (Serafini et al., 2020).

The nation has been experiencing negative consequences, such as the drastic downfall of employment, resulting in a financial crisis and poverty (Ghosh, 2020). People earning daily wages struggle to earn for their daily living, and the concept of maintaining social distancing could be problematic, more specifically in slum areas due to their dense population and

consistency (Golechha, 2020). The stringent lockdown measures during the coronavirus outbreak have increased psychological responses and mental health issues in the whole population (Talevi et al., 2020).

Vaccination in India:

Coronavirus vaccination has recently made available all over the world (Kunal et al., 2021). More than 6 million individuals have been vaccinated as of February 8 in India's largest immunization campaign, which commenced on January 16 (Bagcchi, 2021). COVID-19 vaccination is quite successful in preventing severe sickness and death. Covid-19 vaccines are also safe, with very minimal risks of serious side effects (Razai et al., 2021). Numerous immunizations have been created globally, including in India. Since the start of the SARS-CoV-2 (Koller et al., 2021), Covaxin and Covishield, two COVID-19 vaccines, are in use in India as of April 15, 2021. Bharat Biotech developed and manufactures 'Covaxin, a virion-inactivated severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) vaccine,' while the Serum Institute of India (SII) manufactures 'the Covishield', a recombinant 'chimpanzee adenovirus vector vaccine', with technology transfer from Oxford University and AstraZeneca (Singh et al., 2021). The COVID-19 vaccination is given in two doses (Bhatia & Abraham, 2021).

'The World Health Organization' states 'mental health' as "a state of well-being in which the individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can contribute to his or her community" (Galderisi et al., 2015). WHO has also raised concerns about the pandemic's psychological well-being and psychosocial effects (World Health Organization, 2020d). Coronavirus impacts not just the physical health and the social and economic well-being of individuals but also negatively affects mental health and wellness (Fiorillo & Gorwood, 2020). Following the COVID-19 outbreak in India, according to a current report by the Indian Psychiatric Society, there has been a 20% upsurge in psychological diseases (Kumar & Nayar, 2021). People who already suffer from mental health issues or substance abuse disorders are at a higher risk of contracting the virus, have difficulty getting tested and treated, and have a poor physical and psychological impact as a result of the pandemic (Cullen et al., 2020).

The pandemic and subsequent lockdown exacerbated symptoms such as anxiety in people who already had mental health issues (Kaur & Sonali, 2020). Anxiety is one of the most frequent psychological diseases in the overall population, and it is marked by tense feelings

and anxious thoughts (Ahmad et al., 2020). Fear and worry are caused by a lack of knowledge about the virus's incubation period, transmission method, therapy, and safety precautions (Kar et al., 2020). Social stigma, infectious risk, and a low priority for mental health pathology are some of the reasons (Roy et al., 2020). The disease has inculcated a great deal of anxiety, worry, and fear in the public, as well as some groups, such as older people, caregivers, and people with underlying health problems, due to its tremendous infectious potential (Kazmi et al., 2020).

However, these measures to reduce the pandemic's rate of transmission have a physiological, psychological, and social impact on people and more specifically on the vulnerable populations of society i.e., women, children, elderly, and frontline workers (Wang et al., 2021).

COVID-19 Second Wave:

Except for a few countries, such as India, most other nations experienced the initial wave of COVID-19 before August 2020, with wave 2 beginning in August–September 2020 and wave 3 beginning in March 2021, which is currently ongoing (Sarkar et al., 2021). India experienced a devastating second wave in April-May 2021, while most other countries have passed the second peak, with some countries even experiencing third and fourth waves (Bhardwaj & Agrawal, 2021). In comparison to the first wave, the second wave is moving at a breakneck speed (Jain et al., 2021). The spread of the virus has been prevented and interrupted by a variety of tactics and precautions, including social distancing, social isolation, quarantine, hand washing, lockdowns, and travel bans (Ali, 2020). The second and additional severe wave of the pandemic outbreak had a crucial effect on people's psychological well-being (Kaur et al., 2021). Research conducted on psychological well-being in the next phase of the outbreak-Polish studies in 2021 revealed that the second wave of the pandemic harmed the respondents' psychological well-being. Many participants had an anxiety-depressive disorder, as well as suicidal ideation (Chodkiewicz et al., 2021).

Consequences of the pandemic on various Populations

Children- Despite having a lesser likelihood of getting the intense form of the disease, children and teenagers could be particularly vulnerable to the pandemic's biopsychosocial stressors (de Figueiredo et al., 2020). The noteworthy variations in lifestyle, physical exercise, and mental excursions that come with home confinement have an immediate emotional impact on children (Ghosh et al., 2020). All educational support services addressed to children of all ages were

terminated alongside the closure of schools, with teachers from primary school onwards offering online lessons (Spinelli et al., 2020). Children who are staying at home, away from school, friends, and coworkers, may have a lot of questions regarding the outbreak, and they will turn to their parents or caregivers for answers (Javed et al., 2020). The COVID-19 epidemic and its societal consequences seem to harm children and adolescents with mental illnesses (Jefsen et al., 2020). Special education students, such as those with autism spectrum disorder, are also at risk. When their daily habits are broken, they may get angry and irritable (Lee, 2020).

Women- Since the enforced lockdown was imposed, violence against women has increased significantly throughout the world (Nigam, 2020). Women are substantially correlated with higher self-reported stages of stress, worry, sadness, and posttraumatic stress symptoms, as well as a more severe total psychological impact, according to studies from China, where COVID-19 initially arose (Almeida et al., 2020). According to the WHO, depressive disorders will be the second greatest source of burden of disease by 2020, with one out of every three women suffering from common mental illnesses (Basu, 2012).

Senior Citizens- The nationwide lockdown and transportation restrictions have limited older people's activities (Mukhtar, 2020). Many elderly people in India live alone, don't own a vehicle, and/or are unable to drive. Due to the lack of public transit during the lockdown, it is impossible to obtain vital supplies such as groceries and medications (Mukherjee, 2020). Elderly residents residing at residential care homes are at risk of becoming increasingly socially isolated, as their friends and family members are now not authorized to visit (Brooke, 2020). The risk of death from coronavirus increases with age, with the number of deaths occurring in persons over 60, particularly those with chronic illnesses such as heart disease (Lloyd-Sherlock et al., 2020).

People with Disabilities- Persons with disabilities are more likely to be affected by the epidemic as well as the efforts made to control it (Senjam, 2021). Disability as defined by the 'International Classification of Functioning, Disability, and Health' as "condition causing activity limitations and participation restrictions due to physical, sensitive or cognitive impairments (individual conditions) in relation with social contexts such as inaccessible transportation and public buildings and limited social support (contextual factors) (Dalise et al., 2020) People with Intellectual and Developmental Disabilities appear to be more likely to become infected with the virus and to have more significant clinical effects. Many persons with

IDD have comorbidities that can make COVID-19 more severe, resulting in case-fatality rates that are twice as high as in the general population, especially among the young (Navas et al., 2020).

Frontline workers and COVID-19:

Additionally, there seems to be no doubt that the current coronavirus pandemic is posing significant problems to frontline response groups (Hartmann & Hartmann, 2020). Corona warriors are battling not only the disease but also a lack of personal protective equipment (PPE), N95 masks, and other infrastructure (Gupta, 2020).

Guidelines for Frontline Workers:

The most common way for viruses to spread is by airborne droplets. As a result, to safeguard frontline workers from becoming infected with COVID-19, rules must be established, including the use of Personal Protective Equipment (PPE) that provides minimum protective measures (Lotta et al., 2020). Frontline workers, vulnerable communities more susceptible to the virus, and people with pre-existing comorbidities should be given priority in receiving testing kits (Nagesh & Chakraborty, 2020). The risk for front-line healthcare professionals was higher in all healthcare settings but was highest for those working in inpatient settings and nursing homes, contrary to a wider population (Nguyen et al., 2020).

Doctors- Even in normal conditions, physicians experience high levels of job stress (Galbraith et al., 2020). Doctors are among the most susceptible to highly contagious diseases. They are altruistic warriors who deliver health care while distancing themselves from their families and loved ones (Pandey & Sharma, 2020). During times of self-isolation or quarantine, most doctors have no one to look after their children or families (Urooj et al., 2020). During the pandemic situation, doctors are at greater risk of developing psychological health morbidities, i.e., anxiety, depressive disorders, stigma, and fearfulness (Chatterjee et al., 2020).

Nurses- Nurses have a critical role in the early detection and coronavirus response (Choi et al., 2020). They serve as the most important frontline health workers who are responsible for categorizing COVID-19 patients according to the intensity of infection (Sharma et al., 2020). Nurses who come into intimate contact with these patients while giving treatment are frequently plagued by poor contamination protection, increased infection risks, working fatigue, fear, anxiety, and despair (Hu et al., 2020). Most predominantly, decreased

psychological health among nursing staff might reduce professional performance (Nie et al., 2020).

Pharmacists- From the time of the commencement of the COVID-19 pandemic, pharmacists have been developing creative strategies to minimize the transmission of the virus (Visacri et al., 2020). To prevent the virus from spreading uncontrollably, several hospital pharmacy units have been separated into two or more distinct but equally functional units (Poh & Lin, 2020).

Military Personnel- The Indian military has been offering help to the civil power in several ways since the declaration of the COVID-19 pandemic (Bhaskar, 2021). The Government of India on 10th of April, 2020 announced that the Armed forces were running six quarantine facilities in Mumbai, Jaisalmer, Jodhpur, Hindon, Manesar, and Chennai, and thirteen Army hospitals and 7500 beds were dedicated to patients with coronavirus (Nair & Banerjee, 2020).

Police Personnel- The police are a public service group tasked with maintaining order and peace in any country by preventing criminal activity (Sagar et al., 2014). During their duties, they may be confronted with circumstances involving serious crises without notice. Several variables, including 24-hour availability and administrative issues, combine to make policing the most demanding profession in the world (Joseph & Nagarajamurthy, 2014). Policing is regarded as a stressful and demanding profession, compelling the police personnel to undergo increased job stress leading to burnout, and physical and psychological disorders (Queiros et al., 2020). In times of danger, need, or exertion, a citizen typically turns to the police for safety and protection. When assessed in terms of individual morbidity and death, the cost of stress-related disease in cops appears to be substantial, and this translates into a growing financial burden in the form of lower productivity, sick leave, and early retirement (Collins & Gibbs, 2003). At the workplace, police officers are exposed to both acute and chronic stressful situations, which may result in mental and physiological health issues (Maran et al., 2015). According to studies, police officers are at a higher risk of developing non-communicable illnesses and cardiovascular disease events at a younger age, and they die at a younger age (Tharkar et al., 2008).

The term "Indian Police" encompasses not only India's state police forces, but also the Central Reserve Police Force (CRPF), the Border Security Force (BSF), the Indo-Tibetan Border Police (ITBP), the Central Bureau of Investigation (CBI), the Rapid Police Force (RPF), and other law enforcement agencies (Almale et al., 2014). Police officers are a unique occupational category since they are exposed to violence and stress on the job, which has a

direct and indirect impact on their health. (Ganesh et al., 2014). Police personnel are the frontline workers who are repeatedly exposed to various forms of stressors contributing to mental health conditions such as depression, anxiety, post-traumatic stress disorder (PTSD), burnout, and somatization (Jetelina et al., 2020). Police personnel encounter mental health issues when they have limited or no social support from their family, peers, colleagues, and superiors (Demou et al., 2020).

In the Indian context, the roles and responsibilities of police personnel are classified as constables, inspectors, and officers, with constables being the lowest rank and inspectors being the highest. The stress level of these police personnel varies according to their job roles and responsibilities (B. Gupta et al, 2019). Constables are considered to be the foot troops in India, who bear the brunt of this work (Kaur et al., 2013). Police officers operate in a setting where they must repress emotions such as astonishment, fear, and despair (Mushwana et al., 2019). In India, police officers are routinely educated to cope with natural and man-made disasters, while pandemic control is not stressed during police training (Khadse et al., 2020). The Department of Law Enforcement has performed a critical and front-line role in maintaining social safeguards to prevent COVID-19 from spreading (Dey et al., 2020).

Occupational Stress among Police Personnel- Everyone's life is affected by stress; occupational stress is one of the key problems, as every other occupation has its own set of stressors. Physical and mental illnesses are largely caused by stress (Parsekar et al., 2015). Stress is a strenuous experience that affects various aspects of an individual, including personality factors, sociocultural situations, and environment. Occupational stress, on the other hand, disrupts the overall stability of a person’s psychological and physiological health, further contributing to aberrant behaviour at the workplace (Singh & Kar, 2015). Stressors may be both healthy and unhealthy, and a person's response to one is highly unique and based on the meaning he assigns to an event (Hunnur et al., 2014). There are numerous determinants of work stress some of which include- a pessimistic work environment, long working hours, lack of leisure time, scarcity of time to spend with family and friends, poor living and working conditions, decreased sleep and appetite, and quick actions for tough decisions (Ragesh, et al, 2017). The frequency of these stresses might vary throughout the year depending on a variety of criteria such as their work schedule, police level, and duty area (Ma et al., 2015). The police profession is considered a high-risk vocation, necessitating the provision of numerous protections and aid to police officers (Borovec, 2022).

Work Schedule of Police Personnel:

The Covid-19 pandemic's economic and social impact is expected to transform people's and organizations' ideas of work and occupations, resulting in micro and macro shifts in the workplace (Kramer & Kramer, 2020). While accomplishing the obligations for which they are already understaffed and underfunded, police personnel have been required to manage municipal closures, promote social isolation, and impose stay-at-home requirements (Stogner et al., 2020). Police officers' inability to stay at home and/or socially remove themselves has posed considerable issues for those on the front lines of policing operations (Simpson & Sandrin, 2021). To carry out their duties, police officers must be physically present in communities (Edwards & Kotera, 2021). The police have played a key role in enforcing lockdown restrictions across India, with activities ranging from asking violators to go home, using the threat of force-to-force people to leave public spaces, drawing lines to space people out in front of shops in markets, standing at the Naka (barricade) to check cars at state and district borders, and arresting offenders (Dutta & Fischer, 2020). The police are enforcing the lockdown, who are exhausted after working long shifts and dealing with those who break the curfew for no good reason (Andrade, 2020).

Professional life has become more important than personal life in today's competitive and dynamic world. Workplace demands, pressures, and idealistic expectations endanger employees' mental health (Kumar & Kamalanabhan, 2017). Organizational stressors, such as disagreements, workload, and absence of assistance, are more likely to be negative sources of stress than operational stressors, according to studies conducted among police officers over the last 20 years (van der Velden et al., 2013). Police personnel encounter numerous stressful circumstances while they are vulnerable to traumatic occurrences such as brutality, seeing corpses, mistreated children, etc. (Violanti et al., 2017). Physiological issues such as lack of exercise, high blood pressure, and raised cortisol levels owing to shift work have been linked to police officers' stress levels and well-being (Milliard, 2020). Acute extra-organizational stressors are natural and human-caused (intentional or accidental) disasters that occur outside of organizational boundaries and harm employee and organizational performance (Biggs et al., 2014). This can impair productivity, stimulate absenteeism, lower morale, raise interpersonal conflict, cause health and mental difficulties, and lead to a lack of life satisfaction (Selokar et al., 2011).

Quality of Life during the COVID-19 pandemic- The WHO defines Quality of Life as “an individual's perception of their position in life in the context of the culture and value systems in which they live and concerning their goals, expectations, standards, and concerns” (WHO, 2012). The words "well-being," "social indices," and "style of life," among others, overlap but are not synonymous with "quality of life" (Rajpoot & Halley, 2017). The word “quality of life" refers to how a person evaluates the "goodness" of various areas of their existence (Theofilou, 2013). The term "quality of life" refers to "the extent to which a person enjoys life's major opportunities" (A. Nagesh et al., 2014). The idea of QOL is wide, multidimensional, with subjective interpretations that cover both positive and negative aspects of life (Raina, 2019). The stressful and distressing events that occur in the workplace may influence workers' quality of life and psychological well-being (Kim & Kang, 2020). Coronavirus puts one's safety and desire to live in jeopardy, lowering one's quality of life. As a result, people's well-being and life satisfaction suffer because of their fear of COVID-19 (Dymecka et al., 2021).

Police Personnel at the Time of COVID-19- During the epidemic, healthcare providers and police officers are the front-line workers who deal with patients, suspects, and people whose safety and well-being are at risk (Gnanasabai et al., 2021). More specifically, the contribution of law enforcement services to the global effort to prevent the epidemic is critical (Gover et al., 2020). Police are being called to respond to help in emergencies, implementing novel rules and ordinances that are constantly changing as countries seek advice from epidemiologists and virologists on how to handle the worldwide pandemic (Jones, 2020). As the epidemic spreads, maintaining order has become a significant complaint about police forces all around the world. The way police personnel performed during the epidemic reveals their regular working style and structure (Jiang & Xie, 2020).

The law enforcement agency has portrayed a key role in implementing strict lockdown restrictions across India, with activities that range from asking people to go home, using the threat of punishment to force people to leave public areas, restricting people out in front of shops in markets, standing at the barricades to inspect cars at state and district borders, and arresting violators (Dutta & Fischer, 2020). Despite insufficient safety precautions, the police forces are doing a commendable job of protecting people around the country in the fight against the COVID-19 pandemic. They are working long hours in the most difficult circumstances (Kokane et al., 2020). Responding to pandemics and putting response plans into action puts police officers on the front lines of combat because they work within confined spaces with

strangers and some of the most disadvantaged individuals, while also being at a higher susceptibility to exposure and infection (Jennings & Perez, 2020).

The surge in the number of police officers who have been infected with COVID-19 or have deceased because of the virus outbreak is concerning. In several nations, police officers have been infected with coronavirus and have died because of it while on duty (Edwards & Kotera, 2021). Throughout the pandemic, the number of infected or self-quarantined police officers was expected to rise, perhaps resulting in a personnel shortage and increased workload for those still working (Frenkel et al., 2020). The stress among police personnel is caused due to the physical and psychological strains due to high risk and high workload (Jiang, 2021). The dangers of COVID-19 to a police officer's physical health are obvious, specifically while they continue to operate in areas that are under government-mandated lockdowns owing to the threat of exposure to infections (Drew & Martin, 2020).

COVID-19's severe burden increases police officers' hours of work, resulting in increased health hazards, job stress, and psychological anguish (Huang et al., 2021). The abrupt social turmoil caused by the COVID-19 pandemic has the potential to have an impact on the mental health influence on police officers' mental health and contribute to a diversity of emotional issues, including worry and despair (Yuan et al., 2020). Although the mental health concerns of frontline fighters, such as healthcare workers (HCWs), have received widespread attention, and several nations have begun to provide psychological first aid to their healthcare professionals, the mental health difficulties of police officers are mostly ignored (Grover et al., 2020). The everyday experience of extremely stressful circumstances is inherent to police employment, and it occurs at a far higher frequency than in most other jobs (Purba & Demou, 2019).

The tasks and obligations of policemen place them in challenging and frustrating situations, which may have a significant influence on their psychological health and potentially their effectiveness (Demou et al., 2021). Distress can lead to mental illnesses, including anxiety, depression, and other diseases included in the ‘Diagnostic and Statistical Manual of Mental Disorders’, 4th Ed (DSM-IV) (Garbarino et al., 2013). Distress and depression at work cause work-related impairment and performance loss, which are the key factors of quality of life and significantly contribute to the load on the healthcare system and associated healthcare expenses (Maran et al., 2018).

Organizational stressors, also known as "job context" stresses, may be more stressful for police forces since they are perceived as oppressive, unnecessary, and unavoidable. Because of varied institutional arrangements, policies, and procedures, organizational stresses may be a substantial source of stress (Shane, 2010). The stresses that impact police officers may be divided into four categories, each of which can be further divided into operational and organizational stressors. The former was linked to the nature of police employment, such as workplace violence, exposure to risk and the unknown, and court overtime, while the latter was linked to organizational bureaucracy, governance, hierarchy, and processes (Carleton et al., 2020). The public found organizational stresses to be more distressing than operational difficulties (Collins & Gibbs, 2003).

