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Vulnerability Quotient as a Prediction Tools for Potential Risk of Custodial Deaths - A Study on Its Impact on the Performance Management of the Police Personnel

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ABSTRACT

Custodial deaths continue to be a matter of serious concern for all of us. Article 5 of Universal Declaration on Human Rights states that, “no one shall be subjected to torture, or to cruel inhuman or degrading treatment or punishment in custody”. There are numerous cases where the police officers have misused their powers on the people and toyed with their lives. The police officers, who are regarded as the custodian and guardian of law, have acted in unjust and contrary manner and have failed to protect the very basic right to life guaranteed by article 21 of the Indian constitution. The present research study had examined the vulnerability quotient as a prediction tools for potential risk of custodial deaths and it’s impact on the performance management of the police personnel in the study area. The study examines and measures the physiological, psychological, legal and organizational factors that influence the behavioural patterns of police officers and there impact on the custody of the accused. The study further analyses the impact of vulnerability factors on the performance management of the police officers and their contribution towards the prevention of custodial deaths. The study adopts exploratory and descriptive research designs and implements purposive and convenient sampling techniques for the collection of the sample respondents. The sample respondents identified for the present study consists of 40 police personnel selected from the identified study areas whose involvement in custodial death is established by judicial and police departmental enquiry. Primary data was collected with the help of questionnaire method and inferences were drawn by applying the statistical tools like percentage, chi-square test and summated rating procedures. The study concludes that It is evident from the study that, there is non-congenial and non-conducive climate prevailed in Police stations where the Custodial

Deaths were taken place which eventually made them unhappy and unproductive and resulted in deviant work behaviour. There was no compliance of DK Basu guide lines in case of arrests. It is evident from the sample that the socially backward classes and unemployed youth are more prone to be victims of police aggression when compared to the other classes in the society. The study further concludes that there exists a significant impact of the vulnerability factors on the performance management of the police personnel in the study area.

Key words: custodial deaths, police officers, factors of vulnerability quotient, performance management.

1. INTRODUCTION

Custodial deaths continue to be a matter of serious concern for all of us. Article 5 of Universal Declaration on Human Rights states that, "no one shall be subjected to torture, or to cruel inhuman or degrading treatment or punishment in custody". There are numerous cases where the police officers have misused their powers on the people and toyed with their lives. The police officers, who are regarded as the custodian and guardian of law, have acted in unjust and contrary manner and have failed to protect the very basic right to life guaranteed by article 21 of the Indian constitution.

Legally, custody is defined as, any point in time when a person's freedom of movement has been denied by law enforcement agencies, such as during transport prior to registering a case, or during arrest, prosecution, sentencing, and correctional confinement. Death in custody is defined as the death occurring in some form of custodial detention, such as police cell or prison. Custodial violence is a matter of concern. It is aggravated by the fact that it is committed by persons who are supposed to be the protectors of the citizen.

The Indian Constitution has conferred many rights on the citizen of India and its importance needs no explanation. Hence, the courts as well as the police officers i.e the Law Enforcement Officers of the State should strive to prevent anyone from committing a breach of the same. In contrast to general belief, custodial deaths could be due to natural causes along with un-natural causes. Natural deaths may be due to disease or intoxication already existing in the deceased prior to the custody and aggravated thereafter or may have developed after one is taken into the custody.

As per the NHRC guidelines, all custodial deaths are to be reported within 24 hrs and post-mortem examination is to be conducted by a panel of doctors & videography has been made mandatory. NHRC Report, in the recent years showed an increase in custodial deaths all over India. Though majority of the cases in custody are due to natural causes, but issues such as negligence in medical aid or improper healthcare facilities cannot be ruled out (National Human Rights Commission Annual report). The Court emphasised that all of the guidelines laid down in the D.K. Basu judgement "flow from Articles 21 and 22(1) of the Constitution and need to be strictly followed".

