EXPERIENCES OF STRESS BY LAW ENFORCEMENT OFFICERS: A STUDY OF KOLKATA POLICE

Arpan Bag
Research Scholar, School of Social Work
Tata Institute of Social Sciences
Mumbai, India
arpan2by@gmail.com

ABSTRACT

Policing is believed to be a nerve-wracking job. Stress is inevitably associated with uniformed services. Police personnel face multiple mental conflicts and internal turmoil, in their service period. The study is located in Kolkata. The aim of the study is to understand the police perception of stress, the different levels of stress arising from multiple sources- organizational and operational, within the police station and the department in its entirety. The study uses a mixed method approach to combine quantitative and qualitative data to get an extensive picture and understand the gravity of the situation. The unresolved frustrations and personal conflicts result in stress and in order to deal with it they develop their own coping mechanisms. The current study analyses this with the demographics and also looks into how a personnel is affected and the multiple ways of navigating through it.

Key words- Policing, Organisational stress, Operational stress, Coping, Mental conflict

I.   INTRODUCTION

Policing is considered as one of the most nerve-wracking job. 'Stress' is predictably related with policing as working conditions are adverse enough to add stress in their life. They have to deal with conflict on a regular basis, which can be work related or personal. The police as an organization with existing hierarchy of problems and administrative ineffectiveness, have to face challenges such as potentially traumatic experiences, staff shortage, inadequate resources and detachment from social life. The police personnel face multiple mental conflicts and internal turmoil. The unresolved frustrations and personal conflicts result in stress and the process is never ending. They hardly get time to seek professional help, so they develop their own mechanism of dealing with it. While dealing with these stressors the personnel develop their own coping mechanisms, which is guided by their personality and the kind of support system they have. The police thus face many constraints in playing the roles expected of them which affects their emotional, psychological and social wellbeing.

In this study the researcher is looking at the experience of stress by police personnel, how it affects their work life balance and the coping mechanisms that they develop in order to navigate through stress.

II.   REVIEW OF LITERATURE

Crime statistics of 2011 reveal that a total number of 4,881 police personnel (comprising 3,822 natural deaths, 867 deaths on duty and 192 suicidal deaths) died as compared to 3,988 deaths in the year 2009 showing an increase of 8.17% over the previous year (NCRB, 2012). But casualties while on duty (867) decreased during 2011 by 1% as compared to previous year (872). On the other hand, police casualties due to suicide are increasing steadily over the years.

In 2008, 139 police personnel committed suicide, 162 in 2009, 189 in 2010 while 192 suicidal deaths were reported in 2011 (NCRB, 2012). This is showing an increase in stress level of police personnel. It was reported that highest number of casualties in Punjab (110) followed by casualties in Uttar Pradesh (105). Crime statistics further reveals that a total of 3,299 police personnel of various ranks sustained injuries while performing their duties in the year 2011. The trend analysis shows that there is a continuous increase in death and injuries of police personnel over the years.

"The existing police infrastructure is also inadequate to cater to the needs of the police force. There is a huge manpower shortage in the police department. The police-population ratio, currently 192 policemen per lakh population, is less than what is recommended by UN i.e. 222 policemen per lakh population."[1] This outcomes in overburdening of work which is another grave challenge for the police force. Overburdening of work not just lessens the viability and effectiveness of the police faculty yet in addition prompts mental misery which adds to different crimes committed by the police officers.[2]

In contrast to the working hours for civilians, staff individuals from police stations need to stay on the job for 11 hours or more for every day. 27.7% SHOs and 30.4% supervisory officials even announced that their staff worked for over 14 hours per day. As though this isn't sufficient, 73.6% of police station staff showed that they were not ready to avail week after week offs even once every month. What exacerbates things is that most (over 80%) of the staff are normally reviewed to obligation during their off time, to manage crises of peace, VIP obligations or different works.

This limited force has much progressively constrained material help. 342 police headquarters the nation over don't have a phone; 127 stations have no remote offices and 54 have neither of the two. To arrive at the crime scene, the police has somewhat more than seven vehicles for each hundred cops. Absence of scientific help has accumulated pending shows to the tune of 6, 54,859 holding back to be analyzed as on 1 January 2015. Ghosh (1981) noted that Indians are all familiar with the *paan* chewing, discourteous, rude, and aggressive and bully figure in *Khakhi*. But, similarly Indians are unaware about the fact that police in India is largely underpaid, understaffed, overworked, demoralized, inadequately trained and equipped and subject to political interference, feared as a persecutor rather than respected as a protector, often callous and corrupt.

The study tries to understand the work of the unarmed police force, the stressors associated with their job and how it affects their physical and mental health at large.

---

[1] Bureau of Police Record & Development, "Data on Police Organisation," (2017): pp. 37

[2] https://www.orfonline.org/expert-speak/why-india-needs-urgent-police-reforms-46003/

Policing is considered as one of the most stressful job, stress is inevitably associated with policing. The working conditions are enough to stress them out. They have to deal with conflict on a regular basis, be it conflict at their work place or be their personal conflicts. The police as an organisation with hierarchy of problems and administrative ineffectiveness has to face challenges in the form of potentially traumatic experiences such as life threatening physical assault or witnessing disturbing images of deaths (Toch, H. 2002).