Need for the study- The police force plays a significant role in maintaining security and stability in the community. They are a unique profession that is subjected to workplace violence, which has both direct and indirect health consequences (Thayyil et al., 2012). In contrast to reacting to crimes, police officers are now required to enforce non-essential business closures, disperse societal meetings, and keep order at taxing sites and local hospitals, all while attempting to protect their health (Collazo, 2021). COVID-19 has posed a greater challenge to the police forces during the last few weeks. Police, like many other front-line vital services, had to adapt to fluctuations and develop procedures to permit front-line workers to offer the facilities residents expect while being safe while doing so (Mehdizadeh & Kamkar, 2020). Police personnel are on the job all day and have a lot of one-on-one interaction, rendering them susceptible to COVID-19 infections. Besides that, they are also involved in critical tasks such as protecting containment zones, surveilling home quarantines, dealing with thousands of migrants who hit the roads to return home, preventing unnecessary movement of people, and transporting accused COVID-19 positive cases to the hospital for testing (Bapna, et al., 2021). Therefore, there is a need to study the occupational stress and quality of life of police personnel during the COVID-19 pandemic.

CHAPTER: II

Review of Literature

There are few studies conducted specifically on the occupational stress and quality of life of police personnel during the COVID-19 pandemic. To understand and address the research gap of previously conducted studies and to add to existing knowledge, a review of the literature was conducted. The literature of the present study was collected by utilizing and surfing various search engines such as Google Scholar, PubMed Central, Microsoft Academic, Research Gate, etc. The literature review will provide insight into the occupational stress and quality of life among police personnel during the pandemic. Both Indian and Western studies have been reviewed for the present study.

1. Dr. Pratibha Singh conducted a study in the year 2020 focusing on the Workplace Stress in Police Officers during COVID-19 among Railway protection force and Government protection force study the occupational stress of police personnel concerning the COVID-19 pandemic, the quality of working life in police and the correlation associated with occupational stress and quality of work-life in police. According to the findings of this study, occupational stress is higher in the Railway Protection Force in terms of their working conditions. A total of 100 police officers from the Bihar Police Services stationed in the Bhojpur and Buxar districts participated. The age of the respondents, 26-50 years, was chosen from Danapur Rail Division's RPF and GRP using a purposive sampling strategy. The researcher used two standardized scales and a basic information blank, which includes information such as name, age, educational background, and length of service. To assess the occupational stress of the police personnel, the researcher used the Occupational Stress Inventory developed by AK Shrivastava and AP Singh (1984), followed by the Quality of Work-Life scale established by Dr. T. S. Nanjundeswaraswamy (2015) to evaluate the quality of work-life of police during the pandemic of COVID-19.

2. Maran et al. conducted a study in the year 2018 on the Effects, Coping Mechanisms, and Prevention survey of Italian patrol police officers using a questionnaire. The purpose of this study was to look into operational and organizational stressors, their effects on anxiety, and the handling techniques adopted by Italian law enforcement personnel. The consequences of distress acquaintance ad respondents' responses were assessed using a quantitative method. A overall of 531 members were asked to participate in this study, with 51 of them not mentioning their employment. Therefore, 51 personnel were omitted from

the investigation. The study included 266 out-of-doors patrol officers and 214 indoor officers, with an average age of 40.45 years, and 143 males and 123 females. The scales utilized in the study were a self-administered questionnaire, a police stress questionnaire (PSQ-OP & PSQ-Org), the distress thermometer produced by Roth and colleagues, the state and trait anxiety scales (STAI Y1 and Y2), and the Brief COPE. For statistical analysis, SPSS version 20 was used. The researcher applied the t-test to determine the statistical significance of the observed differences (significant differences were defined as $p < 0.05$). The correlation was estimated to investigate the link between organizational and operational stressors, perceived stress, anxiety levels, and coping mechanisms. As per the findings, both Outdoor and Indoor Patrol Officers suffered from organizational and occupational stress. Indoor Patrol Officers utilized avoidance techniques, whilst Outdoor Patrol Officers seemed more willing to use other coping mechanisms. The mean SD PSQ-Org score of outdoor patrol officers and indoor patrol officers was 3.42 and 3.06, respectively. Interventions on both organizational and operational stressors, according to the study, would improve the quality of Patrol Police Officers' work lives and have a favourable impact on the service provided to the public.

3. Research led by Grover et al. (2020) on the Psychological Effect of Coronavirus Duties during Lockdown on Police Personnel and their Perception of the Behavior of the People: An Exploratory Study from India. The goal of this study was to assess the psychosocial concerns that police officers faced during the COVID-19 outbreak. Using the SurveyMonkey platform to conduct an online survey, researchers collected data from 623 police personnel. A web-based cross-sectional survey was used to analyse the data using the Patient Health Questionnaire-4 (PHQ-4) and Perceived Stress Scale (PSS), as well as a self-designed questionnaire. During the survey period, which ran from May 9 to May 18, 2020, responses were collected. The participants' average age (623 replies) was 36.98 (SD, 10.93). Males made up most of the participants (85.4%), who were married and living with their spouse (67.7%). Approximately half of the participants had completed their studies or were in the process of doing so (51.2 percent). One-third of the participants were assigned to police stations or police lines as their present duty station (36.1 percent). In terms of field duty, about a fifth (18.3%) were primarily responsible for crowd control on roads (18.3%), patrolling (13.5%), and marketplaces (10.4%), while 14.1 % were assigned to other locations like religious sites, interstate borders, and inter-district boundaries. The results revealed that, with overall psychological morbidity of 22.2 per cent, 10.6% of police

officers experienced major anxiety and 18% had significant depressive symptoms. Higher age was linked to more depressive symptoms, a higher total PHQ-4 score, and a greater sense of pressure.

4. A study directed by Boovaragasamy et al. (2021) on COVID–19 and law enforcement personnel: An exploratory community-based study from South India. The study aimed to find out how police officers felt about the sickness, what factors influenced their stress levels, and how they dealt with it during COVID-19. In-depth interviews were performed among randomly selected police personnel working in the COVID-19 situation across the district of Karaikal, Puducherry, in a cross-sectional qualitative study. A total of 32 police officers were chosen at random from all areas and included at least one officer from each of the 15 police stations in the Karaikal district. An interview guide was developed to facilitate the interview, and the data was collected while the officers were on duty. Participants were invited to use open questions to describe their stress, various problems, and challenges they encountered while working during the COVID-19 crisis phase, as well as how they are dealing with them. The interview lasted approximately 20 to 30 minutes. The audio recordings of the in-depth interviews and field notes were used to create transcripts. Thematic content analysis was carried out manually using prefixed codes and categories. The study results found that the majority of the 32 police officers (43.75 percent) were between the ages of 36 and 45, followed by 25 and 35. (37.5 percent). They were married in more than half of the cases (78.12 percent). Around 62.5 percent of those surveyed had been in their current job for more than 5 years. The in-depth interviews were organized into five themes: perspective, a practice they follow when undergoing COVID-19, stress, challenges they confront, and coping techniques they employ. It was discovered that police officers use a variety of stress-coping techniques, which are either trained or learned via experience.

5. Frenkel et al. conducted a study in the year 2020 on the impact of the COVID-19 pandemic on European police officers: Stress, demands, and coping resources. The goal of the research is to better understand the obstacles that police officers faced during the COVID-19 outbreak. Officers' stress was investigated using a mixed-methods study during three months following the lockdown. During the COVID-19 pandemic, the observational study was carried out in six LEAs in five European countries (Austria, Germany, Switzerland,

the Netherlands, and Spain/region Euskadi) from March 27, 2020, to June 5, 2020. At least one measurement point of the online survey was completed by 2567 police officers, 77% of whom were male. Perceived stress, fatigue scale, short version of German Multidimensional Mood Questionnaire, Stress appraisal of COVID-19 was measured by four self-drafted items, and emotional regulation was assessed by six items. The results of the study revealed that, on average, officers seemed to tolerate the pandemic with slight decreases in strain over time. Despite substantial variance between countries, 66% of the variance occurred between individuals. Sex, work experience, stressor appraisal, emotion regulation, and preparedness significantly predicted strain. Risk of infection and deficient communication emerged as the main stressors. Officers' reports allowed us to derive implications for governmental, organizational, and individual coping strategies during pandemics. The study also suggested three primary paths to prepare for a pandemic, i.e., 1) enacting unambiguous laws and increasing public compliance through media communication, 2) being logistically prepared, and 3) improving stress regulation skills in police training.

6. A review study conducted by Laufs & Waseem in 2020 on the response of the police to the coronavirus pandemic. This research looked at 72 studies that looked at policing and police activities during and after natural disasters and public health emergencies. The research identifies four kinds of difficulties that are frequently discussed in this context: police-community interactions, officer mental health and wellness, intra-organizational challenges, and inter-agency collaboration and cooperation. To ensure practical applicability to current police conditions, only literature published from 1990 was included. English-language literature was included reasons were included for the study. Whereas, literature that was otherwise unavailable or lacked a full-text or abstract was excluded from the study. Inter-rater reliability (IRR) was carried out to avoid personal bias. The data was then evaluated, yielding four key analytical categories: police-community connections, psychological health and wellbeing, the impact on internal organization and resourcing, and inter-organizational communication and collaboration. Based on the review and analysis of the literature, a list of recommendations relevant to policing the current COVID-19 outbreak is provided. The findings of this review have immediate implications for policing during COVID-19, but also cover long-term effects, providing valuable recommendations for after the crisis has passed.

7. Kyprianides, et al conducted a study in the year 2021 on Policing the COVID-19 pandemic: police officer well-being and commitment to democratic modes of policing. The study aimed to assess whether the operating environment for police officers, as well as the government's overall response to COVID-19, had an impact on police officer health and wellbeing, as well as commitment to democratic ways of policing during times of emergency and to analyze whether the officers' belief in their authority and sense of identity with the police can explain this relationship. A total of 325 police officers from forces operating in a variety of UK scenarios provided online data. The study also looked at whether (internally) organizational climate and (externally) the UK government's response to COVID-19 were important to (a) officers' support for police use of force in times of emergency, (b) officers' support for procedurally just policing in times of emergency, and (c) their health and well-being; and whether identification and self-legitimacy mediate the relationships between these variables. A positive organizational atmosphere was also linked to decreased support for police use of force, more support for procedurally just policing, and improved police officer health and well-being, according to the study. The results of the study revealed Police officers reported a reasonably favourable organizational atmosphere t (323) = 14.42, p.001) and considered the government response to COVID-19 to be relatively unsatisfactory t (323) = 23.65, p.001).

8. Research by Yuan, et al. in the year 2020 on A Survey of Psychological Responses during the COVID-19 Epidemic among Chinese Police Officers in Wuhu. The study aimed to find out how common and severe psychological responses were among police officers during the COVID-19 pandemic, as well as what factors influenced despair and anxiety. A cross-sectional online questionnaire was distributed to all officers involved in epidemic prevention and control from five districts and four counties in Wuhu, and data collection began on March 10, shortly after the WHO declared that the threat of COVID-19 becoming a pandemic could be a reality in March. There were 3,561 questionnaires received in all, with 3,517 being valid. The nine-item Patient Health Questionnaire (PHQ9), a self-report questionnaire for assessing depression over the past two weeks and the seven-item Generalized Anxiety Disorder (GAD7) scale. SPSS version 22.0 was used for statistical analysis. Qualitative data are expressed as percentages, whereas quantitative data are expressed as means and standard deviations. The study results showed that participants' mean depression score was 4.104.870 (0–27), and 12.17 percent had moderate-severe depression, according to the study's findings. Participants reported a mean anxiety score of

3.594.228 (0–21), with 8.79 percent having moderate-severe anxiety. Anxiety was shown to be more prevalent in older and married police officers. Those with a bachelor's degree or above, those who lived near the city center, and those who took sleeping medications were more likely to suffer from sadness and anxiety. Auxiliary police officers reported lower levels of despair and anxiety. Anxiety and depression scores were substantially associated ($r=0.863$, $p<0.001$).

9. A study conducted by Kokane, Maurya, and T in the year 2020 through a mixed approach to the Incidence of Covid-19 among the police force in Maharashtra The study aimed to learn about the prevalence of COVID-19 among police officers, as well as the obstacles they confront and their preparedness during the Maharashtra pandemic response. In the end, 102 respondents were included in the primary data analysis. The responders were overwhelmingly male (83.33%) and less than 35 years old (61.76%). More than half of those polled said they didn't get their meals on time, and 61% said they didn't get any help from locals in fighting the infection. COVID-19 patients were exposed to 12% of responders during working hours. The results show that more than 90% of police officers and professionals agreed (37.3% agreed and 52% strongly agreed) that infection control practices are ineffective in preventing the spread of the virus, and 84 percent agreed (46.1% agreed and 38.2% strongly agreed) that inadequate preparedness guidelines are needed to combat the virus and the situation. About 44% of those polled were unable to obtain protective gear from authorities to protect themselves. More than half of the respondents said their workplace sanitation and hygiene facilities were average. It was found that the qualitative data, by analyzing several indicators, suggests that there is a higher individual efficacy over collective efficacy amongst the police force. Additionally, the long-time fight against COVID-19 has exhausted the police force psychologically and physically, and this places them at advanced risk.

10. A study conducted by Matulessy, Rakhim & Pascarini in the year 2021 on Understanding Social Support and Work Meaning to Reduce Work Stress for Police Officers during the Covid-19 Pandemic. The study aimed to determine the impact of social support and the meaning of work on the formation of job stress in East Java police personnel. The study enlisted the participation of 123 active police officers from Malang City's Resort Sector.

Three scales were used in the study such as the work stress scale, the family social support scale, and the work meaning scale. The results indicated that social support shows a negative and significant connection with occupational stress. The study concluded by stating that a police officer who received social support from his family, such as aid, attention, and other types of support, was more motivated and excited while performing his job. Furthermore, police officers might minimize work stress if they can interpret their work, which is defined by the idea that their labour is valuable and vital to them and others.

11. A study conducted by Maskaly, Ivkovic & Neyroud in the year 2021 on Policing the COVID-19 Pandemic. The study researchers used a mixed-method approach and quantitative survey data through a digital platform from police executives of 27 countries. The results suggest that more than 70% of agencies reported changes in criteria classed as organizational risk reduction. Surprisingly, police departments experienced the least change in their use of PPE (72%), which could be because they were already employing it in some capacity before the pandemic. Further, the domains of risk reduction and risk mitigation were the other two areas where the highest number of police executives reported the most policy and practice change. The majority of agencies modified their policy on police training (62.5%), recruit field training (50.0%), police officers working remotely (66.7%), the usage of physically separated working facilities for special units (68.4%), and vacation time (68.4%). (52.2 %). The study also concluded by discussing the implications of these findings for future research, police practice, and the development of policy

12. A study conducted by Sadiq in the year 2020 on Policing in a pandemic. The study aimed to see how police officers' views of workload affect their family duties and contribute to increased workplace stress and discontent. Cross-sectional data were obtained from 247 constables ranked police employees operating in the Punjab province of Pakistan executing their responsibilities during the lockdown because of COVID-19. A questionnaire-based survey was used to collect data from the respondents. Respondents were surveyed on a "five-point Likert scale ranging from 1-strongly disagree to 5-strongly agree," The researchers utilized Netemeyer et al (1996)'s five-item scale, which was verified by Ahmad et al. (2019) among Pakistani police officers to measure WFC. The four-item measure of Mansour and Tremblay (2016), which was initially created by Karasek et al. (1998) was used to assess workload. Lastly, job stress was assessed using Lemyre and Tessier's (2003)

six-item scale, with "I feel distracted, tormented, or worried" as an example item. According to the results, respondents agreed on their workload (M = 3.78), WFC (M = 3.87), job stress (M = 4.02), and job discontent (M = 3.96). Furthermore, workload has a positive relationship with WFC (r =.62, p.01), job stress (r =.58, p.01), and job dissatisfaction (r =.52, p.01), whereas WFC has a positive relationship with job stress (r =.53, p.01), and job dissatisfaction (r =.48, p.01). This research adds to the theory of resource conservation and has consequences for managers and policymakers.

13. Research by Wu, et al., in the year 2021 on Explaining Stress during the COVID-19 Pandemic among Chinese Police Officers. The study's purpose was to look at how common police stress was during the pandemic's peak month, compare it to pre-pandemic levels, and evaluate a variety of personal and work-related risk and protective factors for police stress. The data was collected from late January to early February of 2021 for 2 weeks (10 days). Approximately 700 police attended the training during the data collection period, 656 officers declared their desire to participate and received questionnaires, and 600 officers subsequently completed and returned surveys. The majority of the respondents (85%) were men who worked at field stations (82%) and lived in metropolitan areas. Their policing experience was on average 13 years long. The findings further revealed that 3.82 (0.93) of the respondents were concerned about their personal health and well-being, 3.84 (0.93) were concerned about their loved one’s health and well-being, 4.01 (0.80) were stressed, and 3.91 (0.83) felt anxious.

14. Research by Rajbhandari, et al in the year 2021 on Police Stress due to COVID-19 in Nepal. The main purpose of the research was to determine the prevalence of COVID-19 stress among Nepal police officers who worked during the pandemic. A descriptive cross-sectional study was done among 1526 Nepal police officers including those working on the frontlines in Province X. Data was collected from Police constables, police head constable, assistant sub-inspector, sub-inspector, and police inspectors working during the pandemic in Province 3 (Kathmandu, Bhaktapur, Lalitpur, and Hetauda), were included for the study. Google Forms was used to administer a semi-structured questionnaire. Officers' stress levels were measured using the COVID Stress Scale-36 (CSS36), which has a total of 36 features based on individual opinions and a few different demographic variables. The findings of the study revealed that the xenophobia subscale had the greatest percentage

(24.63%), followed by contamination (20.10%) and excessive checking (20.10%) (19.21%). When socio-demographic characteristics were compared, 18-27-year-old groups, including male officers and unmarried groups, exhibited high COVID stress. Further, this study concluded that the majority of the policemen were concerned about outsiders mistaking them for the main source of COVID-19. Concerns about becoming infected with COVID-19 were also significant. During this pandemic, it is critical to analyze psychological difficulties and provide social support to police officers.

15. A study conducted by Fleming & Brown in the year 2020. The experiences of 473 female police officers operating during the first lockdown in 2020 were investigated using an online self-administered questionnaire survey approach during August 2020. The study results found that the study participants were mostly older people, with an average age of roughly 40 and an average service term of 14.8 years. The majority of those who responded to the survey stated that they were Constables (70%). Sergeants accounted for 18%, while Inspectors and higher grades accounted for 12%. During the lockdown, 23% of employees worked from home, 32% worked partially from home, and 45% remained on the front lines. Those who worked from home were on average 44 years old, compared to those who worked partially from home (mean age 40 years) and those who did not work from home (mean age 38 years). Around a third of all participants agreed or strongly agreed that their working hours had risen during the lockdown, while 42 percent disagreed or strongly disagreed.

16. Research by Dey, et al., on the COVID-19 pandemic on the sleep/wake cycle of Indian police in the year 2020. The purpose of this study was to see how the increased stress of the COVID-19 pandemic and population lockdown affected traffic cops' sleep/wake 24-hour pattern. Data was gathered from Traffic Police Officers. Constables, Sub Inspectors, and Sergeants of the Traffic Police Department of West Bengal, India, were the respondents. In the beginning, 150 subjects responded to the survey, whereas, only 120 police officers. The Munich Chrono-Type Questionnaire (MCTQ) of Roenneberg et al. (2003) was used to measure the mid-sleep time before and during the lockdown phase on both workdays and work-free days. The DASS-21 (Lovibond and Lovibond 1995) perceived stress questionnaire was used to assess police officers' stress levels. IBM SPSS version 20.0 was used for all statistical analyses. The findings of the study revealed during the lockdown, general health concerns such as headaches, heart palpitations, and high blood

pressure, as well as respiratory and intestinal issues, were discovered to be significantly enhanced among respondents. Sleep interruption was more common during the lockdown than previously, according to 63% of respondents, while poor sleep quality was more common during the lockdown, according to 64%. There was no discernible difference in nap frequency between before and after the lockdown; 34% reported the same nap frequency, 33% reported a deeper or greater nap frequency, and 32% reported a lower nap frequency. The study was concluded by stating the effect of the lockout on traffic cops raised the danger of sleep disruption, which was accompanied by an increase in reports of various health issues. Sleep is essential for physical and mental well-being, and it has a substantial impact on the system's homeostasis, which helps to alleviate stress, depression, and worry.

17. Research conducted by Velasco et al., in 2021 on the Awareness of Health, Resilience, and Engagement in Spanish Police Officers During the COVID-19 Pandemic. An online cross-sectional study enlisted the participation of 640 local police officers. The scales used in this study were the job-related sociodemographic characteristics, as well as COVID-19-specific variables. The Brief Resilience Scale (BRS) was used to assess resilience. The Utrecht Work Engagement Scale-9 (UWES-9) as well. Lastly, the Spanish version of the GHQ-12 (General Health Questionnaire-12) was employed. The statistical package SPSS 26 was used for the analysis. The study results revealed that 82.5% of the participants were male 17.5% were female, 68.8% were married and 10.9% studied primary education. Low levels of engagement and resilience, as well as a negative image of health, were linked to a lack of personal protective equipment, believing it is simple to become infected with COVID-19, and working as a police officer. More years in the police force were linked to poor health, fewer levels of involvement, and lower levels of resilience. Engagement and resilience would be health-protective factors. The researchers concluded the study was stating that in the police force, it is critical to foster participation and resilience strategies. More experienced police officers show less engagement and resilience, according to the conversation.

18. Jiang's research investigated the stress levels of police personnel during COVID-19: A moderated mediation model in the year 2021. The stress reaction of police officers was given online using convenience and snowball sampling. The required sample size was determined to be 385 people. The ultimate sample size was 553 Chinese police officers,

with an 85% response rate on the questionnaire. Standardized questionnaires were used to assess four scales as Emotional Identity of Profession Scale, The Stress Response Scale, the Psychological Support Scale, and the Active work Adaptation Scale. The results show that psychological support has a significant negative predictive effect on stress response. The study concluded by stating that during a pandemic, police officers are the primary force in maintaining societal order, and their mental health, at least to some extent, affects the success or failure of pandemic preventive and control efforts.

19. A study was conducted by Jankovic & Cvetkovic in the year 2020 on public perception of police behaviors in the disaster COVID-19 – The case of Serbia. The study aimed at determining the perception of the general public on the Serbian police behaviors in combating the COVID-19 pandemic, as well as the perception of the citizens of how successful the police units were in fulfilling their tasks. The study was done through an online survey platform i.e., Google.doc. The participants were asked to complete the online survey in their original language utilizing a snowball sampling approach that targeted the general public using social media channels (Twitter, Facebook, Instagram, etc.). The questionnaire was completed by 325 people in total, and all data was checked before being analyzed. The average age of respondents was 22.41 years, and the young were the most represented group (234;72.4%). According to the survey, the majority (71.5%) have a bachelor's degree or are undergraduates, with only a few having attended primary school (11.1%). 45.2% of the population is single, 44.3% is in a relationship, and 10.5% is married. The study used a structured questionnaire with closed-ended multiple-choice questions and 5-point Likert scale questions (1 for strongly disagree to 5 for strongly agree). The study results revealed that 76.5% of respondents say police officers from the MoI wear face masks in contact with people (X 5 4.25), while 65% say they wear protective gloves in contact with civilians (X 5 4.01).

20. An Exploratory Study conducted by Huang, Bodla & Chen on Police Officers' Perceptions of Health Risk, Work Stress, and Psychological Distress during the COVID-19 Outbreak in China in 2021. The study aimed to learn more about how police officers perceive health risks, work stress, and psychological anguish while implementing lockdown measures on the front lines. A total of 5,650 questionnaires were collected, with 5,611 completed and returned, yielding a 96% response rate. The six-item scale created by Kessler et al. was used to assess psychological distress. The health risk perception of participants was

assessed by two items adapted from the risk perception developed by Dai et al. Lastly, participants were asked to rate how stressful it was to accomplish their jobs. The SPSS version 18.0 application was used to analyse the data. The independent-sample T-test, ANOVA and regression analysis was conducted Police personnel with serious illness were more likely to have higher health hazards, higher job stress, and higher psychological distress than those who are physiologically fit. Participants were divided into three groups: those under 30 years old (age 30), those 30–45 years old (30–45 years old), and those beyond 45 years old (age > 45). During the COVID-19 outbreak, 67.8% of individuals worked longer than usual days. In comparison to physically healthy police officers, officers with chronic diseases had more psychological suffering. Work time had a substantial positive effect on psychological distress, indicating that cops who work longer shifts are more likely to be depressed. The study concludes that the government should pay more attention to their physical health and mental health.

21. A study conducted by Li, Cheung, Sun & Cheng on Participation on the job as observed and performance amongst police officers during the COVID-19 pandemic in Hong Kong in the year 2021. Through a random sampling, 335 respondents were finalized for this study. An 80-item survey instrument was used to measure the work engagement and work performance of the police, which was developed by the research team in the year 2016 after a pilot survey study, using the test-retest reliability method. A scale to measure organizational stress was validated by McCreary and Thompson (2006) with a sample of police officers. The findings of the study show, that supervisor support had no moderating influence on the associations between the various stressors and the two work outcomes, and operational stressors had a significant negative impact on the two work outcomes. Practical suggestions on how to strengthen supervisor support for police personnel and decrease operational pressures were explored after the study.

22. Research carried out by Newiss, et al. on Taking the strain? Police well-being in the COVID-19 era in the year 2021. The study aimed to investigate the various effects of the COVID-19 pandemic on police well-being. Only responses from police officers (N =626) were used (the response rate for police officers was 23.4%). 100 officers were randomly selected (by gender, role, and rank). The interviews were semi-structured and focused on the following topics: Changes in the position during COVID-19; policing experience; organizational support; personal implications; public compliance; and changes in crime and

policing. The study findings show, that working during the COVID-19 epidemic had increased the possibility of officers leaving the force, according to 14.9% of officers at the time of the poll. The following themes are used to discuss further findings from both the survey and the qualitative interviews: Workplace safety; workload and task type; homeworking; personal consequences; and police and organizational support perceptions. According to the study, the majority of police officers felt prepared to manage both personal and work responsibilities during the pandemic (60.7%) and were adapting effectively to the changes in working conditions (63.2%). Because of COVID-19 limits, many police expressed their dissatisfaction with not being allowed to take a proper vacation from work. While the same complaint applies outside policing, the lack of social and familial networks was deemed particularly burdensome given the often traumatic and stressful nature of the police job.

23. A study conducted by Rosario & Lofgren on The Effects of the COVID-19 Pandemic on Police Officer's Mental Health: Preliminary results of a Portuguese sample in the year 2021. Data was collected in a cross-sectional design at a specific point in time. A total of 1,639 officers completed the survey. The survey questions included: sociodemographic questions (gender, marital status, school-age children, and caring for an old relative), one question about COVID-19 exposure in the line of duty, and standardized methods to measure burnout, psychological distress, and posttraumatic stress. To assess the burnout, Oldernburg Burnout Inventory was used. To assess psychological distress, the researchers used a 12-item version of the General Health Questionnaire (GHQ-12), which is commonly used in public health surveys to measure prevalent mental disorders. Lastly, to assess the PTS among the officers during the COVID-19 pandemic, the researchers used The Posttraumatic Stress Checklist for DSM-5 (PCL-5) a 20-item self-report measure that assesses the DSM-5 symptoms of PTS. It is one of the most extensively used screening tools in clinical and research settings to evaluate post-traumatic stress disorder (PTSD). The study results revealed the majority of people said they had at least one symptom of PTS. More experienced officers obtained higher scores on average for psychological distress. Police officers newer to the profession (i.e., 10 years or less) obtained higher scores on average for both disengagement and exhaustion. In conclusion, it was stated that the epidemic is having a stressful effect on police officers, but it is not uniform across different groups. Intervention policies are discussed as a result of the findings.

24. A study conducted by Borovec, Fabris & Jakupovic on the influence of Stress Produced by the COVID-19 pandemic on the work and conduct of police officers in stressful emergencies in the year 2021. The study aimed to see how much the COVID-19 pandemic-induced emergency scenario has affected police officers' work and behavior in Croatia. A total of 988 police officers in Croatia were surveyed, accounting for around 5% of the total number of officers in the country. The survey, which takes the form of a questionnaire, is divided into four components. The first component of the questionnaire collected socio-demographic information. In the second section, Control questions about direct experience with COVID-19 and police involvement during the epidemic were included. The questionnaire's third section has 11 scales: Engagement during the pandemic, Changes in working conditions, workload, Interpersonal relations, Control in operation, Supervisor support, Associate support, public support, Working role, Awareness of change, Operating errors, and Job insecurity. The study results revealed Self-isolation was experienced by 4.9 %, and 0.8 % turned COVID-19 positive. Results also revealed that despite the development of social distancing techniques and remote work (working from home), police work was obliged to continue through active service in the field and direct interaction with civilians. Based on the findings of this study, it can be concluded that the COVID-19 epidemic has had a considerable impact on police organizations and police. The average results on the scale relating to requirements and work intensity (m = 2.7220; sd =.82882) support the claim that there was only a minor shortening of deadlines for completing work tasks, coinciding with an increase in workloads and that police officers were not forced to neglect other work tasks as a result of increased workloads.

25. A study led by Vivek S et al. on Female police officers experienced occupational stress in an urban setting in South Kerala in the year 2018. This cross-sectional survey was done among female police officers working in several police stations in Thiruvananthapuram city. A simple random selection procedure was used to select 50 female police officers from a list received from the office of the commissioner of police in Trivandrum. The operational police stress questionnaire (PSQ-OP) and the organizational police stress questionnaire (PSQ-ORG), both with 20 items, were used to assess occupational stress. The information was coded and entered into Microsoft Excel. The software SPSS version 16.0 was used for further analysis. The study results revealed a majority of people (76%) get less than 6 hours of sleep every night, while only 34% enjoy uninterrupted sleep. When it came to organizational stress, 40 percent indicated moderate stress, and 40 percent reported high

stress, however, in the case of operational stress, 70 percent reported high stress and 20 percent reported moderate stress. Among the many factors of organizational stress investigated, the most prevalent stressor was personnel shortage (74%), followed by bureaucratic red tape concerns (72 percent), while dealing with coworkers was the least stressful (20%). The study found no link between the age of the subject, length of service, socioeconomic class, sleep duration, or physical sickness and occupational stress (including organizational and operational stress).

26. A study conducted by Brown & Fleming in the year 2021 on individual and work-related impacts on police officers and police staff working in support or front-line roles during the UK's first COVID lockdown. The study aimed to investigate the effects on female police officers and police personnel working during the COVID-19 first wave. From a total sample of 2844 women police officers and 1626 women police employees, 437 women police officers and 1626 women police staff were chosen for this study. The results of the study revealed that 59% of all participants indicated they were more anxious than before the lockdown, 58% said they were more exhausted, and 25% claimed they had greater emotional energy reserves. 69% were very or somewhat concerned about their family's safety. This found that 32% of police frontline officers strongly agreed that the lockdown made them more stressed than before, compared to 28% of front-line police personnel, 23% of office-based police officers, and 21% of office-based police employees. Participants were asked if they thought the lockdown was more difficult for females than for males. Overall, 27% of respondents thought women had it harder than males, while only 1% thought it was the other way around; 72% said it was equally difficult for both males and females. When all replies were taken into account, 25% stated their durations had increased, 41% said their work had grown more challenging, and 49% said their work schedule had remained the same.

27. A cross-sectional study conducted by Suma, D & D in the year 2021 on the COVID-19 pandemic and Police Personnel. The study aimed to examine police officers' depression, anxiety, and stress levels while on COVID-19 lockdown duty and to learn about COVID-19's impact on their personal lives. The study employed a total of 60 police officers and a descriptive cross-sectional survey with a multistage sampling from four police stations in the Chilakaluri pet circle were chosen for this study. A total of 60 police personnel were chosen for the study. To collect the data, a self-designed, semi-structured questionnaire and

the DASS -21 scale were distributed through proforma to the selected sample population. The data was imported into Microsoft Excel and statistically analyzed with SPSS software version 25 (Statistical package for the social sciences). The study findings revealed, that 57% of people had mild depression, 1.71% had moderate depression, and 2.85% had severe depression. 11.54% of the 57 people in the study had moderate anxiety, 1.71% had severe depression, and 5.13% had extra-severe depression. 6.84% of the 57 police officers had light stress, 4.56% had moderate stress, 2.28 % had severe stress, and 0.57% had exceptionally severe stress. COVID-19 was found in 33 % of the 60 police officers tested.

28. Research conducted by Rodriguez et al., consequences of Coronavirus on Psychological Well-being of the Peruvian Police and Armed Forces in the year 2021. The mental health of 204 members of the armed forces and the police department tasked to monitor public highways to execute the Peruvian government's measures was investigated in this study. According to the findings, the majority of the participants felt worried and uneasy (81.8 %) and hopeless or depressed in the previous month (68.2 %). Feelings of pessimism and discouragement, according to the participants, had a substantial impact on their ability to rebound (84.3%). Participants showed varied sentiments about COVID-19-induced fear; 42.6 % reported significant anxiety or panic, 40.6 % were uncomfortable thinking about COVID-19, and 42.6 % were terrified of dying as a result of the illness. When seeing news about COVID-19, 52.9 % did not feel apprehensive, and 17.1 % expressed anxiety (e.g., sweating hands) when thinking about the condition. Insomnia was mentioned by a large percentage of respondents (62.3 %). COVID-19 fear predicted 19.7% of the participants' mental health well-being.

29. Borbely on Police Mental Health During the First Year Wave of the COVID-19 Pandemic in the year 2021. Only 28 out of around 100 trainees took part in the survey at this time. Anxiety and depression inventories were used to assess mental health. The Center for Epidemiological Studies Depression Scale was used to assess participants' depression throughout the previous month (CES-D), STAI-T (State-Trait Anxiety Inventory – Trait), and the Hospital Anxiety and Depression Scale (HADS) were used to collect data. The results revealed that 28 individuals had a mean age of 23.14 years (SD=5.52). Males made up 60.71 % (n=17) of the participants, while females made up 39.29 % (n=11). The study participants' mean depression scores were 13.21 on the CES-D (SD=8.34) and 4.04 on the HADS–Depression Scale (SD=2.38), indicating that depression was not common in the

sample. The trait anxiety mean (M=36.50, SD=9.08) was significantly lower than the Hungarian average (M=43.72, SD=8.53). In terms of COVID-19 answer involvement, the majority of respondents (64.29 percent, n=18) were involved in two tasks, while 21.43 percent (n=6) of the sample participated in all three activities, and 14.29 percent (n=4) of the sample were only active in one type of activity.

30. A study was conducted on the Workplace Environment and Job Performance of Police Officers during the COVID-19 Crisis by Zakarani & Noor in the year 2021. The study aimed to look into the impact of the workplace environment, namely the physical environment, supervisor assistance, and performance feedback, on employee performance at the Sepang Police District Headquarters. Data was collected using a cross-sectional survey methodology to elucidate the association between office environment characteristics and employee performance. A total of 100 police personnel from the Sepang District Police Headquarters were included in the sample. The personnel were asked five questions to gauge their reactions to the physical surroundings. The survey was bilingual (English and Malay), and it was adapted based on the conditions for this study, which were derived from many studies. Two questions from Nanzushi (2015) and three questions from Brennan, Chugh, and Kline were used by the researchers (2002). SPSS software was used to examine the data. This programme aided the researcher in cleaning the data and identifying any inaccuracies or missing values. The reliability results indicate that Physical Environment (0.908), Supervisor Support (0.892), Performance Feedback (0.931), and Job Performance (0.919) all had Cronbach's Alpha values above 0.70, indicating that they were all above 0.70. The ANOVA produced in this test likewise has a significant probability value (p=0.000), indicating that all aspects of the workplace physical environment, supervisor support, and performance feedback have an impact on job performance.

31. A study conducted by Perry and Zamir on Expectations, Effectiveness, Trust, and Cooperation: Public Attitudes towards the Israel Police during the COVID-19 Pandemic in the year 2020. A total of 1,575 non-Orthodox Jews aged 18 and up were involved in the study. The survey utilized in this study had 64 items. The majority of the statements were created using data from earlier surveys conducted in Israel and internationally. 'Midgam Project Web Panel' is an online survey organization located in Israel that is commonly utilized by social scientists—conducted the poll between April 6 and 8, 2020. surveyed

between April 6 and 8, 2020. The survey began with a typical consent form that explained the study's aim, duration, and researchers' identities. The findings revealed that the majority of respondents (70%) feel that during the pandemic, police should concentrate on Coronavirus-related tasks. Similarly, only 15% believe that police officers should be lenient and tolerate infractions of emergency regulations, while nearly 66% disagree. Item 7 reveals nearly 52% agreement with this statement in the context of the Coronavirus crisis, and 19% disagreement. Police officers are frequently dishonest, according to 40% of respondents, while only 24% disagree. At the same time, when it comes to pandemic emergency measures, 60% of people trust the police will enforce them fairly, while only 16% disagree (item 9).

32. Zhu et al., in the year 2020 on the Mental Status and Psychological Needs of Chinese Police Officers in a Highly Impacted City during the COVID-19 Pandemic. The study aimed to look at police officers' mental health and psychological requirements during the COVID-19 outbreak in China. A total of 5,467 of the surveys collected were kept. Participants completed a 10-item Anti-Pandemic Public Mental Status Scale (APPMSS), The Mental Symptom Index (MSI). SPSS 23.0 was used for the statistical analysis. The study results revealed, over 70% of Y city police officers were under stress. 60.48 % of police officers under moderate to severe stress did not believe they required psychological assistance. Further, the study concluded by stating that relaxation and stress reduction were the most requested psychological aids, whereas psychological therapy had a low readiness to pick. Some police officers displayed clear psychological effects during the pandemic, and mental health interventions might be tailored to their specific needs.

33. Pitts et al. in the year 2021 on the Effects of COVID-19 on the Honduras National Police and lessons learned regarding police officer well-being and occupational stress. The goal of this formative research is to learn more about COVID-19's effects on the Honduran National Police, with a focus on officer well-being and occupational stress. A total of 143 surveys (71.5%) were completed satisfactorily in the second phase of data collection which depicts that the majority of the officers in the sample are male patrol officers, however, the sample also includes police leadership at various levels. While the majority of officers (87%) say their command or staff has taken particular actions to prevent illness spread in the workplace, more than half (53%) say these steps are insufficient. When asked about specific methods, virtually all respondents say they wear masks (99%) or use antibacterial

gel (93%), with enhanced hand washing (80%) and a focus on deep cleaning of police facilities (70%) and patrol cars (70%) following closely behind (65%). Only 13% said actual police processes had changed, and fewer than half said social separation inside offices had been implemented. Furthermore, only 42% said they had received particular training on how to carry out police actions in response to COVID-19. COVID-19 has far-reaching consequences for police officers, far beyond policy and practice changes and the increased pressure generated by required shifts and the cancellation of all leave. These findings point to a police force that is undergoing significant changes in behaviour, if not policy, as well as an increase in already high levels of occupational stress.