The statistics of 2001 (National Crime Records Bureau) revealed that there were a total of114 cases of police suicide across different states in India while the 2013 record disclosed 214 suicide cases. This escalation in suicide cases may be attributed to the levels of stress among police personnel (Burke & Mikkelsen, 2007).

Complaints against police personnel by civilians about their cynical behaviour have also considerably increased over the years. The complaints reported in 2001 was 12, 345 while those in 2013 were 51,120 (National Crime Record Bureau) which may be a result of chronic stress experienced by the personnel. The past literature and current statistics demands a study to identify and focus on what causes stress among police workforce.

Among innumerable occupations available in modern society, police work are regarded as one the most stressful jobs. Police officers are routinely exposed to acute stressors involving violent confrontations with suspects or having to use lethal weapons. They also experience chronic stresses stemming from night shifts, poor work environments, or seemingly ungrateful citizens

(Cheong & Yun, 2011). Compared to their historical counterparts, contemporary police officers experience additional "evolving stressors" (Slate, Johnson, & Colbert, 2007, p. 102) as police organizations strive to accommodate emerging political contingencies and societal expectations. Umranikar (2004) has narrated the results of similar studies. He states that according to the Mumbai study, on festive days, police force is on the streets rather than celebrating festivals. This means that police officers and other ranks in the commissionarate can't avail holidays or leave due to this. For various reasons, police work in 12 hour shifts while the labour law provides for an 8 hour shift. In view of the shortage of man power heavy crime work and uncertain law and order duties, policemen have to work for 16 hours at a stretch. They also do not avail weekly holidays, casual leave, earned leave and the other gazetted holidays. As a result, over- worked policemen suffer from stress related diseases like diabetes, high blood pressure, ulcer, heart problems etc.

Some officers who cannot cope with stress turn to alcohol and other vices that can lead to family conflict. In extreme cases, suicide is the end result of stress. If departments increased law enforcement officers' options on how to deal with stress, officers might be more likely to seek help and reduce the number of police suicides. Because aspects of policing can overwhelm officers, signs of depression are possible if coping and general help are not sought out. (Olson and Surrette 2004 cited in Kenwright, D. 2008) explain the causes and effects of stress in relation to anxiety and depression. In general, people who become depressed with their jobs also experience a decrease of care in their lives. In their jobs, satisfaction decreases, work days are missed, and more mistakes are made than usual (Bhagat, McQuaid, Lindholm, & Segovis, 1985 cited in Kenwright, D. 2008). Also, while on the job the employee becomes less efficient and may be close to quitting or being fired. Outside the job, the employees may lose interest or withdraw from friends and from their overall support system (Cyranowski, Frank, Young, & Shear, 2000 cited in Kenwright, D, 2008). Because of the stressful environment in which police officers work, there is a possibility they will suffer stress and, therefore, be ineffective.

Mechanisms have been undertaken by the police administration in India, to provide special attention to the physical health of the police personnel, but very little work has been done on the field of mental health of the police personnel. Some stress buster programmes are conducted by the police department but very less and not a permanent approach to the underlying problem of mental health with in the police department. In contrast there are facilities within the armed forced to deal with their psychological issues arising from their work, but in case of the police force that approach has still not been taken into consideration. In the western context the mental health of police has been taken up very seriously. This is a matter of grave concern to look up for the mental wellbeing of the police personnel to build a strong police force. The personal and the public impact of stress thus then is an area to be explored and understood to build a strong responsive and pro people police system and ensure the smooth functioning of the criminal justice system. The person vested with the responsibility of safety and security of the citizens, their safety should be a part of the administration, for providing the service for which it has been established.

III. METHODOLOGY

A. Rationale

The police, face many constraints while executing and carrying out the law enforcement roles expected of them. This in turn, affects their emotional, psychological and social well-being and makes them vulnerable due to the multiple interpersonal and intra personal conflicts faced by them. This leads to mental health issues as it affects their identity and contests their beliefs and ideologies as an individual. These lead to multiple coping mechanisms such as developing certain stereotypes, ascribing notional criminal behaviours to a community which in turn impacts the efficiency and world view of justice in their service.

While the conditions differs across police stations based on the work environment and context of the police station there are some similarities which demand a re-look at the stress and mental health experience of law enforcement personnel.

The adaptive mechanisms while may help the law enforcement personnel to cope, it's the maladaptive mechanisms that have negative outcomes for both the personnel and the law and order jurisdiction under his/her control. The personal and the public impact of stress thus then is an area to be explored and understood to build a strong responsive and pro people police system and ensure the smooth functioning of the criminal justice system.

The study primarily tries to understand the experiences of stress on the physical and mental health of Law Enforcement Officers. This chapter lays the foundation of the research, it tells about the methodology that has been incorporated to carry out the research.

B. Research Objectives
* To study the socio-demographic profile of the law enforcement officers.
* Understand police perception of stress.
* Identify the level of stress associated with policing.
* To understand the various coping mechanisms related to stress.
* Identify the various services available to deal with stress and mental health within the law enforcement system.