34. Tian et al., in the year 2021, on Mental Health Status Among Frontline Prison Police During the Prevention and Control of the COVID-19 Epidemic. The goal of this study was to determine the prevalence and influencing factors on mental health status among frontline jail police during the prevention and control of the COVID-19 outbreak. The recruitment of participants was done utilising a snowball sampling strategy to reduce face-to-face contact and interaction. The survey was conducted using the "Questionnaire Star" online survey platform. A total of 1035 questionnaires were completed without the use of any aid, with 981 of them being valid. Informed consent, socio-demographic characteristics, items on the job and life circumstances of frontline prison police, and mental health status were all included in the survey questionnaire. The scales, such as the General Health Questionnaire (GHQ-12) were utilised to assess mental health. The study findings revealed that a total of 981 frontline prison police officers participated in this survey, with a response rate of 94.78%, including 262 (26.71%) females and 719 (73.29) males. The respondents ranged in age from 20 to 57 years old, with a mean age of (29.56 6.13) years. Being married (46.59 %) was similar to being unmarried (53.41). The majority of the sample (73.80 %) had a bachelor's degree or more, while 26.20 % had only a high school diploma. 55.56 % have been in their profession for less than 5 years, followed by those who have been in it for 5 to 10 years (30.17%). One-third of frontline correctional officers may have a mental health issue (33.43 percent, 328/981) during the COVID-19 outbreak prevention and control. The study concluded, findings underscored the importance of prison officials regularly monitoring the psychological impact of public health emergencies on frontline prison officers, as well as developing and implementing targeted interventions to address mental health issues on a timely basis.

35. An exploratory study to assess the stress and coping pattern among the police officers in M.P. during the lockdown period due to exposure to COVID-19 by Bhadouria in the year 2020. The study's goal was to determine police officers' stress levels, determine the pattern of coping among police personnel, see if there was a link between stress and coping patterns among police personnel, to determine the link between stress levels and factors such as age. Police personnel willing to take part in the study were included. Whereas, those who were not willing to participate in the study were excluded. For the investigation, a total of 100 samples were gathered. The Purposive Sampling Method was utilized, and a structured interview questionnaire was created following a review of the literature to construct the best tool for data collection. The Stress Rating Scale was used to collect data. The study results revealed, that during the Covid-19 lockdown period, most police officers (85%) reported moderate stress, while 15% suffered low stress. The majority of police officers (82%) have a positive coping response, whereas 18% have a negative coping response. As a result, it can be inferred that the vast majority of people have poor coping skills. The average coping score (60.67) of respondents aged 41-455 years was higher than the average coping score (56.94) of respondents aged 25-40 years. Furthermore, the mean coping score (66.12) for respondents aged 56 and up was higher than the comparable score for respondents aged 41 to 55.

36. A study conducted by Soloviev, Zhernov & Ichitovkina in the year 2020 on Female Moscow Police Officers' Emotional Reactions during the COVID-19 Pandemic Emergency Conditions. The goal of the study is to assess the emotional reactions of female police officers who work as public order guards in the COVID-19 pandemic situation. An empirical survey was conducted on 68 Moscow police officers who served to safeguard public order in crowded areas using a random sample. The Spielberger-Hanin personal and situational anxiety questionnaire was used to assess anxiety as a personal trait as well as a mood connected to the current situation, Bass-Darkey aggression state diagnosis method was used to determine the severity of aggressiveness and hostility, Student's parametric t-test for independent samples was used to assess the variations in reliability between groups based on the test method's average indicators. The results revealed that only 12% of female officers had concerns about their physical health and obtained COVID-19 fear when operating as public order officers in emergency COVID-19 pandemic settings. 89 % said

their general health and performance had improved. Female police officers, on the other hand, were more likely to be depressed in 53% of cases due to expressed anxiousness as a character trait. When serving in congested areas, 76 percent of them expressed concern, not for their health, but for the chance of infecting their family with the sickness.

37. A study conducted by Waseem on patrolling Coronavirus by routine inefficiency in Pakistan in the year 2021. The survey was conducted among 400 police officers between June and July. A total of 28 semi-structured interviews with serving police officers from around Pakistan were performed, the snowballing strategy was adopted, and oral agreement was obtained before each interview. A total of 288 people responded to the survey, 117 people responded, and 110 people completed it. According to survey results, 41% of employees felt their work-related stress had increased as a result of the pandemic and subsequent lockdowns. Only 35% of those polled said there was no difference. While 68 % felt they could talk about their problems with their peers during the pandemic, only 58 percent felt they could speak with their supervisors, indicating that procedural informality may harm rank-and-file officers' relationships with junior and senior officers, in addition to the overarching a work environment that separates higher management from rank-and-file officers.

38. Tsehay et al., in the year 2021investigated a cross-sectional study in Ethiopia. The study aimed to determine the prevalence and severity of anxiety, depression, sleep deprivation, and coping among Dessie town police officers who were on duty at the time of data collection. The data collection tools included socio-demographic information as well as psychological tools, the Patient Health Questionnaire (PHQ-9), the Generalized Anxiety Disorder7 (GAD-7), Insomnia Severity Index (ISI), Brief Resilient Coping Scale, Oslo Social Support Scale (Oslo-3). A total of 385 participants were included in the study. The study results show, that depression was found to be present in 28.9%, Anxiety affects 30.2 percent of people, 22.1% have mild anxiety, 2.6% have moderate anxiety, and 5.5% have severe anxiety. Insomnia affects 15.9% of people. Almost everyone has a decent understanding of COVID-19 transmission and pandemics. The study concluded by stating the importance of psychological therapy for issues such as anxiety, depression, and sleeplessness.

39. Research conducted by Nameirakpa et al., in the year 2021 on the job stress and challenges faced by police personnel of Bishnupur district in COVID-19 times. The study aimed to analyse the on-job stress conditions and attitudes regarding challenges faced by Bishnupur District police officers, as well as to determine the relationship between stress and variables of interest. Demographic information, a police stress questionnaire (PSQ-op), a coping mechanism questionnaire, and questions on challenges during the epidemic were all included in the questionnaire. The study results show the PSQ-OP stress level of participants showed that before the COVID-19 pandemic, 45% of participants worked more than 8 hours per day; however, during the COVID-19 pandemic, this number jumped to 77%. The majority of the participants (78.6%) were involved in any COVID-19-related chores, and half of them were involved in enforcing lockdown operations, while 36% were involved in quarantine and confinement zones. 50 percent of the participants were subjected to social stigma in their communities and spent the pandemic at the police station. The majority (75%) of them are willing to take the vaccination, with 96 % indicating prevention and protection from the virus as the reason. 45 % said they were under moderate stress, 28.1 percent said they were under high stress, and 26.8% said they were under low stress. The study was further concluded by stating that there is a need for complete support for their job satisfaction.

40. Mohamed et al., in the year 2021 on occupational stressors experienced by police officers during the COVID-19 outbreak. The study aimed to close the gap between existing stressors and COVID-19-related stressors experienced by police personnel. The results found that there is currently insufficient material on the influence of the COVID-19 pandemic on policing work. Because COVID-19 is a novel condition, there is little research on occupational stress among cops. The stresses found in the literature review were separated into two categories: operational and organisational issues. Organizational stressors linked to police officers' mental health include I) a lack of knowledge about the disease, ii) ineffective leadership that leads to uncertainty, iii) insufficient security gear, iv) insufficient logistics, v) a lack of pre-disaster training, vi) a staff shortage, and vii) new policies. Other stress indicators linked to police officer occupational stress include the officers' socio-demographic traits. Police officers have less professional medical expertise and medical equipment appropriate for the pandemic than healthcare practitioners. Providing adequate knowledge and training on the disease, particularly critical information on the disease's transmission and prevention strategies is thought to aid in improved

response during a pandemic outbreak. Leadership and communication are critical within the organization during a pandemic. Uncertainty in action was observed as a result of rapid changes in organization regulations, short time given to officers, and conflicting commands. As a result, officers' self-confidence is harmed, and they are unable to carry out the appropriate intervention. Physical resources must be available in the event of an emergency. The lack of personal protective equipment (PPE) such as gloves and face masks may make it difficult for law enforcement officials to fulfil their duties in this situation. Staff shortages are a result of police becoming infected.

41. A study conducted by Magnavita et al., in the year 2021 on A One-Year Prospective Study of Work-Related Mental Health in the Intensivists of a COVID-19 Hub Hospital. The study aimed to assess employees' perceptions of organizational fairness and workplace stress, as well as how they differed in connection to external circumstances. The current survey was completed by 120 out of 198 eligible workers. The Italian version of the Siegrist effort/reward imbalance model was used to assess stress. The 2-item version of the "Sleep Condition Indicator" was used to assess sleep quality. Goldberg's anxiety and depression scales were used to assess mental wellness (GADS). According to Warr et al., job satisfaction was measured by a single question on a 7-point Likert scale ranging from severely dissatisfied to extremely satisfied. The 10-point Ab-del-Khalek scale was used to gauge happiness. The study results found that 40 % said they were forced to work alone, and roughly 70% said they had fewer social interactions. The majority of them (71.0 %) agreed with the following statement: "Vaccinations will allow us to contain the epidemic." A total of 21% of workers were unsatisfied with their jobs, with 41.2 percent indicating that they intended to resign. On a scale of 1 to 10, the average happiness score was 6.55 1.92. Burnout was indicated by nearly half of the workers (46.5%) on a monthly or more often basis. The study concluded; that the image that has emerged after a year of observation necessitates the use of support measures. Higher intangible rewards, increased participation in safety measures, and enlarged consideration to meditation and sleep are all advised.

42. Research conducted by Iskandarsyah et al., in the year 2021 on the Mental Health, Work Satisfaction and, Quality of Life Among Healthcare Professionals During the COVID-19 Pandemic in an Indonesian Sample. Purposive sampling was used in this cross-sectional investigation. The study's participants were Health Care Professionals who were

participating in the COVID-19 pandemic response in West Java Province. A total of 379 people clicked on the link and completed the survey. The researcher used WHO developed the Self-Reporting Questionnaire (SRQ), Job satisfaction scale, and Personal safety at work subscale, Euro Qol Group developed the EQ-5D-5L as a standard instrument to assess health-related quality of life in a variety of health conditions and treatments. Participants were asked two open-ended questions about their concerns after being exposed to COVID-19. The study results showed a mental health conditions, PTSD symptoms, work satisfaction, and quality of life were all found to be unrelated to gender. There was a significant difference in QoL (index score) based on workplace, PTSD symptoms were positively correlated with mental health conditions like depression, anxiety, and somatoform disorders, while work satisfaction subscales like personal safety, serving COVID-19 patients, comfortable working conditions, health status (index score), and self-perceived health (EQ-VAS) were negatively correlated. The study was further concluded by stating that there is a need for psychological interventions to reduce psychological issues and also to enhance the quality of life of health care workers.

43. Cross-sectional research by Said & El-Shafei in the year 2020 on nurses working on the front lines during the COVID-19 pandemic in Zagazig City, Egypt. The goal of this study was to determine occupational stress, job satisfaction, and the likelihood of leaving among nurses who worked with suspected COVID-19 patients. A total of 420 staff nurses who work in a COVID-19 Triage Hospital named Zagazig Fever Hospital (ZFH) participated in the study. Expanded Nursing Stress Scale (ENSS), "MERS-CoV staff questionnaire and McCloskey/Mueller Satisfaction Scale (MMSS). The study results found that occupational stress was significantly higher in the ZFH Group than in the ZGH Group, with 75.2% of participants reporting high-stress levels in the ZFH Group versus 60.5% in the ZGH Group; especially in subscales of workload, dealing with death and dying, inadequate emotional preparation, supervisory problems, and uncertainty concerning treatment, patients, and their families. The study concluded by stating that a high-stress work environment led to job discontent and a desire to leave the company in the future. This focus on implementing ways to alleviate perceived job-related stress boosts job satisfaction and reduces the likelihood of turnover during these trying times.

44. Roberts et al. in the year 2021 on psychological health and impacts of COVID-19 on rural paramedics, police, community nurses, and child protection workers. Quantitative analysis

of cross-sectional survey research is used in this study. A total of 632 rural paramedics, cops, community nurses, and child protection workers took part in the study. Police were included in this study because they were tasked with monitoring and enforcing public health orders in the aftermath of COVID-19. Demographic data and several open-field text boxes were also included in the survey, encouraging participants to give their thoughts on COVID-19's influence. The Public Health Questionnaire was used to assess depression (PHQ9). The Generalised Anxiety Disorder Scale was used to assess anxiety (GAD7). The Maslach Burnout Inventory (MBI) was used to assess burnout. The ISA (Intellectual, Social, and Affective) engagement scale was used to assess workplace involvement. The study results revealed that a large percentage of respondents were full-time employees, and 74% had worked for their present company for more than 10 years. There were high levels of sadness, anxiety, and burnout. COVID-19 had the greatest impact on family, career, social life, and travel. To conclude, according to the statistics, the most effective mental health interventions are practical and preventive, such as ensuring that workloads are fair and appropriate.

45. Hazari & Manas in the year 2021 on "Impact of Occupational Stress and Health in Police Personnel". The research was carried out among police officers in the Hyderabad Karnataka region. A total of 300 completed questionnaires were obtained from all respondents. According to the findings, several factors contribute to occupational stress and health disparities among male and female police officers in the region. Occupational stress was high among the young police officers. Female police officers are likewise found to have higher levels of occupational stress than male officers. Occupational stress is also very high among police officers in the Hong Kong region, according to this study. In the current study, 74% of the respondents agreed with the statement that police officers are overworked. Anxiety or depression causes stress in the workplace, according to 47% of respondents. The study concluded by stating that training in stress management can be given at the appropriate time to improve competency and skills.

46. A study conducted by Jackman, Henderson, Clay & Coussens on the relationship between psychological well-being, social support, and personality in an English police force in the year 2020. The participants were 381 police officers from the Midlands region of England. The Social Provisions Scale was used to assess how accessible individuals thought they were to their co-workers. The 14-item Warwick–Edinburgh Mental Health Scale was used

to assess the psychological well-being scale. The Shortened Inventory of Socially Supportive Behaviour (SIBSB) was used to examine the perception of support of the respondents. The Ten-Item Personality Inventory was used to assess personality. The 14-item Warwick–Edinburgh Mental Well-being Scale was used to assess psychological well-being. The study results revealed that psychological wellness did not differ significantly between operational and non-operational employees. Psychological wellness was found to be significantly linked to perceived support, received support, and all five TIPI subscales. Psychological wellness was found to have moderate-to-strong relationships with perceived support, emotional stability, received support, and extraversion.

47. A study conducted by Collazo in the year 2021 on Shared Trauma and the Effects of Coping in Law Enforcement Couples. The study discusses the traumatic stress faced by law enforcement couples. Police officers are exposed to between 10 to 900 stressful occurrences on average over their careers, putting them at significant risk of developing post-traumatic stress disorder. Trauma from the job frequently spills over into police officers' personal lives, and they have difficulties leaving the strains of work behind at the end of their shifts. Spouses were also discovered to be always worried about their partners. Affect dysregulation issues were also examined in the context of issues unique to law enforcement couples. Roberts and Levenson (2001) used standardized measures and self-report daily logs to rate levels of stress and weariness in the spousal relationship in their mixed-methods study of 19 male police officers and their spouses. The researchers also used recordings of the couples interacting with each other for 15 minutes and five minutes individually with the researcher to measure degrees of affect (good or negative). the study also stressed the difficulties in coping among police couples during the COVID-19 pandemic. A problem-focused coping strategy is defined as diminishing or removing components of the stressful circumstance through planned, confrontational activities, according to Lazarus and Folkman's (1984) transactional model of stress. Further, this study throws light on the concept of dual trauma and dual trauma couples.

48. A study conducted by Drew & Martin in the year 2021 on Policing during a global health pandemic: exploring the stress and well-being of police and their families. The goal of the study is to provide important insights for police agencies, as well as those who work to support and improve the well-being of police. The online survey was conducted using the Survey Monkey online platform to 209 active police officers which included 173 male and

34 female officers. The survey was conducted by the National Director of Wellness Services (FOP). The survey asked about respondents' age, gender, present rank, years of service, and geographic area, as well as whether they were active or retired. The survey included information regarding the agency's degree of support for dealing with increased physical and mental/emotional stressors during the epidemic, as well as the provision of PPE (three questions). A 5-point Likert scale was used to collect responses, ranging from "strongly disagree" to "strongly agree," with the option of "I felt no additional physical or mental/emotional stressors." The survey questions also included the pre-pandemic stress, pandemic stress, sources of pandemic stress and comparison of pandemic stress with previous critical incidents. To understand the long-term impacts of the pandemic 5-point scale from strongly disagree to strongly agree was provided. The study results revealed that t The largest group of officers was between 46 and 55 years of age (45%). Most officers had more than 16 years of service (16 to 20 years: 19.6%; 21 to 25 years: 21.1%, and over 25 years: 31.4%) and the largest percentage of officers held the rank of corporal/sergeant (32.5%). 5.3 % said they had been diagnosed with COVID-19 at the time of the study. Over half of the respondents said that police in their agency had been diagnosed, with the largest group (35.9%) reporting between one and ten cops. At least one cop in their agency had died, according to sixteen officers (7.7%). Only one cop said they had never been exposed to COVID-19. 40.7 percent of the sample indicated some/moderate or very low exposure, whereas 58.8% indicated high or very high exposure.

49. Mohamed et al., in the year 2022 on the impact of a pandemic on the police officers of Malaysia. The primary goal of this research is to determine the impact of the COVID-19 pandemic on Malaysian police personnel's mental health. The police-specific stressors associated with COVID-19 were measured using the Police Stress Questionnaires (PSQ). Meanwhile, assessments such as the Depression Anxiety Stress Scale (DASS-21) are used to assess the prevalence of occupational stress among police personnel. The respondents indicated the highest percentages of moderate depression, moderate anxiety, and moderate stress, with 41.1 % reporting moderate depression, 45% reporting moderate anxiety, and 31.8 % reporting moderate stress. Depression, anxiety, and stress are linked to a lack of resources, unbalanced work responsibilities, insufficient equipment, and a high incidence of COVID-19 infection among police personnel. There is a strong link between COVID-19 stressors and police officers' levels of depression, anxiety, and stress, with a direct link. The study concluded by stating that during the COVID-19 epidemic, the majority of police

officers experienced moderate to severe depression, anxiety, and stress. The study identified stressors that aid in the development of best practices and provide recommendations for police in the event of a future pandemic.

50. An exploratory study conducted by Singh & Kar in the year 2015 on Sources of occupational stress in the police personnel of North India. The purpose of the study was to investigate several etymologies associated with stress among law enforcement officers. A total of 300 male police personnel were selected for the study. Wherein, 100 constables, 100 inspectors, and 100 officers working in six departments of Uttar Pradesh, i.e., Lucknow, Meerut, Noida, Varanasi, Raibareilly, and Ghazipur were selected for the study. COs, ASPs, SPs and SSPs were included in the study. An occupational stress questionnaire, 10 open-ended questions for qualitative analysis, and statistical analysis were done to assess, collect and analyze data. The results of the study revealed that the majority of the respondents belonged to the age group ranging from 35-45 years. Most of the respondent's qualifications ranged from intermediate to post graduate and their work experience ranged from 10-20 years. The results further revealed that the inspector had the highest level of overall stress (39.89). the inspector had the highest levels of stress in the domains of private life, organizational structure, and interpersonal stressors. The constables were more stressed in the areas of environmental stress, travelling and work overload.

CHAPTER-III

METHODOLOGY

3.1. NEED FOR THE STUDY:

The police forces have been playing a vital part in controlling the spread of pandemics. Police personnel in India are subjected to several distinct occupational stresses due to the COVID-19 pandemic, which impacts their mental health and their work performance negatively. Occupational stress results in disruption of the psychological as well as physiological homeostasis of the individual, leading to deviant functioning in the working environment. Therefore, reducing the QOL. The study aims to assess the occupational stress and quality of life of police personnel during the epidemic.

3.2. AIM:

The main aim of the study is to assess the occupational stress and quality of life of police personnel during COVID-19.