1. Is there any relation between demographic variable and stress?

2. What is the meaning of stress for a law enforcement officer?

3. How do different factors impact stress in the police station?

4. What is their concept of mental health and mental well-being?

5. How does stress impact mental well-being?

6. What are the various support systems available to deal with stress?

D. Research Design

A *Mixed Method* Approach has been adopted. Some of the research questions are more oriented towards quantitative approaches, other questions lend themselves to qualitative approaches (Rocco et al, 2003), whereas some questions called for an integration of both qualitative and quantitative methods (Tashakkori, A., & Teddlie, C. (2009). A mix of both methodologies, combining the benefits of quantitative and qualitative approaches would fulfil the objectives of the study.

This is the "Inside Out & Bottom-Up, Horses' Mouth" approach. The design used is explanatory as the study aims to understand the police perception of stress and its link to mental health and try to explain how stress impacts the law enforcement officers. The study will be a cross-sectional as data will be collected at a single point across ranks.

E. Tools

Objectives	Research questions	Method and Tools
1. To study the socio-demographic profile of the law enforcement officers	1. Is there any relation between demographic variable and stress?	QUANTITATIVE Self-administered questionnaire
2. Understand police perception of stress	1. What is the meaning of stress for a law enforcement officer? 2. What is their concept of mental health and mental well-being? 3. How is stress associated with mental well-being?	QUALITATIVE In-depth interview (semi-structured interview guide)
3. Identify the level of stress associated with policing	1. How do different factors impact stress in the police station?	QUANTITATIVE Organisation Police stress questionnaire Occupational Police stress Questionnaire

4. To understand the coping mechanism related to stress	1. What are the various coping mechanisms adapted by the police personnel? 2. What influences their coping?	QUALITATIVE In-depth interview (semi-structured interview guide)
5. Identify the various services available to deal with stress and mental health within the law enforcement system	1. What are the various support systems available to deal with stress?	QUALITATIVE In-depth interview (semi-structured interview guide)

F. Universe

The universe of the study will be police personnel working in Kolkata Police. The study will be focusing on the civil police. District police is divided into two major branches of police force i.e. the armed police and the civil police. The primary function of the civil force is to control crime, while the primary function of armed police is to deal with law and order situation.

G. Unit of analysis and information

The unit of analysis for the study will be individual police personnel as well as the police station. As the study tries to explore the individual perception of stress and response to it within the police system and the environment of the police station.

H. Methods and tools

The structured-interview

For capturing the socio-demographic profiles of the respondents, structured interview method was used. A structured interview, entails the administration of an interview schedule or a self-administered questionnaire, where by 'each respondent receives exactly the same interview stimulus as any other'. The tools used for data collection as mentioned earlier was a self-administered questionnaire prepared on the basis of research questions, review of literature and the researcher's experience of working with the police personnel.

The in-depth interview

To understand the police perception of stress, identify the various sources of stress, the various support systems available to deal with the stress generated, the various problems associated with the job and the stress related to the job, the effect of the stress on their physical and mental health also understand the varied ways of coping undertaken by the police personnel to navigate through stress.

For this the tool used was interview guide developed for the respondents. The guide was developed on the basis of the research questions, review of literature and the researcher's past experience of working with the police personnel.

Level of stress from various sources

To calculate the level of stress that is being experienced from various sources, Organisational Police Stress Questionnaire and Operational Police Stress Questionnaire (McCreary, D.R., & Thompson, M.M. (2006) has been used. The Operational Police Stress Questionnaire (PSQ-Op) is a short, psychometrically sound measure of the operational stressors associated with policing, which should be used in future programs of research investigating the associations among stress, physical health, and psychological well-being. The Organisational Police Stress Questionnaire (PSQ-Org)38 is the tool to measure what aspects of policing are most stressful and what impact do these stressors have on health and wellbeing of police. Both the tools have been developed by McCreary, D. R., & Thompson, M. M. However the actual scoring process of the tool i.e. by summing or averaging the 20 items from each to create separate PSQ-OP and PSQ-Org scale scores (McCreary, D.R., & Thompson, M.M. (2006) was not used.

All the tools were translated to Bengali for the purpose of the study. The interviews were conducted in Bengali, later it was translated to English.

I. **Sampling**

Convenience sampling was used, for the purpose of the study. Convenience sampling is a type of sampling where the first available primary data source will be used for the research without additional requirements. In other words, this sampling method involves getting participants wherever you can find them and typically wherever is convenient (Teddlie & Yu, 2007). As police work is very strenuous and they have to follow a very hectic work schedule, so during data collection the researcher will be considering their schedule so convenient has been used.

J. **Sample size**

As of 2017, Kolkata Police has 8 divisions covering 70 police stations. It has a strength of approximately 35,000 and a territorial jurisdiction of 243 km2 (approx.). A tentative list of police stations were made. Earlier 10 police station from were selected from the divisions, but due to time constrains data collection was restricted to 6 police stations. The 6 police stations were selected on the basis of discussion with the main police station in each of the division, on the basis of the crime rate and population. A total of 9 in-depth interviews were conducted, and for the quantitative data 50 interviews were conducted.