3.3. OBJECTIVES OF THE STUDY:

1. To evaluate the socio-demographic background of police personnel.
2. To study the occupational stress of the police personnel experienced during the COVID-19 pandemic.
3. To evaluate the quality of life of the police personnel during the COVID-19 pandemic.
4. To study the relationship between occupational stress and the quality of life of police personnel during the COVID-19 pandemic.

3.4. HYPOTHESES:

Police Personnel have not experienced any stress during the COVID-19 pandemic (H0).

3.5. OPERATIONAL DEFINITION:

Occupational Stress: A biological and psychological reaction to workplace circumstances or occurrences that are harmful to one's health and well-being. It is influenced by elements like decision-making freedom, workload, degree of responsibility, job stability, physical environment, safety, kind and pace of work, and relationships with coworkers and managers. The Organizational Police Stress Scale will be utilized to assess the occupational stress of law enforcement officers at the time of epidemic.

Quality of Life: The degree to which a person obtains satisfaction from life. The following factors are crucial for a greater quality of life: mental, material, and physical well-being; interpersonal interaction; chances for individual growth (e.g., skill development); exercising rights and making independent lifestyle decisions; and involvement in society. Enhancing QOL is a particular concern for those with chronic disease or developmental and other disabilities, for those undergoing medical or psychological treatment, and for the aged. WHO-QOL BREF will be used to assess the quality of life of police personnel.

Police Personnel: Police personnel refer to permanent, parallels of police and other backing; part-time employees are converted to full-time equivalents. The police personnel who have served during the COVID-19 pandemic will be considered for the present study.

Coronavirus: COVID-19 is the infectious disease caused by the coronavirus, which is a respiratory pathogen. WHO first learned of this new virus from cases in Wuhan, the People's Republic of China, on 31 December 2019.

A pandemic is defined as "an epidemic occurring worldwide or over a very wide area, crossing international boundaries and usually affecting a large number of people."

3.6. RESEARCH DESIGN:

The present study involved a cross-sectional descriptive research design to assess the occupational stress and quality of life among police personnel during the COVID-19 pandemic.

3.7. UNIVERSE OF THE STUDY:

The initial case of the pandemic was established in Bengaluru on the 5th of March, 2020. As of October 28, 2020, Bengaluru reports 3,30,862 COVID cases, 43,760 active cases, 2,83,300 cured, and 3,802 deaths. (Source-TOI).

BBMP is divided into 8 zones, for ease of administration, each administered by a Zonal Commissioner. i.e., Yelahanka Zone, Dasarahalli Zone, Rajarajeshwarinagar Zone, Bommanahalli Zone, South Zone, West Zone, East Zone and Mahadevapura Zone.

Police personnel working in the police stations of a west zone have been taken for the study. Bengaluru west zone has 17 police stations i.e., Annapoorneshwari Police Station, Basaveshwara Nagar Police Station, Byatarayanapura Police Station, Chamarajpet Police Station, Chandra Layout Police Station, City Market Police Station, Cottonpete Police Station, J.J.Nagar Police Station, Jnanabharathi Police Station, Kempapura Agrahara Police Station, Kalasipalya Police Station, Kamakshipalya Police Station, Kengeri Police Station, Magadi Road Police Station, .R.R. Nagar Police Station, Upparpete Police Station and Vijayanagar Police Station. After reviewing the statistics of different police stations, it was found that each station consists of 50-80 police personnel working in shifts around the day.

3.8. SAMPLE AND METHOD OF SAMPLING

The probability sampling method (Stratified Random Sampling with Multistage Sampling method) was used to select samples for the study.

- ***Stage 1 (Selection of zones):*** BBMP has 8 zones; the researcher selected only the 'west zone' due to practical considerations.
- ***Stage 2 (Selection of police stations):*** All the police stations were included in the west
- zone.
- ***Stage 3 (Random selection of police personnel):*** Within each of the 17 police stations, 24 police personnel, belonging to different ranks, including ASI, HC, PC, were randomly selected from 16 police stations, but only 18 police personnel were selected from Chamarajapet police station, due to staff shortage. A total of 402 police personnel working under the West Zone of the BBMP division constituted the participants of the study.

  The sample was selected based on the first responders who participated in the response either directly or indirectly to the pandemic and dealt with the public.

Inclusion criteria:

- Police personnel working under the jurisdiction of the West Zone of the BBMP division
- Assistant sub-inspector (ASI), Head Constable (HC), and Police Constable (PC) were included to participate in the study.
- Police personnel who worked as frontline workers during the COVID-19 pandemic.
- Those who are willing to participate
- Both genders were included

Exclusion Criteria:

- Police personnel who work elsewhere other than the police stations that fall under the West Zone of the BBMP division
- Police personnel who did not work during the COVID-19 pandemic
- Inspectors, Sub-inspectors, and home guards were excluded from the study
- Police personnel who were not ready to take part in the study.

3.9. TOOLS USED FOR DATA COLLECTION

- Socio-demographic datasheet
- Organizational Police Stress Questionnaire (PSQ-Org)
- The Workplace Stress Scale (WPSS)
- World Health Organization Quality of Life-BREF (WHOQOL-BREF)

DESCRIPTION OF THE TOOLS:

- **Socio-demographic data sheet:** A semi-structured questionnaire on socio-demographic data was used to elicit the age, gender, education, marital status, duration of service, rank, and domicile of the responders.
- **Organizational Police Stress Questionnaire (PSQ-Org):** The PSQ-Org was developed by McCreary, D. R., & Thompson, M. M. in the year 2013. It is a 20-item measure to be rated on a 7-point Likert-type scale ranging from 1 (No stress at all) to 7 (A lot of stress). Reduced productivity, absenteeism, and employee turnover are all stress-related issues that may negatively affect employers with burnt-out employees. The scale also psychometrically measures stressors associated with policing that can

later be used in a future program of research, to investigate the associations among physical health, stress, and psychological well-being.

- **The Workplace Stress Scale (WPSS):** The Workplace Stress Scale was developed by The Marlin Company, North Haven, CT, and the American Institute of Stress, Yonkers, NY. It is a self-report scale to measure the level of workplace stress at the workplace. It consists of eight items that measure workplace stress at low, mild, moderate, severe, and very severe levels.
- **World Health Organization Quality of Life-BREF (WHOQOL-BREF):** The WHOQOL-BREF is a 26-item scale developed by the World Health Organization consisting of four domains: physical health (7 items), psychological health (6 items), social relationships (3 items), and environmental health (8 items); it also contains QOL and general health items. Each item of the WHOQOL-BREF is scored from 1 to 5 on a response scale, which is stipulated as a five-point ordinal scale. The scores are then transformed linearly to a 0–100 scale. The physical health domain includes items on mobility, daily activities, functional capacity, energy, pain, and sleep. The psychological domain measures include self-image, negative thoughts, positive attitudes, self-esteem, mentality, learning ability, memory concentration, religion, and mental status. The social relationships domain contains questions on personal relationships, social support, and sex life. The environmental health domain covers issues related to financial resources, safety, health, and social services, living physical environment, opportunities to acquire new skills and knowledge, recreation, the general environment (noise, air pollution, etc.), and transportation.

3.10. SAMPLE DESIGN:

3.11. SETTING OF THE STUDY: The study was conducted in Bengaluru City; it is the capital of the State of Karnataka. Founded in the 16th century, this city was ruled by the great dynasties of Kadambas, Hoysalas, and Vijayanagar Kings. Bengaluru city occupies an area of 800 sq km and has a population of over 1 crore. Bengaluru is also called "Garden City", "India's Silicon Valley", "Fashion Capital of India" and of late, the "Floriculture Capital" due to the present boost of the flower export business, "Science Capital of the Country" and "Information Technology Capital of India". Bengaluru City is well connected by Air, Rail, and Road transport to all the major cities in India.

City Police are responsible for the overall policing in the city and have been providing excellent service with well-established community participation in crime prevention, maintenance of law and order, and traffic management. The City Police has a network of beats manned by foot patrol and vehicle patrol day and night. These are backed by special mobile patrol units called Hoysala, traffic patrol, and several armed striking force mobile units stationed in strategic areas.

The jurisdiction of the City Police has been divided into 8 zones - East, West, South, North, Central, South East, North East, and Whitefield. Each zone is headed by an Officer of the rank of Deputy Commissioner of Police. Each zone is subdivided into subdivisions headed by Assistant Commissioners of Police, which are further divided into Police Stations under the charge of an Officer of the rank of Police Inspector. The study was conducted in the police stations falling under the West Zone.

3.12. STATEMENT OF THE STUDY:

To study occupational stress and quality of life of police personnel during the COVID-19 pandemic.

3.13. STATISTICAL ANALYSIS:

SPSS statistical package 26 was used for data analysis. The tests used were frequency, chi-square, T-test, ANOVA, and regression.

3.14. ETHICAL CONSIDERATION: Initially, the researcher presented the research synopsis to the ethical committee. The researcher obtained consent from the Deputy Commissioner of Police (DCP) West Zone, Bengaluru. While collecting data from police personnel, every inspector in charge of police stations was informed about the study and also informed that the information collected from one station would not be disclosed to the other, and their data would be kept strictly confidential. Informed consent will be acquired from the participants.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

Table 1

Sociodemographic Variables of the Respondents

Sociodemographic variables		N	%
Age			
	21-30	191	47.5
	31-40	104	25.9
	41-50	68	16.9
	51-60	39	9.7
Gender			
	Male	325	80.8
	Female	77	19.2
Marital Status			
	Married	269	66.9
	Unmarried	133	33.1
Education			
	SSLC	24	6
	PUC	117	29.1
	UG	205	51
	PG	56	13.9
Rank			
	ASI	63	15.7
	HC	117	29.1
	PC	222	55.2

Experience			
	0-10	225	56
	11-20	102	25.4
	20+	75	18.7

Table 1 shows sociodemographic profiles of police personnel working as frontliners at the time of the epidemic. The table depicts the age, gender, education, rank, and experience of the respondents. Out of 402 respondents, 191 (47.5%) belonged to the age group 21-30 years. 325 (80.8%) were male and 77 (19.2%) were female. It was also found that 269 (66.9%) were married and 133 (33.1%) were unmarried. The majority of the police personnel (51%) had completed their undergraduate level, 117 (29.1%) completed their Preuniversity College, 56 (13.9%) had completed postgraduation, and very few, 24 (6%) studied up to SSLC. Most respondents were Police Constables (PC) 222 (55.2%). 29.1% were Head Constables (HC) and 15.7% were Assistant Sub-Inspectors (ASI). It was also found that 225 (56%) had 0-10 years of work experience, 102 (25.4%) had 11-20 years of experience, whereas 75 (18.7%) of the respondents had a work experience of 20 years and above.

Table 2

Frequency Table of Organizational Police Stress

Organisational Police Stress	**F**	**%**
No Stress at All	103	25.6
Moderate Stress	102	25.4
A Lot of Stress	197	49

Mean= 2.2338; SD= .83266

Table 2 represents the frequency of Organizational Police Stress. The stress level of the police personnel was categorized into low, moderate, and high. Out of 402 respondents, 25.6% (103) of police personnel indicated that they had no stress at all during the COVID-19 pandemic. 25.4% (102) reported that they had moderate stress. Whereas, 49% (197) of police personnel

experienced a lot of stress during the pandemic. The mean value of the organizational stress scale is 2.2338, and the SD is .83266.

Table 3

Frequency and chi-square results for Organizational Stress concerning the gender of the Police personnel

Variable	No Stress at All		Moderate Stress		A Lot of Stress		$\chi 2$ (2)
	N	%	N	%	n	%	
Gender							
Male	85	26.2	77	23.7	163	50.2	2.534[a]
Female	18	23.4	25	32.5	34	44.2	

Note: p>0.05

Table 3 revealed that the Chi-square of independence showed a non-significant association of Organizational Stress Scale between male and female police personnel with χ^2 (2, N= 402) = 2.534, P= 0.28, *φ=.02.* The value of the phi coefficient was .07 (<.50), which indicated a small effect size. The findings showed that males with Organizational Stress exhibit a higher frequency than females.

Table 4

Frequency and chi-square results for the Organizational Stress Scale concerning the marital status of the Police personnel

Variable	No Stress at All		Moderate Stress		A Lot of Stress		$\chi 2$ (2)
	N	%	N	%	N	%	
Marital Status							
Married	82	30.5	65	24.2	122	45.4	10.181[a]
Unmarried	21	15.8	37	27.8	75	56.4	

Note: p>0.05

Table 4 revealed that the Chi-square of independence showed a non-significant association between the Organizational Stress and marital status of the police personnel (χ^2 = 10.181, N= 402, P= 0.06, *φ=.02).* The value of the phi coefficient was .159 (<.50) which indicates small

effect size. The finding showed that a higher number of married police personnel had a lot of stress as compared to the unmarried. However, a higher percentage of unmarried police personnel experience a lot of stress.

Table 5

Mean, standard deviation, and one-way ANOVA statistics for education and Organizational Police Stress

Variable	SSLC		PUC		UG		PG		F (3, 39)	η2
	M	SD	M	SD	M	SD	M	SD		
OPS	2.08	.829	1.94	.879	2.43	.755	2.16	.832	9.501**	0.06

Note: p<0.05

Table 5 shows the mean, standard deviation, and F-values for Organizational Stress Scale and education. Results indicated non-significant mean differences across the education group on the organizational stress scale (F =9.50, p<0.05). The value of η2 was 0.06 (<.50) which indicated a small effect size. Findings revealed that the degree-qualified police personnel exhibited a higher level of organizational stress compared to other education groups.

Table 6

Mean, standard deviation and one-way ANOVA statistics for age and Organizational Police Stress

Variable	21-30		31-40		41-50		51-60		F(3, 39)	η2
	M	SD	M	SD	M	SD	M	SD		
OPS	2.35	.780	2.24	.841	2.01	.872	2.00	.888	4.059**	0.02

Note: p>0.05

Table 6 shows the mean, standard deviation, and F-values for Organizational Stress and age. Results indicated significant mean differences across the age group on organizational stress (F =4.05, p<0.05). The value of η2 was 0.02 (<.50) which indicated a small effect size. Findings revealed that police personnel aged between 21-30 exhibited a higher level of organizational stress compared to other age groups.

Table 7

Mean, standard deviation and one-way ANOVA statistics for rank and Organizational Police Stress

Variable	ASI		HC		PC		F(3, 39)	η2
	M	SD	M	SD	M	SD		
OPS	2.35	.780	2.24	.841	2.01	.872	4.246**	0.02

Note: p>0.05

Table 7 shows the mean, standard deviation, and F-values for organizational stress and rank. Results indicated significant mean differences across the rank group on the Organizational Stress Scale with F=4.24, p>0.05. The value of η2 was 0.02 (<.50), which indicated a small effect size. Findings revealed that police personnel with the rank of ASI exhibited a higher level of organizational stress compared to other rank groups.

Table 8

Mean, standard deviation, and one-way ANOVA statistics for experience and Organizational Police Stress

Variable	0-10		11-20		20+		F (3, 39)	η2
	M	SD	M	SD	M	SD		
OPS	2.34	.786	2.20	.859	1.94	.868	6.604**	0.03

Note: p>0.05

Table 8 shows the mean, standard deviation, and F-values for Organizational Stress and experience. Results indicated significant mean differences across the experience group with F=6.60, p>0.05. The value of η2 was 0.03 (<.50) which indicated a small effect size. Findings revealed that police personnel having experience of 0-10 years exhibited a higher level of organizational stress compared to other experience groups.

Table 9

Frequency Table of Workplace Stress Scale

Workplace Stress Scale	F	%
Fairly Low	71	17.7
Moderate Stress	205	51.0
Severe	126	31.3

Mean= 2.1368; SD= .68739

Table 9 represents the frequency of the Workplace Stress Scale. Out of 402 respondents, 17.7% (71) of police personnel indicated that they had fairly low stress during the COVID-19 pandemic. 51.0% (205) reported that they had moderate stress. Whereas, 31% (126) of police personnel experienced severe stress during the pandemic. The mean value of the organizational stress scale is 2.1368 and the SD is .68739.

Table 10

Frequency and chi-square results for Workplace Stress concerning the gender of the Police personnel

Variable	Fairly Low		Moderate Stress		Severe		$\chi 2$ (2)
	N	%	N	%	N	%	
Gender							
Male	62	19.1	159	48.9	104	32.0	3.586[a]
Female	9	11.7	46	59.7	22	28.6	

Note: p>0.05

Table 10 revealed that the Chi-square of independence showed a non-significant association between male and female police personnel with χ^2= 3.586, N= 402, P= .166, φ=*.02.* The value of the phi coefficient was .094 (<.50), which indicated a small effect size. The findings showed that a higher number of male police personnel had a lot of Workplace Stress when compared to female police personnel.

Table 11

Frequency and chi-square results for Workplace Stress concerning the marital status of the Police personnel

Variable	Fairly Low		Moderate Stress		Severe		$\chi 2$ (2)
	N	%	n	%	N	%	
Marital Status							
Married	57	21.2	135	50.2	77	28.6	7.751[a]
Unmarried	14	10.5	70	52.6	49	36.8	

Note: p<0.05

Table 11 revealed that the Chi-square of independence showed a statistically significant association between marital status and workplace stress level among police personnel with χ^2=7.751, N= 402, P= 0.021. The value of the phi coefficient was .139 (<.50), which indicated a small to medium effect size. Although more married personnel reported severe stress in absolute numbers (77 compared to 49), a higher **proportion** of unmarried personnel experienced severe stress (36.8% vs. 28.6%).

Table 12

Mean, standard deviation and one-way ANOVA statistics for education and Workplace Stress

Variable	SSLC		PUC		UG		PG		F(3, 39)	η2
	M	SD	M	SD	M	SD	M	SD		
WPS	2.00	.780	2.03	.693	2.19	.664	2.19	.698	1.830**	0.01

Note: p>0.05

Table 12 shows the mean, standard deviation, and F-values for the Workplace Stress Scale and education. Results indicated significant mean differences across the experience group with F=1.830, p>0.05. The value of η2 was 0.06 (<.50), which indicated a small effect size. Findings revealed that PG-qualified police personnel exhibited a higher level of workplace stress compared to other education groups.

Table 13

Mean, standard deviation and one-way ANOVA statistics for age and Workplace Stress

Variable	21-30		31-40		41-50		51-60		F(3, 39)	η2
	M	SD	M	SD	M	SD	M	SD		
WPS	2.23	.650	1.99	.717	2.20	.681	1.92	.702	4.488**	0.03

Note: p>0.05

Table 13 shows the mean, standard deviation and F-values for Workplace Stress Scale and age. Results indicated significant mean differences across the age group with F=4.488, p>0.05. The value of η2 was 0.03 (<.50), which indicated a small effect size. Findings revealed that police personnel aged 21-30 exhibited a higher level of organizational stress compared to other age groups.

Table 14

Mean, standard deviation, and one-way ANOVA statistics for rank and Workplace Stress

Variable	ASI		HC		PC		F(3, 39)	η2
	M	SD	M	SD	M	SD		
WPS	2.12	.729	1.96	.693	2.22	.656	5.790**	0.02

Note: p>0.05

Table 14 shows the mean, standard deviation and F-values for Workplace Stress Scale and rank. Results indicated significant mean differences across the rank group on the Workplace Stress Scale with F=5.790, p>0.05. The value of η2 was 0.02 (<.50) which indicated a small effect size. Findings revealed that police personnel with the rank PC exhibited a higher level of workplace stress compared to other rank groups.

Table 15

Mean, standard deviation and one-way ANOVA statistics for experience and Workplace Stress

Variable	0-10		11-20		20+		F(3, 39)	η2
	M	SD	M	SD	M	SD		
OPS	2.24	.658	1.98	.717	2.04	.686	6.070**	0.02

Note: p>0.05

Table 15 shows the mean, standard deviation, and F-values for Workplace Stress Scale and experience. Results indicated significant mean differences across the rank group on the Workplace Stress Scale with F=6.070, p>0.05. The value of η2 was 0.03 (<.50), which indicated a small effect size. Findings revealed that police personnel with experience of 0-10 years exhibited a higher level of workplace stress compared to other experience groups.

Table 16

Frequency and chi-square results for physical health concerning the gender of the Police personnel

Variable	Low		Medium		High		χ^2 (2)
	N	*%*	*N*	*%*	*N*	*%*	
Gender							
Male	88	27.1	110	33.8	127	39.1	.232[a]
Female	21	27.3	24	31.2	32	41.6	

Note: p>0.05

Table 16 revealed that the Chi-square of independence showed a non-significant association of physical health between male and female police personnel with χ^2=.232, N= 402, P= 0.89, φ=.02. The value of the phi coefficient was .02 (<.20) which indicated a small effect size. The Cramer's V (ϕ_c) value was .02, which showed a weak association between physical health and gender of police personnel. The findings showed that females with physical health from quality of life exhibit a higher frequency than males.

Table 17

Frequency and chi-square results for Physical health concerning the marital status of the Police personnel

Variable	Low		Medium		High		χ^2 (2)
	N	*%*	*N*	*%*	*N*	*%*	
Marital Status							3.480[a]
Married	69	25.7	85	31.6	115	42.8	

Unmarried	40	30.1	49	36.8	44	33.1	

Note: p>0.05

Table 17 revealed that the Chi-square of independence showed a non-significant association of physical health between married and unmarried police personnel with χ^2= 3.480, N= 402, p= .17, φ=.399. The value of the phi coefficient was .024 (>.20), which indicated a small effect size. The Cramer's V (ϕ_c) value was .024, which showed a small association between physical health and marital status of police personnel. The findings showed that married police personnel exhibited higher frequencies of high physical health compared to their unmarried counterparts, though the association was not statistically significant.

Table 18

Mean, standard deviation and one-way ANOVA statistics for education and physical health

Variable	SSLC		PUC		UG		PG		*F (3, 39)*	*η2*
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*		
WHO-QOL (PH)	1.95	.85	2.20	.815	2.13	.79	1.98	.79	1.32	.009

Note: p>0.05

Table 18 shows the mean, standard deviation and F-values for physical health and education. Results indicated non-significant mean differences across the education group on physical health with F=1.32, p>0.05. The value of η2 was .009 (<.20), which indicated a small effect size. Findings revealed that PUC-qualified police personnel exhibited a higher level of physical health compared to other education groups.

Table 19

Mean, standard deviation and one-way ANOVA statistics for age concerning Quality of Life (Physical Health)

Variable	21-30		31-40		41-50		51-60		F(3, 39)	η2
	M	SD	M	SD	M	SD	M	SD		
WHO-QOL (PH)	2.13	.773	2.02	.841	2.20	.820	2.20	.863	.848**	0.006

Note: p>0.05

Table 19 shows the mean, standard deviation and F-values for physical health and age. Results shows no statistically significant differences across the age group on physical health with F=.848, p>0.05. The value of η2 was 0.06 (<.20), which indicated a small effect size. Findings revealed that police personnel between the age range of 51-60 exhibited a higher level of physical health compared to other age groups.

Table 20

Mean, standard deviation and one-way ANOVA statistics for physical health and ranks of police personnel

Variable	ASI		HC		PC		*F(2, 39)*	*η2*	Post-Hoc
	M	*SD*	*M*	*SD*	*M*	*SD*			
WHO-QOL (PH)	2.17	.83	2.10	.86	2.12	.77	0.16	.0008	1>3>2

Note: p>0.05, Leven's Homogeneity of Variance (<0.05)

Table 20 shows the mean, standard deviation and F-values for physical health and police personnel ranks. Results indicated non-significant mean differences across the rank group on physical health with F (2, 39) = 0.16, p>0.05. The value of η2 was 0008 (<.20) which indicated a negligible effect size, indicating almost no practical difference. Findings revealed that ASI police personnel exhibited a higher level of physical health compared to PC and HC rank groups. The post hoc comparison indicated the insignificance of group-mean differences. Additionally, the significant Levene's test ($p < 0.05$) suggests a violation of the homogeneity of variance assumption, which further limits the reliability of the ANOVA findings.

Table 21

Mean, standard deviation and one-way ANOVA statistics for experience concerning Quality of Life (Physical Health)

Variable	0-10		11-20		20+		F(3, 39)	η2
	M	SD	M	SD	M	SD		
WHO-QOL (PH)	2.12	.766	2.04	.871	2.24	.835	1.216**	0.006

Note: p>0.05

Table 21 shows the mean, standard deviation and F-values for physical health and experience of police personnel. Results indicated non statistically significant differences across the experience group on physical health with F= 1.216, p>0.05. The value of η2 was 0.006 (<.20) which indicated a small effect size. Findings revealed that police personnel with experience range between 20+ years exhibited a higher level of physical health compared to other experience groups.

Table 22

Frequency and chi-square results for Psychological health concerning the gender of the Police personnel

Variable	Low		Medium		High		χ2 (2)
	N	%	N	%	n	%	
Gender							
Male	89	27.4	129	39.7	107	32.9	.396[a]
Female	21	27.3	28	36.4	28	36.4	

Note: p>0.05

Table 22 revealed that the Chi-square of independence showed a non-significant association of psychological health and gender of police personnel with χ^2= 0.396, N= 402, p= .820. The value of the phi coefficient was .031 (<.50), which indicated a small effect size. The Cramer's V (ϕ c) value was .031. The findings showed that although female police personnel exhibited a slightly higher frequency in the high psychological health category (36.9%), this difference was not statistically significant.

Table 23

Frequency and chi-square results for Psychological health concerning the marital status of the Police personnel

Variable	Fairly Low		Moderate Stress		Severe		χ2 (2)
	N	%	N	%	N	%	
Marital Status							
Married	67	24.9	101	37.5	101	37.5	6.071[a]
Unmarried	43	32.3	56	42.1	34	25.6	

Note: p>0.05

Table 23 revealed that the Chi-square of independence showed a significant association between psychological health and marital status of police personnel with χ^2=6.071, N= 402, P= .048, φ=*.123.* The value of the phi coefficient was .123 (<.50), which indicated a small effect size. The findings showed that unmarried police personnel reported higher frequencies in the lower and moderate psychological health categories compared to married police personnel.

Table 24

Mean, standard deviation and one-way ANOVA statistics for education concerning Quality of Life (Psychological Health)

Variable	SSLC		PUC		UG		PG		F(3, 39)	η2
	M	SD	M	SD	M	SD	M	SD		
WHO-QOL (PSY)	1.95	.907	2.14	.768	2.10	.750	1.78	.802	3.169**	0.02

Note: p>0.05

Table 24 shows the mean, standard deviation and F-values for psychological health across different education levels. he analysis showed that the differences in psychological health among education groups were not statistically significant, F(3, 39) = 3.169, p > 0.05. The effect size (η^2 = 0.02) indicated a small effect. Although not statistically significant, the results suggest that police personnel with PUC education reported higher psychological health scores compared to those with other educational qualifications.

Table 25

Mean, standard deviation and one-way ANOVA statistics for age concerning Quality of Life (Psychological Health)

Variable	21-30		31-40		41-50		51-60		F(3, 39)	η2
	M	SD	M	SD	M	SD	M	SD		
WHO-QOL (PSY)	1.99	.777	2.10	.736	2.16	.784	2.10	.882	.990**	0.007

Note: p>0.05

Table 25 shows the mean, standard deviation and F-values for psychological health across different age groups. The analysis showed no statistically significant differences in psychological health among the age groups, $F(3, 39) = 0.990$, $p > 0.05$. The effect size was very small ($\eta^2 = 0.007$), indicating a negligible impact of age on psychological health. Although not statistically significant, police personnel in the 41–50 age group reported slightly higher psychological health scores compared to the other groups.

Table 26

Mean, standard deviation and one-way ANOVA statistics for rank with Quality of Life (Psychological Health)

Variable	ASI		HC		PC		F(3, 39)	η2
	M	SD	M	SD	M	SD		
WHO-QOL (PSY)	2.03	.822	2.21	.729	1.99	.784	3.222**	0.01

Note: p>0.05

Table 26 shows the mean, standard deviation and F-values for Psychological health across different ranks of police personnel. The analysis indicated no statistically significant differences in psychological health among the ranks, $F(2, 39) = 3.222$, $p > 0.05$. The effect size ($\eta^2 = 0.01$) was very small, suggesting that rank had little to no effect on psychological health. However, descriptively, police personnel holding the rank of Head Constable (HC) reported slightly higher psychological health scores compared to ASIs and PCs.

Table 27

Mean, standard deviation and one-way ANOVA statistics for experience concerning Quality of Life (Psychological Health)

Variable	0-10		11-20		20+		F(3, 39)	η2
	M	SD	M	SD	M	SD		
WHO-QOL (PSY)	1.99	.776	2.14	.722	2.14	.849	1.877**	0.009

Note: p>0.05

Table 27 shows the mean, standard deviation and F-values for psychological and experience. Results indicated a non-significant mean difference for psychological health across different experience groups with F=1.877, p>0.05. The value of η2 was 0.009 (<.20) which indicated a

small effect size. Although police personnel with more than 20 years of experience had a slightly higher mean psychological health score, this difference was not significant. The effect size ($\eta^2 = 0.009$) suggests a small effect of experience on psychological health.

Table 28

Frequency and chi-square results for Quality of Life (Social Relationship) with the gender of the Police personnel

Variable	Low		Medium		High		$\chi 2$ (2)
	N	%	n	%	N	%	
Gender							
Male	95	29.2	133	40.9	97	29.8	1.393[a]
Female	26	33.8	33	42.9	18	23.4	

Note: p>0.05

Table 28 shows the frequency distribution and Chi-square test results for social relationship scores across gender of the police personnel with χ^2= .1.393, N= 402), p= .498, φ=*.02.* The value of the phi coefficient was .02 (<.20), which indicated a small effect size. The Cramer's V (ϕc) value was .05, which showed a weak association of Social Relationships between male and female police personnel. While male police personnel had a slightly higher frequency in the "High" social relationship category compared to females, this difference was not statistically significant, suggesting that gender is not a meaningful factor in social relationship scores among police personnel.

Table 29

Frequency and chi-square results for Quality of Life (Social Relationship) concerning the marital status of the Police personnel

Variable	Fairly Low		Moderate Stress		Severe		$\chi 2$ (2)
	N	%	n	%	N	%	
Marital Status							
Married	49	18.2	118	37.5	102	37.5	64.094[a]
Unmarried	72	54.1	48	36.1	13	9.8	

Note: p>0.05

Table 29 revealed that the frequency, Chi-square of independence showed a significant association of social relationship across marital status of police personnel. The Chi-square test of independence revealed a statistically significant association between marital status and social relationship scores $\chi^2(2, N = 402) = 64.094$, $p < .001$. The phi coefficient ($\varphi = .03$) and Cramer's V ($\phi c = .03$) indicate a small effect size and a weak association. The results show that married police personnel had higher frequencies in the moderate to severe categories of social relationship scores, whereas unmarried personnel were more represented in the fairly low category. This suggests that marital status is significantly associated with perceived social relationship quality among police personnel, with married individuals reporting better outcomes.

Table 30

Mean, standard deviation and one-way ANOVA statistics for education concerning Social Relationship

Variable	SSLC		PUC		UG		PG		F(3, 39)	η2
	M	SD	M	SD	M	SD	M	SD		
WHO-QOL (SR)	2.16	.816	2.08	.749	1.93	.741	1.87	.854	1.785**	0.01

Note: p>0.05

Table 30 shows the mean, standard deviation and F-values for social relationships across different educational groups. The results indicated a non-significant mean difference across the education groups on social relationships ($F(3, 39) = 1.785$, $p > 0.05$). The η^2 value of 0.01 indicates a small effect size, suggesting that the level of education has minimal impact on social relationships among the participants.

Table 31

Mean, standard deviation and one-way ANOVA statistics for age concerning Social Relationship

Variable	21-30		31-40		41-50		51-60		F(3, 39)	η2
	M	SD	M	SD	M	SD	M	SD	11.473**	0.07

WHO-QOL (SR)	1.75	.750	2.20	.715	2.14	.652	2.23	.872

Note: p>0.05

Table 31 shows the mean, standard deviation and F-values for social relationships across different age groups. The results indicated a non-significant mean difference across the age groups on social relationships with F=11.473, p>0.05. The value of η2 was 0.07 (<.20) which indicated a small to moderate effect size. Findings revealed that the police personnel belonging to the age group of 51-60 exhibited a higher level of social relationships compared to other age groups.

Table 32

Mean, standard deviation and one-way ANOVA statistics for rank concerning Quality of Life (Social Relationship)

Variable	ASI		HC		PC		F(3, 39)	η2
	M	SD	M	SD	M	SD		
WHO-QOL (SR)	2.20	.806	2.20	.701	1.80	.745	14.364**	0.06

Note: p>0.05

Table 32 shows the mean, standard deviation and F-values for social relationships across rank groups. Results indicated a non-significant mean difference across different rank groups concerning social relationships with F=14.364, p>0.05. The value of η2 was 0.06 (<.20), which indicated a small effect size. Findings revealed that police personnel with the rank of ASI exhibited a higher level of social relationships compared to PC.

Table 33

Mean, standard deviation and one-way ANOVA statistics for experience concerning Social Relationship

Variable	0-10		11-20		20+		F(3, 39)	η2
	M	SD	M	SD	M	SD	15.995**	0.07

WHO-QOL (SR)	1.80	.744	2.22	.688	2.21	.793

Note: p>0.05

Table 33 shows the mean, standard deviation and F-values for social relationships across different experience groups. The results indicated a non-significant mean difference among experience groups concerning social relationships with F=15.995, p>0.05. The value of η2 was 0.07 (<.20) which indicated a small effect size. Findings revealed that police personnel with experience range between 11-20 exhibited a higher level of social relationship compared to other experience groups.

Table 34

Frequency and chi-square results for Quality of Life (Environment) concerning the gender of the Police personnel

Variable	Low		Medium		High		χ2 (2)
	N	%	N	%	n	%	
Gender							
Male	94	28.9	121	37.2	110	33.8	2.044[a]
Female	25	32.5	22	28.6	30	39.0	

Note: p>0.05

Table 34 revealed that the frequency and Chi-square of independence showed a significant association of the environmental domain concerning the gender of police personnel. The Chi-square test of independence indicated no significant association between gender and environmental quality of life levels ($\chi^2(2) = 2.044$, $p = .360$). The phi coefficient ($\varphi = 0.07$) indicates a small effect size, suggesting that gender has minimal impact on the environmental domain of quality of life among police personnel.

Table 35

Frequency and chi-square results for Quality of Life (Environment) concerning the marital status of the Police personnel

Variable	Fairly Low	Moderate Stress	Severe	χ2 (2)

	N	%	N	%	N	%	
Marital Status							
Married	70	26.0	96	35.7	103	38.3	6.324[a]
Unmarried	49	36.8	47	35.3	37	27.8	

Note: p>0.05

Table 35 revealed that the Chi-square results showed a significant association of environmental domain in relation to the marital status of police personnel with χ^2= 6.324, N= 402), P= .042, *φ=.02.* The value of the phi coefficient was .012 (<.20) which indicated a small effect size. The Cramer's V (ϕ c) value was .012, which showed a weak association of environment between married and unmarried police personnel. The findings showed that married police personnel had a higher frequency in the "severe" category of environmental quality of life compared to unmarried personnel.

Table 36

Mean, standard deviation and one-way ANOVA statistics for education concerning the Environment

Variable	SSLC		PUC		UG		PG		F(3, 39)	η2
	M	SD	M	SD	M	SD	M	SD		
WHO-QOL [E]	1.87	.850	2.09	.819	2.08	.765	1.92	.870	1.041**	0.00

Note: p>0.05

Table 36 shows the mean, standard deviation and F-values for the environmental domain across different educational groups. The results indicated no significant mean differences across different education groups with F=1.041, p>0.05. The value of η2 was 0.00 (<.20), which indicated a small effect size meaning that educational level had no impact on quality of life related to the environment. While police personnel with a PUC qualification reported the highest mean score.

Table 37

Mean, standard deviation and one-way ANOVA statistics for age concerning Environment

Variable	21-30	31-40	41-50	51-60	F(3, 39)	η2

	M	SD	M	SD	M	SD	M	SD		
WHO-QOL [E]	2.01	.801	2.07	.808	2.10	.775	2.10	.852	.346**	0.002

Note: p>0.05

Table 37 shows the mean, standard deviation and F-values for environmental domain across different age group. Results indicated no significant mean differences across the different age ranges concerning their environmental domain with F=.346, p>0.05. The value of η2 was 0.0002 (<.20) which indicated a small effect size. Findings revealed that the police personnel belonging to the age group of 51-60 exhibited a higher level of environment compared to other age groups.

Table 38

Mean, standard deviation and one-way ANOVA statistics for rank concerning Environment

Variable	ASI		HC		PC		F(3, 39)	η2
	M	SD	M	SD	M	SD		
WHO-QOL [E]	2.01	.792	2.13	.808	2.01	.801	.916**	0.004

Note: p>0.05

Table 38 shows the mean, standard deviation and F-values for environmental domain across different ranks of police personnel. Results indicated non-significant mean differences across the ranks concerning the environmental domain with F=.916, p>0.05. The value of η2 was 0.004 (<.20) which indicated a small effect size. Findings revealed that police personnel with a rank HC exhibited a higher level of environmental domain of QOL compared to ASI and PC.

Table 39

Mean, standard deviation and one-way ANOVA statistics for experience concerning the Environment

Variable	0-10		11-20		20+		F(3, 39)	η2
	M	SD	M	SD	M	SD		
WHO-QOL [E]	2.01	.796	2.08	.809	2.10	.814	.482**	0.002

Note: p>0.05

Table 39 shows the mean, standard deviation and F-values for quality of life of environmental domain across experience. The results indicated non-significant mean differences across the groups having different experience backgrounds concerning the environmental domain with ($F=.482$, $p>0.05$). The value of $\eta 2$ was 0.002 (<.20) which indicated a small effect size. Findings revealed that police personnel with an experience range of 20+ years exhibited a higher level of quality of life concerning the environmental domain compared to other experience-background groups.

Table 40

T-Test results of Gender concerning Organizational Stress, Workplace Stress and Quality of Life (Physical Health, Psychological Health, Social Relationship and Environment) of Police Personnel

Scales	Gender	N	Mean	Std. Deviation	F	Sig.
Organisational Police Stress	Male	325	2.24	.841	1.906	.168
	Female	77	2.20	.800		
Workplace Stress Scale	Male	325	2.12	.703	2.375	.124
	Female	77	2.16	.615		
PHYSICAL HEALTH	Male	325	2.12	.805	.220	.639
	Female	77	2.14	.822		
PSYCHOLOGICAL	Male	325	2.05	.775	.455	.500
	Female	77	2.09	.797		
SOCIAL RELATIONSHIP	Male	325	2.00	.769	.038	.845
	Female	77	1.89	.753		
ENVIRONMENT	Male	325	2.04	.791	2.185	.140
	Female	77	2.06	.848		

Table 40 explains the status of scale variables across the gender categories. The level of Organizational police stress, workplace stress, physical health, psychological health, social relationships and environment does not differ between the male and female groups.

Table 41

T-test results of Marital Status concerning Organizational Stress, Workplace Stress and Quality of Life (Physical Health, Psychological Health, Social Relationship and Environment)

	Marital Status	N	Mean	Std. Deviation	F	Sig.
Organisational Police Stress	Married	269	2.14	.859	7.155	.008
	Unmarried	133	2.40	.749		
Workplace Stress Scale	Married	269	2.07	.703	.084	.772
	Unmarried	133	2.26	.638		
PHYSICAL HEALTH	Married	269	2.17	.810	2.284	.132
	Unmarried	133	2.03	.797		
PSYCHOLOGICAL	Married	269	2.12	.781	1.324	.251
	Unmarried	133	1.93	.760		
SOCIAL RELATIONSHIP	Married	269	2.19	.724	.030	.863
	Unmarried	133	1.55	.667		
ENVIRONMENT	Married	269	2.12	.793	.001	.974
	Unmarried	133	1.90	.802		

The above table explains the level of scale variables across the marital categories. Organizational police stress differs between the married and unmarried groups of police personnel. However, the level of workplace stress, physical health, psychological health, social relationships and the environment do not differ in the married and unmarried groups.