K. **Location**

The study has been conducted in the police stations within the city of Kolkata, West Bengal. The primary reason for taking up Kolkata is that according to the statistics in the NCRB West Bengal occupies the 3rd position in the increasing rates of suicide of police personnel. The familiarity with the language will help in building rapport easily with the participants and will act as a catalyst during the process of data collection.

KOLKATA POLICE AREA MAP
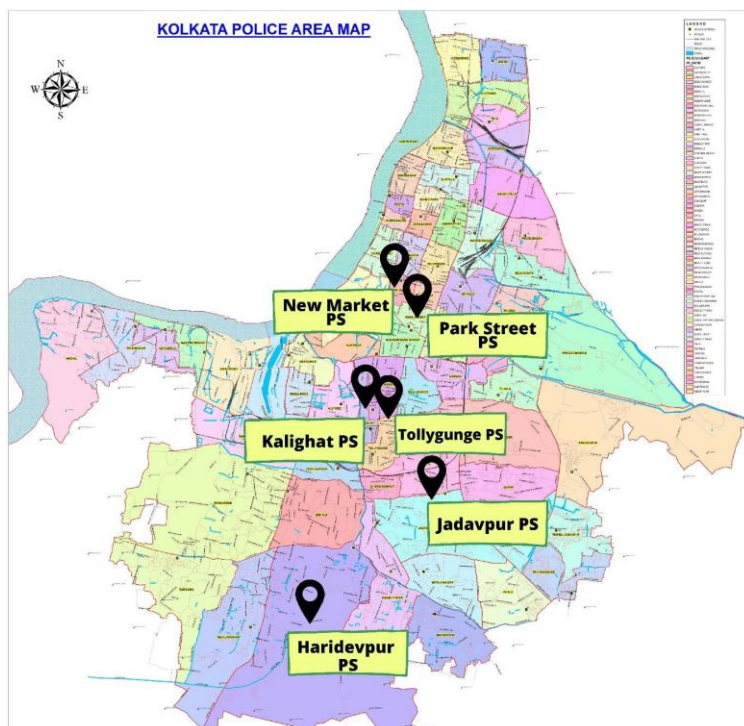
For the purpose of the study the researcher has used Methodological triangulation to understand the perception of stress of the police personnel and the level of stress that arises from the different sources. First quantitative data was collected with the help of two tools, PSQ-Op and PSQ-Org, to measure the level of stress arising from different sources, associated with the job of policing, later in-depth interviews were conducted, to get a better understanding about the sources of stress and how it actually affects them, assessing the level of stress arising from each of the sources.

L. **Data analysis**

The quantitative data obtained were analysed through the Statistical Package for the Social Sciences (**SPSS**) is a software package used in statistical analysis of data. It was developed by **SPSS** Inc. and acquired by IBM in 2009 (Bryman & Cramer, 2012), and the frequency and cross tables emerging from this analysis have been interpreted to suggest findings.

The in-depth interviews with nine participants, have been analysed through narrative analysis within which thematic analysis has been used.

The researcher has used thematic analysis to analyse the interviews to understand the police perception of stress and its effect on the physical and mental health of the individuals and the ways of dealing with it.

In thematic analysis, the emphasis is on the content of a text, 'what' is said more than 'how' it is said, the 'told' rather than the 'telling'. Because interest lies in the content of the speech, analysis revolves around what is said by focusing on the meaning of what is said.

The PSQ-Op and PSQ-Org was analysed using the Statistical Package for the Social Sciences (**SPSS**) is a software package used in statistical analysis of data. It was developed by **SPSS** Inc. and acquired by IBM in 2009 (Bryman

& Cramer, 2012), to find the various level that have been marked by the respondents on a scale of 1-7. The frequencies were represented and interpreted to get the findings.

IV.   FINDINGS

A.   Demographics of participants

 The data depicted that a majority of the participants were in the age group of 30-45 years i.e. 31 (66%) in which 31 are male and 2 female,. There is considerable lower representation of women in the older age group. A perceptible under representation of the people from Schedule caste and Scheduled tribe emerges in the data vis a vis the reservation policy in India. However this needs to be verified with a complete sample coverage of the given police station. Heartening was the presence of people from the Muslim community of which one participant considered himself a part of the general population over his minority identity. Another interesting fact that emerges is that 74 percent of the police personnel were staying in their own house and 14 percent i.e. 7 were staying in police quarters. Thus indicating that there might be a shortage of police quarters but definitely not a crisis as often construed. Figure 4.4 reveals the serious issue of underemployment in the department as the post police sepai requiring the lowest educational qualification i.e. secondary holds the highest number of respondents i.e. 60 percent i.e. 30 participants, in which 93 percent i.e. 28 participants were overqualified for the position. As a result, a most participants had income above 30,000, but interestingly all of them were not of the same rank. A majority of participants claimed to be happily married, staying with their families i.e. 88 percent or 44 participants. And a majority of participants were having a service duration of 15-20 years.

B.   Findings of the study

The study aimed at understanding the experience of stress by the law enforcement officials. The chapter consolidates the major findings of the study in relation to the objectives and research questions that were formulated for the study.

The first objective was to get an understanding of the socio-demographic profile of the police personnel and see whether there is any relation between stress and demographic variables. The collected data showed that 50 participants a majority of the participants were in the age group of 30-45 years. Lower representation of women can be seen in the older age group depicting the fact that recruitment of women in the police started late. It seems there was a slight under representation of the people from Schedule caste and Scheduled tribe, in the department, in comparison to the reservation policy in India. Serious issue of underemployment in the department emerged as there most personnel were over qualified for the post they were recruited for. Maximum number of participants had income above 30,000, but all of them were not of the same rank.

Some of the demographic variables were cross tabulated with stress factors, to establish the relation of stress generation and demographics. It was found that the younger population is at much risk than the older ones, as the personnel grow old, their social attachment also becomes loose, whereas the younger group find themselves strongly attached to their social life and the lack of ability to engage in their social life causes high amount of stress. Experience of stress by caste has been elaborated, which reveals that along with under representation of the people from scheduled caste and scheduled tribe, certain amount discrimination also takes place within the department that is a replica of the structural discrimination that is present in the society affecting these categories of people. In the cross tabulation with designation the data prominently showed that the stress experienced by the

police constables were much higher than the other ranks. They were the most oppressed population in the department. This gave a clear picture of the hierarchy present within the organization and how it impacts the police personnel. Bureaucratic red tape was one of the major stressor across all the ranks causing high amount of stress, standing as a barrier in the proper functioning of the department.

The impact of stress from different factors in the police station was mainly divided into organizational and operational. The impact was seen on the social life and the health of the police personnel. Data shows that that the stressors identified and discussed by the police personnel were arising as result of their occupation. Each and every stressor was directly linked with the profession. The most important identified stressor that affects the individual at personal level was not being able to spend quality time with family and friends, this is due to the extra hours that they have to invest in their job. Followed by the mismanagement of time to indulge in social life. Both of these stressors primarily occur due to the erratic work timings in the job and causes stress for the individual, when the person feels detached with their social life and not meet the expectations of their family members as well as friends. This further complicates the situation when the members of family and lack in their capacity to understand the job, and the work associated with it, everyone has preconceived notion about the job and they constantly go on judging the individual associated with the job. This also happens due to the lack of transparency of the working procedure of the system, and the stigma attached with it. All these factors individually as well as combined create a huge amount of stress for the police personnel, which becomes difficult to deal with. The major organizational stressors that emerged from the table were- staff shortage, inadequate equipment, excessive administrative duties, dealing with court system and unequal sharing of work responsibilities.

The data highlighted the expectations from a police personnel within the department which lead to stress. The most important were: working overtime, working on off days etc. These stressors emerge directly out of the primary stressors of organizational stress i.e. staff shortage, inadequate equipment- shortage of staff increases the work load on the individual and compels him/her to stay overtime to finish their job, and eventually miss out on off days. Excessive paper work points out the process of work in the department, as each and every thing needs to be documented. In the organization where there is shortage of equipment as discussed earlier managing the paper work and also making arrangement for the paper itself becomes excessively stressful.

Different stressors related to the health of the individual was identified, all of these were associated with the job. Working at night was found to be the most stressful followed by the risk of being injured on job. Finding time to keep themselves physically fit and maintaining a healthy eating routine was also identified as prominent stressors.

While looking at the effect of stress on mental health of the police personnel most of them admitted that in due course of their service they are under constant mental pressure. The requirement of the job is such that along with physical pressure the individual has to undergo huge amount mental pressure. Certain characteristics of the job directly infiltrates the psychological well-being of the individual associated with it. The major guiding factors behind this pressure are overwhelming amount of work due to acute shortage of staff, lack of social engagement, inadequate family time, being constantly under the radar of the supervisors who emphasizes on the negatives, lack of rewards and potentially traumatic events. All these stressors affect the mental well-being in an adverse manner, such as low productivity, change in behaviour- emotional outburst and in extreme cases there is a possibility of mental illness and death.

So in order to deal with the tremendous stress the police personnel develop their own coping mechanisms. Coping mechanisms as indicated by the participants varies from person to person, like physical exercise work out for some people as a stress buster whereas watching movies and spending time with friends help to release stress. Sharing experiences with family members, exercising, meditation, sharing experience with colleagues and seniors were the primary mechanisms identified by the participants. Beside activities such as watching movies, power nap, listening to songs as well as singing was also mentioned. The police personnel shared that they learn to adapt and develop mechanism for coping by interacting with their senior officers, whom they see as role model. The social learning theory says that the people learn from one another, via observation, imitation and modelling. It implies that people often model behaviour in those similar to themselves. One of the maladaptive coping mentioned by several of the participant is that of substance abuse. Withdrawal was also mentioned by some of the participants.

The data shows that, most of the stressors are due to the administrative failures and the rigid structure of the police department. These impact the normal functioning of the system and place the police personnel in a vulnerable position, where he/she has nothing to do rather to accept the ongoing process.