Table 42

The regression coefficient of age, experience, education, rank, gender, marital status, QOL and workplace stress on organisational police stress

Variables	*B*	*β*	*T*	*SE*	*p*	*95% CI*		R^2
						LB	*UB*	
(Constant)	2.16		3.14	0.69	0.002	[0.81,3.51]		
Age	-0.06	-0.07	-0.66	0.09	0.508	[-0.22,0.11]		
Experience	-0.16	-0.15	-1.09	0.15	0.276	[-0.45, 0.13]		.13
Education	0.05	0.05	0.81	0.06	0.421	[-0.07, 0.17]		
Rank	-0.11	-0.10	-0.77	0.15	0.439	[-0.40, 0.17]		
Gender	-0.15	-0.07	-1.38	0.11	0.167	[-0.36, 0.06]		

Marital Status	0.05	0.03	0.52	0.10	0.605	[-0.15, 0.26]	
QOL	-0.03	-0.02	-0.47	0.06	0.642	[-0.14, 0.09]	
Workplace Stress	0.34	0.28	5.83	0.06	0.000	[0.23, 0.46]	

Note: CI= Confidence Interval; LB= Lower Bound; UB= Upper Bound

Table 42 shows the impact of age, experience, education, rank, gender, marital status, QOL and workplace stress on organisational police stress. The R^2 value of 0.13 revealed that the predictors explained a 13% variance in the organisational police stress with F (8, 893) = 7.15, P<.001. The findings revealed that workplace stress positively predicted organisational police stress (β=0.28, p<.001) whereas age, experience, education, rank, gender, marital status and QOL have a non-significant effect on organisational police stress.

Table 43

The regression coefficient of age, experience, education, rank, gender, marital status, QOL and organisational police stress on workplace stress

Variables	*B*	*B*	*t*	*SE*	*P*	*95% CI*		R^2
						LB	*UB*	
(Constant)	2.22		3.97	0.56	0.000	[1.121]	[3.321]	.14
Age	0.06	0.08	0.82	0.07	0.414	[-0.080]	[0.195]	
Experience	-0.19	-0.21	-1.58	0.12	0.116	[-0.424]	[0.047]	
Education	0.03	0.03	0.52	0.05	0.607	[-0.073]	[0.126]	
Rank	-0.12	-0.13	-0.97	0.12	0.333	[-0.353]	[0.120]	
Gender	0.02	0.01	0.26	0.09	0.796	[-0.150]	[0.195]	
Marital Status	0.07	0.05	0.79	0.09	0.427	[-0.100]	[0.237]	
QOL	-0.16	-0.16	-3.34	0.05	0.001	[-0.247]	[-0.064]	
Organisational Police Stress	0.23	0.28	5.83	0.04	0.000	[0.153]	[0.309]	

Note: CI= Confidence Interval; LB= Lower Bound; UB= Upper Bound; QOL=Quality of Life

Table 43 shows the impact of age, experience, education, rank, gender, marital status, QOL and organisational police stress on workplace stress. The R^2 value of 0.14 revealed that the predictors explained a 14% variance in workplace stress with F (8, 393) = 7.92, P<.001. The findings revealed that QOL negatively predicted workplace stress (β=-0.16, p<.001). The organisational police stress however positively predicted workplace stress (β=-0.28, p<.001)

whereas age, experience, education, rank, gender, and marital status have a non-significant effect on workplace stress.

Table 44

The regression coefficient of age, experience, education, rank, gender, marital status, organisational police stress and workplace stress on QOL

Variables	*B*	*B*	*t*	*SE*	*P*	*95% CI*		R^2
						LB	*UB*	
(Constant)	2.23		3.72	0.60	0.00	[1.052]	[3.412]	
Age	0.03	0.04	0.37	0.07	0.71	[-0.120]	[0.175]	
Experience	0.10	0.11	0.81	0.13	0.42	[-0.149]	[0.356]	
Education	0.01	0.01	0.10	0.05	0.92	[-0.101]	[0.112]	
Rank	0.12	0.12	0.92	0.13	0.36	[-0.134]	[0.371]	
Gender	0.02	0.01	0.16	0.09	0.87	[-0.169]	[0.200]	.08
Marital Status	-0.25	-0.17	-2.74	0.09	0.01	[-0.428]	[-0.070]	
Organisational Police Stress	-0.02	-0.02	-0.47	0.04	0.64	[-0.108]	[0.066]	
Workplace Stress	-0.18	-0.17	-3.34	0.05	0.00	[-0.282]	[-0.073]	

Note: CI= Confidence Interval; LB= Lower Bound; UB= Upper Bound; QOL=Quality of Life

Table 44 shows the impact of age, experience, education, rank, gender, marital status, organisational police stress and workplace stress on QOL. The R^2 value of 0.08 revealed that the predictors explained 8% variance in workplace stress with F (8, 393) = 4.21, P<.001. The findings revealed that marital status negatively predicted QOL (β=-0.17, p<.01). The workplace stress also negatively predicted QOL (β=-0.17, p<.001) whereas age, experience, education, rank, gender, and organisational police stress have a non-significant effect on QOL.

DISCUSSION

The present research emphasises the occupational stress and quality of life of police personnel during the coronavirus outbreak. The research was led by applying a descriptive research design using the Stratified Random Sampling with Multistage Sampling for selecting the respondents. The sample was comprised of police personnel working in the police station limits under the jurisdiction of the West Zone of BBMP. The data were collected from 402 police personnel who worked during the COVID-19 pandemic using a semi-structured questionnaire, Organizational Police Stress Questionnaire (PSQ-Org), Workplace Stress Scale (WPSS), and World Health Organization Quality of Life-BREF (WHOQOL-BREF). The data was analysed using SPSS 25.

This chapter elaborates on the findings of the research and debates the possible conclusions. The interpretation has been done by reviewing various literature, either by ratifying or contrasting it. The discussion of the result is presented in the following manner:

1. Socio-demographic indicators.
2. Organizational police stress of the police personnel during the COVID-19 pandemic.
3. Workplace stress of the police during the COVID-19 epidemic.
4. Quality of life of the police personnel during the COVID-19 pandemic.

Socio-demographic indicators of police during the pandemic:

Age-wise distribution of the respondents: The present research study consisted majority of police personnel 47.5% (191), in the age group of 21-30 years. In an exploratory study conducted on the work stress of police officers during the COVID-19 pandemic (Huang, Bodla & Chen, 2020) similar results were found wherein a large number of police personnel who fit into the age group below 30 years. A study was conducted (Zakarani & Noor, 2021) on the Workplace Environment and Job Performance of Police personnel at the time of the pandemic. The socio-demographic profile of participants showed that the age group of the majority of the respondents was (42%). No other studies had a majority of participants representing the age group of 21-30 years old. In research conducted on the effects of occupational stress and health on police personnel by (Hazari & Manas, 2020). The age group distribution of the respondents shows that the majority (35%) of the participants belong to the age group of 51-60 years and (25.3%) of the respondents belong to the age group of 20-30 years old. This indicates that the younger police force is considered to be active, less likely to suffer severe consequences of the

pandemic due to their physical strength, immunity and resilience, and this makes them more suitable for handling frontline, high-risk duties during the pandemic.

Gender-wise distribution of the respondents: The research study comprised a majority 80.8% (325) of male police personnel. Consequently, there are more male respondents than female respondents. In a study, a similar outcome was discovered on the work strain of police personnel of the Bishnupur district of West Bengal during the COVID-19 pandemic found that there are a majority (87%) of male respondents than female police respondents (13%) (Nameirakpam et al., 2021). In a mixed approach study conducted in Maharashtra by Konkane et al., 2020) on the Understanding of the Incidence of epidemic among the police force, it was found that the study recruited a majority (85%) of male police personnel than females. In another study conducted in Calicut, Kerala it was found that out of 406 police personnel recruited for their study, a majority (91.4%) of respondents were male respondents in contrast with (8.6%) of female police personnel (Ragesh et al., 2017). This reflects the male-dominated nature of the law enforcement sector, where it is considered to be a physically demanding job and also due to the workplace demands such as irregular working hours.

Marital Status wise distribution of the respondents: The majority of the police personnel 66.9% (269) recruited for the present study were married and 33.1% (133) of police personnel were unmarried. A study conducted on work-related stress and psychological well-being of police personnel in Bangalore; Karnataka also found a similar result stating that there were more married respondents than unmarried respondents (Ravikumar, 2022). In another exploratory study conducted in South India on COVID-19 and police personnel, similar results were found that there were more than half the married police personnel than the unmarried police personnel (Boovaragasamy et al., 2021). Similarly, in a study conducted by (Berg et al., 2005) on Strain in the Norwegian police service, it was found that (84.3%) of the police personnel who participated in the study were married. This indicates that most of the uniform services have a specific age criteria that typically fall between 20-40 years, where marriage is considered socially most common at this age range.

Education-wise distribution of the respondents: Education is one of the most significant socio-demographic factors of the respondents. In the milieu of the current study, four educational groups i.e., SSLC, PUC, UG, and PG were taken into consideration. It was found that the majority of the police personnel 51% (205) were educated up to UG, 29.1% completed PUC, 13.9% had a PG and only 6% of police personnel studied up to SSLC. Comparable

outcomes were found in a study directed in Calicut, Kerala on occupational stress among police personnel stating that 39.9% (150) of police personnel were undergraduates (UG) (Ragesh et al., 2017). In a study conducted among Spanish police during the epidemic on the Perception of Health, Resilience, and Engagement by (Velasco et al., 2021). Similar results were seen in the study which stated that 35.5% of the police personnel were educated up to the university level (bachelor's degree). Similarly, in a cross-sectional study conducted by Tian et al., 2021 on frontline prison police mental health status during the prevention and control of the COVID-19 pandemic. It was found that the majority 73.80% of the respondents studied up to a bachelor's degree. This is because of the recruitment criteria for constables and sub-inspectors, where the minimum education requirement is 10+2 or a bachelor's degree. Therefore, many who would prefer to join the force may pursue graduation, which would enhance their chance of being selected for the post.

Rank-wise distribution of the respondents: The present study comprised three police ranks i.e., Assistant Sub-inspector (ASI), Head Constables (HC), and Police Constables (PC). The majority 55.2% (222) of the respondents were Police Constables (PC), 29.1% of respondents were Head Constables (HC) and 15.7% of the respondents were Assistant Sub-inspectors (ASI). In a study, a similar outcome was discovered on police officers' well-being and commitment. It was found that Police Constables comprised 58 % of the total sample (Kyprianides et al., 2021). In a Descriptive, cross-sectional study conducted by (Suma et al., 2021) on the epidemic and police personnel- front-line COVID-19 warriors. It was found that the majority 53% of the participants were Police Constables. Similarly, a study conducted in England and Wales by (Kyprianides et al., 2021) on Policing the pandemic: police officer well-being and commitment to democratic modes of policing. Similar results were found. It was noted that the majority 58% of the respondents were Police Constables. Another study conducted by (Collins & Gibbs, 2003) on a study of the causes, generality, and intensity of symptoms linked with stress among police within a country police force. The demographic outcomes indicated that there was a majority of 80% of the constables when compared to other ranks. This indicates that police constables are the ones who are recruited in large numbers, because they are involved in handling daily policing tasks such as crowd control and/or traffic regulation.

Experience-wise distribution: The majority 56% (225) had 0-10 years of work experience, 25.4% of the respondents had 11-20 years of experience, and 18% of the respondents had 20+ years of work experience. There were no studies found that had similar results concerning the

experience of police personnel during the COVID-19 pandemic. The reason for the majority of police personnel with 0-10 years' work experience indicates, younger personnel are being engaged in pandemic-related activities.

Organizational stress of police during a pandemic

The present study reveals that 49% (197) of police personnel had a lot of stress on the Organizational Police Stress Scale. Research conducted by Queiros et al. in the year 2020 found similar results concerning the Organizational Police Stress Questionnaire, which states that 87.2% (986) of police personnel had high stress during the COVID-19 pandemic. Another study conducted by Maran et al. in the year 2015 in northern Italy found that police personnel had shown high stress on Organizational Police Stress Questionnaire. Police personnel reported a lot of stress concerning the Organizational Police Stress Questionnaire in a study conducted in Ontario, Canada, by Chan & Andersen in the year 2020.

The occupational stress of the police personnel concerning age and organizational stress indicates that the mean score of the police personnel between the age range of 21-30 is 2.35 (SD .780), which indicates an increased organizational police stress than the other age groups. This may be due to the increased job responsibilities and working in different shifts, family responsibilities, etc. Comparable results were shown in a study led in Kerala on Occupational stress among police personnel in India in the year 2017 revealed that the police personnel belonging to the younger age group, i.e., 21-30 years, had higher work stress compared to other age groups (Ragesh, 2017).

The mean score of the rank of police personnel concerning the organizational police stress is 2.35 (.780), which indicates that the police personnel belonging to the rank ASI exhibited a higher level of stress compared to other ranks. This could be due to a higher position leading to dealing directly with higher authorities, the age factor and managing the HC and PC. Similar results were found in a study conducted in Lucknow, Uttar Pradesh, in the year 2015 on the occupational stress in the police personnel revealed that the inspectors had the highest stress level compared to officers and constables.

The highest mean score of the work experience concerning the organizational police stress scale is 2.34 (.786), which indicates that the police personnel having work experience from 0-10 years had a high level of organizational stress associated with other experience groups. This might be a result of the PC's use for work during the coronavirus pandemic, as they worked as

a frontline worker and directly interacted with the public. There are no studies that support the results of the research.

Workplace Stress of Police Personnel during Pandemic

The mean score of workplace stress and education of police during the COVID-19 pandemic is high at 2.19 (.698) among the police personnel educated up to post-graduate level (PG). This indicates that police personnel with higher education qualification seems to have higher work stress due to the nature of work and responsibilities. There are no studies that support this finding. The mean score of police personnel belonging to the age group of 21-30 is 2.23 (.650) which indicates high workplace stress compared to other age groups. This may be due to the placement of police personnel in frontline duties, where they had to directly deal with the public causing fear and excessive stress of encountering COVID. This may also include the police personnel's workplace conditions, too much work or too many deadlines during the COVID-19 pandemic.

The mean score of workplace stress and rank of police personnel during the COVID-19 pandemic is greater than 2.22 (.656) among the police constables which indicates that the police constables (PC) have higher workplace stress compared to ASI and HC. The reason may be due to the nature of work during the pandemic i.e., they served as a frontline worker dealing with the public directly and were more prone to encounter COVID. A cross-sectional study conducted in Rohtak, Haryana to study the depression, anxiety, and stress among police during pandemic in the year 2021 revealed that police constables had high psychological distress compared to ASI (Bapna et al., 2021).

The mean score of the workplace stress and experience of police during the COVID-19 pandemic is high among the police personnel belonging to the experience group of 0-10 years which indicates that the police personnel who belong to the experience range between 0-10 years have a higher stress compared to all other experience group. This may be due to job pressure, family and personal life, lesser work experience causing lesser skill utilization, working too hard, long shift hours, handling multiple tasks at once etc. There are no studies that support this finding.

Quality of Life of Police Personnel during Pandemic

The World Health Organization's (WHO's) Quality of Life- BREF scale assesses the individual's quality of life through four domains i.e., Physical health, psychological, social

relationships, and environment. The frequency and chi-square for WHO-QOL (psychological) concerning marital status of the police personnel during the COVID-19 pandemic showed a significant association, which indicates that unmarried police personnel had poorer psychological health compared to married police personnel The result indicates a small but notable variation in stress levels possibly influenced by family responsibilities, workload, and support systems during the pandemic. There are no studies supporting this finding.

A significant mean score was found for education under the psychological domain of the quality-of-life scale. The mean score of police personnel of the PUC qualified is higher at 2.14 (.768) than the other education groups. This indicates that the PUC-qualified police personnel have a high level of psychological health. This may be due to education level has been associated with better mental health, better coping, body image and appearance, positive feelings about self and others, high self-esteem etc. A study conducted on the Quality of life among healthcare workers during the epidemic in Bangladesh in the year 2022 revealed there was a positive relationship in the psychological domain between the QOL score and the level of education among the healthcare workers (Rashid et al., 2022).

The significant mean score was found for rank under the emotional domain of the quality-of-life scale. The mean score of police personnel belonging to Head Constable indicated high psychological health compared to PC & ASI. This may be due to the moderate stress level in terms of work responsibility, positive emotions, increased confidence level, being optimistic etc. There are no relevant studies concerning the QOL (psychological health) of head constables.

The frequency and chi-square results of the social relationship of WHO-QOL and the marital status of police personnel show a significant association between married and unmarried police. The results indicate that married police exhibited a higher social relationship compared to unmarried police personnel during the COVID-19 pandemic. This may be due to the social assistance from relatives and close companions and neighbours, stable interpersonal relationships, and satisfying personal, and professional relationships among the married police personnel. A study conducted to analyse the quality of life of health workers during the COVID-19 pandemic in Indonesia found that health workers had moderate social relationships on the scale of WHOQOL-BREF (Hadning & Ainii, 2021). Another study conducted on QOL and its predictive aspects among Malaysian healthcare workers during the COVID-19

lockdown revealed that the QOL social relationship domain was lower among healthcare workers compared to the overall population (Woon et al., 2021).

A significant mean score was found for education under the social relationship domain of the WHO-QOL scale. The mean score of the police personnel qualified SSLC indicated higher social relationship 2.16 (.816) compared to other education groups. This may be due to the reduced work stress leading to higher social life and interactions and increased interaction among family members and colleagues. The study carried out in Brazil on the QOL of nurses at the time of pandemic showed that a lower education level indicated a lower level of QOL among the nurses on the contrary, the nurses who were qualified up to postgraduate level had high QOL during the COVID-19 pandemic (Caliari et al., 2022).

The environmental domain includes monetary funds, independence, physical safety, health and social services, the place in which one lives, the opportunity to learn new knowledge and abilities, engagement, opportunities for recreation and leisure activities, physical environment. The frequency and chi-square results of the environmental domain of WHO-QOL and gender of the police personnel during the epidemic showed a substantial association between the environment and male and female police personnel. The results depict that female police personnel had higher environmental health on the quality-of-life scale compared to male police personnel. This may be due to increased safety among the police personnel, less shift work among the female police personnel, and a positive home environment due to their profession at home. A study conducted to study the quality of life of Bangladesh healthcare workers during the COVID-19 pandemic revealed that the environmental QOL score was found to be significantly associated with a monthly income in the non-COVID group (Rahman et al., 2022).

The frequency and chi-square results of the environmental domain of WHO-QOL and the marital status of the police personnel during the COVID-19 pandemic showed a significant association of environment between married and unmarried police personnel. The result showed that married police personnel exhibited higher environmental health compared to unmarried police personnel. This may be due to a positive home environment, security, financial resources etc. A different result was shown in research on the quality of life among health care employees during the COVID-19 pandemic revealed that those who were single, widowed or divorced showed higher environmental QOL compared to those who were married (Woon et al., 2021). A study on the quality of life of healthcare workers in Bangladesh revealed

that higher income levels contribute to a positive effect on the environmental domain (Rahman et al., 2022).

A significant mean score was found for education concerning the WHO-QOL scale. The findings revealed that the PUC-qualified police personnel had higher environmental health compared to the SSLC, UG and PG-qualified police personnel. This may be due to adequate financial resources, a positive physical environment, recreational activities, leisure activities etc. There were no relevant studies found in this context.