While discussing about the services within the organization to deal with stress and promoting good mental health, all respondents shared it is drastically lacking and that it needs to be explored. The shared experiences of the police personnel show that that there is a lack of initiative on behalf of the administration to resolve the issues within the police department as most of the stress was generated either due to the present working conditions or the way in which the job is done. It is necessary to resolve these issues to build a strong responsive and pro people police system and ensure the smooth functioning of the criminal justice system.

REFERENCES

[1] American Psychological Association. Stress: Retrieved on 20 April 2018 from: http://www.apa.org/helpcenter/stress-kinds.aspx

[2] American Addiction Center, & American Addiction Center. (2018, March 19). Top 3 Common Mental Health Challenges among Police Officers. Retrieved from https://medium.com/first-responders/top-3-common-mental-health-challengesamongpolice-officers-110d9f628d5f

[3] Aaron, J. (2000). Stress and coping in police officers. Police Quarterly, 3, 438-450.

[4] Avdija, A. S. 2014). Stress and law enforcers: testing the relationship between law enforcement work stressors and health-related issues. Health Psychology and Behavioral Medicine, 2(1), 100–110. http://doi.org/10.1080/21642850.2013.878657).

[5] Bushra. (n.d.). Literature Review. Retrieved September 5, 2018, from http://shodhganga.inflibnet.ac.in/bitstream/10603/21078/11/12_chapter 3.pdf

[6] Brown, J. M., & Campbell, E. A. (1994). Stress and policing: Sources and strategies John Wiley & Sons.

[7] Beehr, T., Johnson, L., & Nieva, R.1995). Occupational Stress: Coping of Police and Their Spouses. Journal of Organizational Behavior, 16(1), 3-25. Retrieved from http://www.jstor.org/stable/2488609

[8] Brannen, J. (2005). Mixing methods: The entry of qualitative and quantitative approaches into the research process. *International journal of social research methodology*, 8(3), 173-184.

[9] Bryman, A., & Cramer, D. (2012). *Quantitative data analysis with IBM SPSS 17, 18 & 19: A guide for social scientists*. Routledge.

[10] Bhusra. (n.d.). Chapter-6, ROLE OF POLICE IN ADMINISTRATION OF CRIMINAL JUSTICE SYSTEM. Retrieved from https://shodhganga.inflibnet.ac.in/bitstream/10603/45012/11/11_chapter 6.pdf

[11] Bratz, L.L.(1979). 'Combating Police Stress', F.B.I. Law Enforcement Bulletin,55, (1). U.S.Depaetment of Justice, Washington, D.C. 20535.

[12] Bhusra. (n.d.). Police in India (dissertation). Retrieved from https://shodhganga.inflibnet.ac.in/bitstream/10603/21078/10/11_chapter 2.pdf

[13] Cheong, J., & Yun, I. (2011). Victimization, stress and use of force among South Korean police officers. Policing: An International Journal of Police Strategies & Management, 34(4), 606–624.

[14] Coping with everyday stress. (n.d.). Retrieved from https://www.thinkmentalhealthwa.com.au/about-mental-health-wellbeing/ways-tolook after-your-mental-health/coping-with-everyday-stress/

[15] Carver, C. S., Scheier, M.F., & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach. Journal of Personality and Social Psychology, 56, 267-283.

[16] Coman, G. & Evans, B. (1991). Stressors facing Australian police in the 1990s, Police Studies, 14,153-65.

[17] Crannage, A. (2018, May 16). How does stress impact our mental health? Retrieved from https://www.mqmentalhealth.org/posts/stress-and-mental-health

[18] Chapter 8 Stress among Mumbai Police Force. (n.d.). Retrieved June 12, 2019, from http://shodhganga.inflibnet.ac.in/bitstream/10603/7597/13/13_chapter 8.pdf

[19] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

[20] Crime in India, Crime in India (2012). Retrieved from http://ncrb.gov.in/StatPublications/CII/CII2012/Statistics2012.pdf

[21] David H. Bayley , The Police and Political Development in India, 1969, p.51. 82. Ibid.

[22] Desai, T. (1999). Indian Journal of Industrial Relations, 35(2), 249-252. Retrieved from http://www.jstor.org/stable/27767657

[23] Denzin, N. (2006). *Sociological Methods: A Sourcebook.* Aldine Transaction. ISBN 978-0-202-30840-1. (5th edition)

[24] Depue, R. L. (1979). Turning inward: The police officer counselor. FBI Law Enforcement Bulletin, 48(2), 9-13.

[25] Gautam, D. N. (1993). *The Indian police: A study in fundamentals*. Mittal Publications, p. 85.

[26] Ghosh, Dwaipayan (27 February 2014). "Four new police stations in Kolkata" (http://timesofindia.indiatimes.com/city/kolkata/Four-new-police-stations-in- Kolkata/articleshow/31103457.cms). The Times of India. Retrieved 27 April 2014.

[27] G, Ragesh & Tharayil, Harish & TP, Meharoof & Philip, Mariamma & Hamza, Ameer. (2017). Occupational stress among police personnel in India. Open Journal of Psychiatry & Allied Sciences. 8. 10.5958/2394-2061.2017.00012.X.

[28] http://www.humanrightsinitiative.org/publications/police/ police_organisations.pdf, Accessed on 20/1/2020.