T-test results of Gender and Marital Status concerning PSQ-ORG, WPS, QOL (Physical, Psychological, Social and Environmental Health)

The t-test result in the present study of gender concerning organizational police stress, workplace stress, and quality of life of police during the COVID-19 pandemic reveals that Organizational Police Stress was found to be more among males 2.24 (.841) compared to females 2.20 (.800) police personnel during the COVID-19 pandemic. A study conducted on job stress, burnout and coping among the Portuguese police task found men presented high stress and burnout whereas, females had higher enthusiasm towards their jobs (Queiros et al., 2020).

The t-test result in the current study of marital relation to PSQ-Org, WPS and QOL of the police personnel during the COVID-19 reveals that Organizational Police Stress was found to be more among the unmarried police personnel 2.40 (.749) compared to married police personnel 2.14 (.859). A study conducted in Ibadan, Oyo state, Nigeria in the year 2015 revealed that unmarried individuals experienced more burnout than married police personnel (Odedokun, 2015).

CONCLUSION

The present study offers a comprehensive understanding of the occupational stress and quality of life (QOL) of police personnel during the COVID-19 pandemic, specifically among those serving in the West Zone of Bengaluru. The findings reveal that police personnel, particularly younger individuals, constables, and those with lesser years of experience, experienced significantly high levels of organizational and workplace stress during the pandemic. Factors such as long working hours, unsafe work conditions, lack of resources, inconsistent leadership, and the emotional toll of public enforcement duties contributed to elevated stress levels.

The study further found that various socio-demographic factors such as marital status, education level, gender, and rank significantly influenced the psychological, social, environmental, and physical dimensions of QOL. Unmarried personnel, for instance, experienced more organizational stress but had better psychological health. Married personnel reported stronger social support and environmental health.

These findings underscore the urgent need for targeted mental health interventions, stress management programs, and supportive work environments to safeguard the well-being of police personnel, especially during public health crises. The study contributes valuable insights for mental health professionals, policy makers, and police departments to foster resilient support systems and to formulate preventive strategies for future emergency responses.

Despite its limitations, the study lays a strong foundation for further research and practical interventions in the area of occupational stress among frontline workers like police personnel.

SUMMARY AND CONCLUSION

This chapter summarizes the methodology adopted by the researcher and the major findings of the present study and a brief conclusion of the study is presented.

The following is the outline of this chapter.

6.1. Introduction

6.2. Methodology

6.2.1. Methods of data collection

6.2.2. Ethical consideration

6.3. Phases of the study:

6.4. Analysis of data

6.5. Results

6.5.1. Socio-demographic details of the patient.

6.5.2. Organizational stress of the police personnel.

6.5.3. Workplace stress of the police personnel.

6.5.4. Quality of life of police personnel.

6.5.5. T-test results of gender and marital status concerning PSQ-Org, WPS, QOL (physical, psychological, social, and environmental health)

6.6. Limitations of the study.

6.7. Implications of the study.

6.8. Recommendations of the study

6.9. Conclusion.

6.1. INTRODUCTION

The present study aimed to assess the occupational stress and QOL of police in COVID-19 throughout the epidemic. A descriptive research design was used by taking 402 samples of police personnel working under the jurisdiction of the West Zone of the BBMP division using Stratified Random Sampling with the Multistage Sampling method. The samples were selected based on the first responders who are either directly or indirectly contributing to the reaction to the pandemic and dealing with the public. The data was collected using a socio-demographic datasheet, organizational police stress questionnaire, workplace stress scale and WHOQOL-BREF.

The twenty-first century saw a significant viral outbreak. In December 2019, Wuhan, China reported the initial case of the coronavirus pandemic. Several people have died as a result of the virus's widespread infection around the world. In the history of human civilization, the pandemic has brought about several unprecedented and unanticipated difficulties that have increased global morbidity and mortality rates of morbidity and mortality. The coronavirus's most prevalent signs and symptoms are fever, coughing, sore throats, and breathing difficulties.

India's first coronavirus case was reported on January 30, 2020, in the Kerala district of Thrissur. Many people were unaware of the pandemic's effects in its early stages. Later, with a rise in cases and mortality rates, the virus' seriousness became apparent. The Indian government declared a state of emergency and ordered three weeks of social isolation, quarantine, and lockdown to stop the infectious virus's rapid spread throughout the country. Only essential services, such as grocery, banking, and health care, were accessible during the lockdown.

The police personnel in India have been instrumental in enforcing strict lockdown regulations, engaging in activities such as requesting people to go to their homes, threatening punishment to make them leave public spaces, barring people from standing in front of shops in markets, manning barricades to inspect vehicles at district and state boundaries, detaining offenders. Many police personnel have died as a result of contracting COVID-19 while performing their duty. Police officers work longer hours due to COVID-19's heavy workload, which poses health risks, raises stress at work, and causes psychological distress.

6.2. METHODOLOGY:

The present study was conducted in 17 police stations of Bengaluru’s west zone. Approximately, 50-80 police personnel worked on a shift basis around the day from each police station. Grounded on the inclusion and exclusion standards, 402 police personnel were selected to participate in the study. The participants were ensured about the confidentiality and the study

objectives were explained. Socio-demographic datasheet, organizational police stress questionnaire, workplace stress scale and WHOQOL-BREF were used to collect data from the respondents.

6.2.1. Method of Data Collection: A semi-structured questionnaire to collect the socio-demographic factors such as age, gender, education, marital status, duration of service, rank, and domicile of the respondents, organizational police stress questionnaire (PSQ-Org) developed by McCreary, D. R., & Thompson, M. M. in the year 2013 is a 20-item scale rated on a 7-point Likert type scale ranging from 1 (No stress at all) to 7 (A lot of stress). Reduced productivity, absenteeism, and employee turnovers are all stress-related issues that may negatively affect employers with burnt-out employees, Workplace Stress Scale (WPSS) developed by The Marlin Company, North Haven, CT, and the American Institute of Stress, Yonkers, NY is a self-report scale to measure the level of workplace stress at the workplace. It consists of eight items that measure workplace stress at low, mild, moderate, severe, and very severe levels WHOQOL-BREF is a 26-item scale prepared by the WHO containing of four domains: physical health (7 items), psychological health (6 items), social relationships (3 items), and environmental health (8 items); it also contains QOL and general health items. The data was collected between 17th January 2021 to 20th March 2021. The researcher approached the DCP, West Zone, Bengaluru and the respective Inspector in charge of selected police stations.

6.2.2. Ethical Considerations:

1. The permission was obtained from the Ethical Committee
2. The permission was obtained from the Deputy Commissioner of Police (DCP) West Zone, Bengaluru
3. Permission from an inspector of each selected station from obtained.
4. Participant informed consent was obtained.

6.3. PHASES OF THE STUDY:

The information was gathered for the current study only once from the police personnel working in the police stations belonging to the west zone of Bengaluru.

6.4. ANALYSIS OF DATA:

SPSS statistical package 26 was used for data analysis. The tests used were frequency, chi-square, T-test, ANOVA, and regression.

6.5. RESULT:

The present study focused on the occupational stress and QOL of police personnel during the COVID-19 pandemic. The organizational police stress, workplace stress and QOL of the police personnel who served as frontline workers at the time of epidemic.

6.5.1. DEMOGRAPHIC DETAILS OF THE POLICE PERSONNEL:

Age-wise distribution of the participants: The present study consisted majority (47.5%) of participants belonging to the age group of 21-30 years. Similar results were found in research conducted by Kokane et al., 2020 wherein, many fitted to the age group less than 35 years.

Gender-wise distribution: The present research had majority (80.8%) were male. This indicates that the majority of the participants were male police personnel double the female police personnel. Same outcomes were seen in the study led by Huang, Bodla & Chen, 2021 found that male participants were more compared to female participants.

Marital status of the participants: The respondents of the present study consisted of the majority (66.9%) who were married. This represents that the majority of the police personnel were married and similar results were found in research conducted by Rajbhandari et al., 2021 discovered that the many of the police personnel were married.

Education-wise distribution of the participants: The current research found that most of the respondents were qualified up to UG. This represents that most of the police personnel were educated up to undergraduate. Results found in research led by Nameirakpam et al., 2021 indicated that most of the police personnel were qualified up to graduation and above.

Rank-wise distribution of the participants: The present study found that the majority (55.2%) of the participants were police constables (PC). In a study, a similar outcome was discovered by Suma et al., 2021 which indicated that the majority of the participants were police constables.

Experience-wise distribution of the participants: The current study shows that the widely held (56%) of the participants fitted to the age group of 0-10 years. There were no studies that supported this finding.

6.5.2. DESCRIBES ABOUT ORGANIZATIONAL STRESS OF THE POLICE PERSONNEL

The organizational police stress was measured on the PSQ-Org scale. The findings of this investigation concerning the organizational stress of the police at the time of epidemic revealed that 49% (197) of the respondents had experienced a lot of stress on the PSQ-Org during the COVID-19 pandemic. The mean score of the police personnel on the PSQ-Org belonging to the age group 21-30 was 2.35 which indicates that the police personnel belonging to the age group of 21-30 had exhibited higher organizational stress compared to other age groups. The mean score of the rank of police personnel on the PSQ-Org was 2.35 (.780) which indicates that the police personnel belonging to rank ASI exhibited a higher level of stress compared to other ranks. The highest mean score of the work experience on the PSQ-Org was 2.34 (.786) which indicates that the police personnel having work experience from 0-10 years had a high level of organizational stress related to other experience groups. The above findings show that the police personnel had issues with organisational stress such as dealing with co-workers, favouritism, staff shortage, too much computer work, dealing with supervisors, inconsistent leadership skills, and pressure during free time has contributed to the organizational stress among the police personnel during the COVID-19 pandemic.

6.5.3. DESCRIBES ABOUT POLICE PERSONNEL WORKPLACE STRESS DURING COVID-19 PANDEMIC

The Workplace Stress Scale (WPS) was used to assess the workplace stress of police personnel at the time of epidemic. The mean score of WPS and education of police during the COVID-19 pandemic was found to be high at 2.19 (.698) among the police personnel educated up to post-graduate level (PG). The mean score of police personnel belonging to the age group of 21-30 is 2.23 (.650) which indicates high workplace stress compared to other age groups. The mean score of workplace stress and rank of police personnel during the COVID-19 pandemic is greater than 2.22 (.656) among the police constables which indicates that the police constables (PC) have higher workplace stress compared to ASI and HC. The police personnel having work experience between 0-10 years had a high mean score on the WPS compared to the other experience groups. The police personnel during the COVID-19 had experienced unpleasant or unsafe conditions at work, they felt that the job was negatively affecting their physical or emotional well-being, too much work, unreasonable deadlines, difficulty expressing feelings about the job conditions supervisors, job pressures interfering with

personnel life have all contributed to the increased workplace stress among the police personnel.

6.5.4. DESCRIBES ABOUT QOL OF POLICE DURING THE PANDEMIC

The World Health Organization's (WHO's) Quality of Life- BREF (WHOQOL-BREF) scale assesses the quality of life in four domains such as physical health, psychological, social relationship, and environment.

Psychological Health: The study results revealed, that the psychological health of the police personnel on the WHOQOL-BREF indicated that unmarried police personnel had a higher psychological stress compared to the married police personnel. Similarly, the mean score of the PUC-qualified police personnel was higher at 2.14 (.768) than the other education groups which indicated that the PUC-qualified police personnel had higher psychological health. The mean score was high among the police personnel belonging to the rank head constables who had higher psychological health compared to PC & ASI. The above findings indicate that the police personnel had positive feelings, self-esteem, increased concentration, and positive feelings about bodily image and appearance.

Social Relationship: The results revealed, that married police personnel exhibited high social relationships compared to unmarried police personnel. The mean score of police personnel qualified SSLC was 2.16 which indicated that they had a higher social relationship compared to other age groups. The above results indicate that married police personnel had good personal relationships, and social support from their family members. Similarly, police personnel with lesser qualifications had a better social relationship compared to the other groups.

Environmental Health: The results revealed that female police personnel had higher environmental health compared to male police personnel. The results revealed that the married police personnel exhibited higher environmental health compared to the unmarried police personnel. The mean score was found to be high among the police personnel who were qualified PUC concerning environmental health compared to another educational group. The above findings indicate that higher environmental health indicates, increased financial resources, freedom, safety and security, and a better home environment.

6.5.5. T-TEST RESULTS OF GENDER AND MARITAL STATUS CONCERNING PSQ-ORG, WPS, QOL (PHYSICAL, PSYCHOLOGICAL, SOCIAL AND ENVIRONMENTAL HEALTH)

The t-test results revealed Organizational Police Stress was found to be more among males 2.24 (.841) compared to females 2.20 (.800) police personnel during the COVID-19 pandemic. The t-test result in the present study of marital relation to PSQ-Org, WPS and QOL of the police personnel during the COVID-19 pandemic reveals that Organizational Police Stress was found to be higher among the unmarried police personnel 2.40 (.749) compared to married police personnel 2.14 (.859).

6.6. LIMITATIONS:

The study was led only in the west zone of Bengaluru.

6.7. IMPLICATIONS OF THE STUDY:

The results of the study can have implications in the areas of psychiatric social work practice, education, and research.

- **Psychiatric social work practice:** The prime responsibilities of the psychiatric social worker are to support, provide therapy and coordinate the care of individuals with mental illness. In this context, the stress of the police personnel due to the COVID-19 pandemic can be addressed and stress management interventions can be provided.
- **Psychiatric social work research:** The present study implies that there is a need to conduct research studies in the area of stress among police personnel not only during the pandemic also to study their overall stress and its impact on their general health and well-being.

6.8. RECOMMENDATIONS OF THE STUDY:

- Similar studies can be conducted by inducing more socio-demographic variables such as family details.
- General health and coping strategies of the police personnel can be assessed using GHQ, and coping scales for police personnel.
- A comparative study among the male and female police personnel, ASI and HC and HC and PC can be conducted.
- Stress management interventions can be provided to the participants to enable them to overcome stress during any pandemic.

6.9. Conclusion:

The present study highlights the significant levels of occupational and workplace stress experienced by police personnel in Bengaluru's West Zone during the COVID-19 pandemic. Younger officers, constables, and those with fewer years of experience were particularly affected. Contributing factors included long working hours, unsafe work conditions, lack of support, and increased responsibilities. These stressors impacted their psychological and physical well-being, emphasizing the mental health risks frontline workers face during crises.

The study also found that quality of life varied across socio-demographic groups, with marital status, education, and rank influencing psychological, social, and environmental well-being. Unmarried personnel reported higher stress levels, while married officers experienced better social and environmental support. These findings suggest the need for structured stress management programs, mental health support, and further research to improve the resilience and overall well-being of police personnel, especially during emergencies.

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APPENDIX

Organizational Police Stress Scale

Organizational Police Stress Questionnaire

Below is a list of items that describe different aspects of being a police officer. After each item, please circle how much stress it has caused you over the past 6 months, using a 7-point scale (see below) that ranges from "No Stress At All" to "A Lot Of Stress":

No Stress At All			Moderate Stress			A Lot Of Stress
1	2	3	4	5	6	7

1. Dealing with co-workers	1	2	3	4	5	6	7
2. The feeling that different rules apply to different people (e.g. favouritism)	1	2	3	4	5	6	7
3. Feeling like you always have to prove yourself to the organization	1	2	3	4	5	6	7
4. Excessive administrative duties	1	2	3	4	5	6	7
5. Constant changes in policy / legislation	1	2	3	4	5	6	7
6. Staff shortages	1	2	3	4	5	6	7
7. Bureaucratic red tape	1	2	3	4	5	6	7
8. Too much computer work	1	2	3	4	5	6	7
9. Lack of training on new equipment	1	2	3	4	5	6	7
10. Perceived pressure to volunteer free time	1	2	3	4	5	6	7
11. Dealing with supervisors	1	2	3	4	5	6	7
12. Inconsistent leadership style	1	2	3	4	5	6	7
13. Lack of resources	1	2	3	4	5	6	7
14. Unequal sharing of work responsibilities	1	2	3	4	5	6	7
15. If you are sick or injured your co-workers seem to look down on you	1	2	3	4	5	6	7
16. Leaders over-emphasise the negatives (e.g. supervisor evaluations, public complaints)	1	2	3	4	5	6	7
17. Internal investigations	1	2	3	4	5	6	7
18. Dealing the court system	1	2	3	4	5	6	7
19. The need to be accountable for doing your job	1	2	3	4	5	6	7
20. Inadequate equipment	1	2	3	4	5	6	7

Workplace Stress Scale

	Never	Rarely	Sometimes	Often	Very Often
Conditions at work are unpleasant or sometimes even unsafe	1	2	3	4	5
I feel that my job is negatively affecting my physical or emotional well-being.	1	2	3	4	5
I have too much work to do an/or too many unreasonable deadlines.	1	2	3	4	5
I find it difficult to express my opinions or feelings about my job conditions to my superiors.	1	2	3	4	5
I feel that job pressures interfere with my family or personal life.	1	2	3	4	5
I feel that I have inadequate control or input over my work duties.	1	2	3	4	5
I receive inadequate recognition or rewards for good performance.	1	2	3	4	5
I am unable to fully utilize my skills and talents at work.	1	2	3	4	5

World Health Organization-Quality of Life (BREF)

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life **in the last four weeks.**

		Very poor	Poor	Neither poor nor good	Good	Very good
1.	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2.	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about **how much** you have experienced certain things in the last four weeks.

		Not at all	A little	A moderate amount	Very much	An extreme amount
3.	To what extent do you feel that physical pain prevents you from doing what you need to do?	5	4	3	2	1
4.	How much do you need any medical treatment to function in your daily life?	5	4	3	2	1
5.	How much do you enjoy life?	1	2	3	4	5
6.	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	Extremely
7.	How well are you able to concentrate?	1	2	3	4	5
8.	How safe do you feel in your daily life?	1	2	3	4	5
9.	How healthy is your physical environment?	1	2	3	4	5

The following questions ask about how completely you experience or were able to do certain things in the last four weeks.

		Not at all	A little	Moderately	Mostly	Completely
10.	Do you have enough energy for everyday life?	1	2	3	4	5
11.	Are you able to accept your bodily appearance?	1	2	3	4	5
12.	Have you enough money to meet your needs?	1	2	3	4	5
13.	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14.	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Very poor	Poor	Neither poor nor good	Good	Very good
15.	How well are you able to get around?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16.	How satisfied are you with your sleep?	1	2	3	4	5
17.	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18.	How satisfied are you with your capacity for work?	1	2	3	4	5
19.	How satisfied are you with yourself?	1	2	3	4	5

20.	How satisfied are you with your personal relationships?	1	2	3	4	5
21.	How satisfied are you with your sex life?	1	2	3	4	5
22.	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23.	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24.	How satisfied are you with your access to health services?	1	2	3	4	5
25.	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to how often you have felt or experienced certain things in the last four weeks.

		Never	Seldom	Quite often	Very often	Always
26.	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	5	4	3	2	1

Do you have any comments about the assessment?

_____

_____

[The following table should be completed after the interview is finished]

		Equations for computing domain scores	Raw score	Transformed scores*	
				4-20	0-100
27.	**Domain 1**	(6-Q3) + (6-Q4) + Q10 + Q15 + Q16 + Q17 + Q18 ☐ + ☐ + ☐ + ☐ + ☐ + ☐ + ☐	a. =	b:	c:
28.	**Domain 2**	Q5 + Q6 + Q7 + Q11 + Q19 + (6-Q26) ☐ + ☐ + ☐ + ☐ + ☐ + ☐	a. =	b:	c:
29.	**Domain 3**	Q20 + Q21 + Q22 ☐ + ☐ + ☐	a. =	b:	c:
30.	**Domain 4**	Q8 + Q9 + Q12 + Q13 + Q14 + Q23 + Q24 + Q25 ☐ + ☐ + ☐ + ☐ + ☐ + ☐ + ☐ + ☐	a. =	b:	c:

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