[29] Harper, H., Evans, R. C., & Thornton, M. (1999). A cross-cultural comparison of police personality. International Journal of Comparative and Applied Criminal Justice, 23, 1-15

[30] He, N., Zhao, J., & Ren, L. (2005). Do race and gender matter in police stress? A preliminary assessment of the interactive effects. Journal of Criminal Justice, 33, 535- 547.

[31] He, N., Zhao, J., & Archbold, C. (2002). Gender and police stress: The convergent and divergent impact of work environment, work-family conflict, and stress coping mechanisms of female and male police officers. Policing: An International Journal of Police Strategies & Management, 25, 687-708.

[32] Hudek-knežević, J., Kardum, I., & Maglica, B. K. (2005). The sources of stress and coping styles as mediators and moderators of the relationship between personality traits and physical symptoms, 12(2), 91–101.

[33] Hardy, M. A., & Bryman, A. (Eds.). (2009). *Handbook of data analysis*. Sage

[34] InsightsIAS. (2019, October 24). Insights into Editorial: A road map for criminal justice reforms. Retrieved from https://www.insightsonindia.com/2019/10/24/insights-into-editorial-a-road-map-forcriminal- justice-reforms/'

[35] Jogsan, Y., & Jogsan, Y. (n.d.). Job Stress and Mental Health among Police Personnel. Retrieved from https://www.academia.edu/19027613/Job_Stress_and_Mental_Health_among _Police_Personnel.

[36] Jain, S., & Gupta, A. Building smart police in India: background into the needed police force reforms, building smart police in India: background into the needed police force reforms (n.d.). Retrieved from https://niti.gov.in/writereaddata/files/document_publication/Strengthening-Police- Force.pdf

[37] Kenwright, D. (2008). Police Stress: An Examination of the Effects of Stress and Coping Strategies.

[38] Kolkata Police 162 Years of Service. (n.d.). Retrieved January 26, 2020, from http://www.kolkatapolice.gov.in/

[39] Kumar, V., & Kamalanabhan, T. J. (2014). Sources of stress among police officials: a qualitative investigation. Indore Management Journal, 6(1), 79-89.

[40] Kolkata Police Force. (2020, February 28). Retrieved from https://en.wikipedia.org/wiki/Kolkata_Police_Force

[41] LANGUAGE IN INDIA. (n.d.). Retrieved from http://www.languageinindia.com/nov2005/mentalconcepts1.html

[42] Learning, L. (n.d.). Sociology. Retrieved from https://courses.lumenlearning.com/alamo-sociology/chapter/readingsymbolicinteractionist- theory/

[43] Labaree, R. V. (2019). Organising your Social sciences Research Paper: Types of Research designs. 2009.

[44] Mathur Pragya, Stress in police in India, Recognition, Diagnosis and Copying strategies, Gyan Publishing House, New Delhi, 1999, pp, 7-8.

[45] Mathur K. M. Police in India, problems and Perspectives, Gyan Publishing House, new Delhi, 1995,p. 276

[46] Morash, M., & Haarr, R. (1995). Gender, workplace problems and stress in policing. Justice Quarterly, 12, 113–140.

[47] McCreary, D.R., & Thompson, M.M. (2006). Development of two reliable and valid measures of stressors in policing: The Operational and Organizational Police Stress Questionnaires. *International Journal of Stress Management, 13*, 494-518

[48] Malimath, V. S. Committee on Reforms of Criminal Justice System Government of India, Ministry of Home Affairs, 1Committee on Reforms of Criminal Justice System Government of India, Ministry of Home Affairs87–88 (2003). Bangalore, Karnataka. Retrieved from https://mha.gov.in/sites/default/files/criminal_justice_system.pdf

[49] Mental Health. (2019, December 3). Retrieved from https://medlineplus.gov/mentalhealth.html

[50] Nordqvist, C. (2017, August 24). Mental health: Definition, common disorders, and early signs. Retrieved from https://www.medicalnewstoday.com/articles/154543.php

[51] "National Requirement of Manpower for 8-Hour Shifts in Police Stations", Study sponsored by Bureau of Police Research & Development, Govt. of India, August 2014, p. 128.

[52] Police casualties. (2013). In StatPublications. Retrieved from http://ncrb.gov.in/StatPublications/CII/CII2013/Chapters/15-Police Casualties.pdf

[53] Protecting our protectors: Ensuring police officer mental health, safety and wellbeing |News & Insights | Informa Australia. (2018, August 21). Retrieved from https://www.informa.com.au/insight/protecting-protectors-ensuring-policeofficermental health-safety-wellbeing/

[54] Police Accountability: Too Important to Neglect, Too Urgent to Delay. (2005, October 13). Retrieved from https://www.humanrightsinitiative.org/publications/chogm/chogm_2005/default.htm

[55] Patterson, George. (2003). Examining the effects of coping and social support on work and life stress among police officers. Journal of Criminal Justice. 31. 215-226. 10.1016/S0047-2352(03)00003-5.

[56] Parkar, S. R., Dawani, V. S., & Apte, J. S. (2001). History of psychiatry in India. Journal of postgraduate Medicine, 47(1), 73.

[57] Ranta, R. S. (2009). Management of stress and coping behaviour of police personnel through Indian psychological techniques. Journal of the Indian Academy of Applied Psychology, 35(1), 47-53.

[58] Rocco, T. S. R. T. S., Bliss, L. A. B. L. A., Gallagher, S. G. S., Pérez, A. P. A., & Prado, P. (2003). Taking the next step: Mixed methods taking the next step: Mixed methods research in organizational systems research in organizational systems. *Information Technology, Learning, and Performance Journal*, *21*(1), 19.

[59] Riessman, C. K. (1993). *Narrative analysis* (Vol. 30). Sage.

[60] Subash C. Kashyap, Our Constitution: An Introduction to India's Constitution and Constitutional Law, 1994, p.269.

[61] Sugimoto, J. D., & Oltjenbruns, K. A. (2001). The environment of death and it influence on police officers in the United States. Omega: Journal of Death and Dying, 43,145-155.

[62] Stressors. (n.d.). Retrieved September 5, 2018, from http://humanstress.ca/stress/whatisstress/stressors/

[63] Stress: Coping with Everyday Problems. (2016, November 01). Retrieved from http://www.mentalhealthamerica.net/conditions/stress-coping-everyday-problems

[64] Stress and Coping Mechanisms - How the body responds to Stressors. (n.d.). Retrieved September 4, 2018, from https://explorable.com/stress-and-copingmechanisms

[65] Segerstrom SC & Miller GE (2004) Psychological Stress and the Human Immune System: A Meta-Analytic Study of 30 Years of Inquiry. Psychological Bulletin, 130, 601-630.

[66] Stress. (2020, February 20). Retrieved from https://www.mentalhealth.org.uk/a-toz/ s/stress

[67] Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques*. Thousand Oaks, CA: Sage publications.

[68] Tnn. (2015, May 05). Mental health of police personnel under scanner - Times of India. Retrieved from https://timesofindia.indiatimes.com/city/kolhapur/Mentalhealth-ofpolice-personnel-under-scanner/articleshow/47167694.cms

[69] Toch, H. (2002). *Stress in policing*. American Psychological Association.

[70] The Dangers of Loneliness. (n.d.). Retrieved October 2, 2018, from https://www.psychologytoday.com/us/articles/200307/the-dangers-loneliness

[71] Tashakkori, A., & Teddlie, C. (2009). Integrating qualitative and quantitative approaches to research. *The SAGE handbook of applied social research methods*, *2*, 283-317.

[72] Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of mixed methods research*, *1*(1), 77-100.

[73] Tan SY, Yip A. Hans Selye (1907-1982): Founder of the stress theory. Singapore Med J. 2018;59 (4):170–171. doi:10.11622/smedj.2018043

[74] US Legal, Inc. (n.d.). Law Enforcement Officer Law and Legal Definition. Retrieved from https://definitions.uslegal.com/l/law-enforcement-officer/

[75] Velden, P. G., Rademaker, A. R., Eric Vermetten, M. P., Yzermans, J. C., & Grievink, L. (2013, January 01). Police officers: A high-risk group for the development of mental health disturbances? A cohort study. Retrieved from https://bmjopen.bmj.com/content/3/1/e001720#ref-2

[76] Violanti, J.M. (1997). Suicide and the police role: A psychosocial model. Policing: An International Journal of Police Strategy and Management, 20, 698-715.

[77] Vold, G., Thomas, B., & Snipes, J.(2002). Theoretical criminology. (5th ed). New York: Oxford University Press.

[78] Violanti, J.M., & Aron. F. (1993). Sources of police stressors, job attitudes and psychological distress, Psychological Reports, 72, 899-904.

[79] Violanti, J., & Aron, F. (1994). Ranking police stressors. Psychological Reports, 75(824-826).

[80] Vollmer, A. (1933). Police progress in the past twenty-five years. Am. Inst. Crim. L. & Criminology, 24, 161.

[81] What is POLICE? Definition of POLICE (Black's Law Dictionary). (2017, March 27). Retrieved January 4, 2019, from https://thelawdictionary.org/police/

[82] What Is Mental Health? (n.d.). Retrieved from https://www.mentalhealth.gov/basics/what-is-mental-health

[83] Wilkinson, D. (2006). LibGuides: Research Support: Research Methodology. Retrieved from https://libguides.wits.ac.za/c.php?g=693518&p=4914913

[84] Wisdom, J., & Creswell, J. W. (2013, March). Mixed Methods: Integrating Quantitative and Qualitative Data Collection and Analysis While Studying Patient- Centered Medical Home Models. Retrieved from https://pcmh.ahrq.gov/page/mixedmethods-integrating-quantitative-and-qualitative-data-collection-and-analysis-while

[85] What Is Mental Health? (n.d.). Retrieved from https://www.mentalhealth.gov/basics/what-is-mental-health

[86] Yun, I., Kim, S. G., Jung, S., & Borhanian, S. (2013). A study on police stressors, coping strategies, and somatization symptoms among South Korean frontline police officers. Policing: An International Journal of Police Strategies & Management, 36(4), 787-802.