Police work is challenging in multiple ways. Police officers are often mandated to respond to and resolve violent situations and take antisocial elements in to custody. Thereby, they may often be forced to use force to resolve such dangerous incidents effectively (Karlsson & Christianson, 2006). Various factors such as individual (physiological, psychological), legal, and organizational influence, the behavioural pattern of police officers during custody of an accused were studied. Measuring these factors and finding the physical and psychological state of the police officers was done. "Vulnerability index" of custodial deaths is the coefficient value derived from numerical values obtained from testing the police officers on above factors. By calculating vulnerability factor, we can identify whether a police officer can perform his duties of custody of detainee smoothly, at the same time do his investigation related job and prevent custodial deaths.

1.1 Custodial deaths in Andhra Pradesh

The state of United Andhra Pradesh (2014) has an area of 2,75,045 Sq. Meters with a population of 8,46,65,533. The total number of cases of all kinds (Special, Local Laws and Indian Penal Code) is about 8,34,030. The total strength of police is around 79,296. The percentage of civil police over total police is 84: 1. Of them, only 6779 are empowered to investigate, i.e. they are of and above the rank of ASI of Civil Police. There are about 28.8 police men per 100 Sq. Km. Area and 98 police men for 1,00,000 Population. On an average, we have 3.4 IPC Cases to handle per civil police man. Total police expenditure is Rs 1,116.97 Crores per annum and cost to government per police man per annum is Rs.1,40,735 as per the bifurcation data.

2. STATEMENT OF PROBLEM

Previous research has demonstrated the link between line of duty stress and its deleterious effects on health outcomes through officer self-report and physiological stress response system measures that assess stress-related cardiovascular and hormonal reactivity during exposure to critical incident scenario training. Nonetheless, police stress is not operational per se. Indeed, police officers also experience organizational stress as a result of authoritarian supervisors, rapid shift rotations without days off, heavy workloads, and so forth. John Violanti, a research professor at State University of New York—Buffalo, has devoted his research to examining the impact of work-related stress and trauma on police officers' health and well-being.

Violanti and colleagues have found empirical evidence that police officers have a higher risk of experiencing cardiovascular disease compared to the general population. Additional findings have indicated that officers are also at risk for elevated triglycerides, hypertension, and glucose intolerance. However there is no research found on the concept of deriving Vulnerability index to assess the health and behaviour and capacity of police officers and the custody index for the police stations. If the police station is not custody compliant then custody should not be granted by the courts and the power to arrest also should not be granted to the staff of the Police station.

Therefore, in the present research detailed study was conducted on custodial deaths in Andhra Pradesh and Telangana regions in India. Various factors such as physiological, psychological, legal, and organizational influence on the behavioural pattern of police officers during custody of an accused were studied. A new term called, "Vulnerability quotient", of police officers was coined which was aimed to identify whether a police officer befits to perform his/her duties of custody of detainee smoothly and prevent custodial deaths lawfully.

3. OBJECTIVES OF THE STUDY

- To examine and measure the physiological, psychological, legal and organizational factors that influence the behavioural patterns of police officers and their impact on the custody of the accused.
- To analyse the impact of vulnerability factors on the performance management of the police officers and their contribution towards the prevention of custodial deaths.

4. RESEARCH METHODOLOGY

- Research Design – The present Research Study adopts the exploratory and descriptive research design and hence the research design can be termed as the hybrid research design as it involves the mixed form of different research designs.
- Sampling Method – The present research study applies the purposive and convenient sampling techniques for the selection of the required study sample. These two methods of sampling techniques were applied in the present study because the selected case is purposeful, criterion based, as it serves the purpose of discovering, gaining insight and understanding the chosen problem.

- Sample Size, Sample Nature and Sampling Area - The sample for the present study consists of 40 police personnel selected from Andhra Pradesh and Telangana regions (previously known as un divided Andhra Pradesh) whose involvement in custodial death is established by judicial and police departmental enquiry. The sample includes all the three regions of the study area i.e. Andhra, Telangana and Rayala Seema regions. All patterns of Custodial deaths are represented. Sample is drawn from Nine Locations i.e., nine police stations in different districts of Andhra Pradesh and Telangana. The minimum educational qualification of all the members of the sample is 10th class pass to graduation. The designation/ranks of the sample varied from constable to circle Inspector.
- Data Sources - The present research study utilizes both primary and secondary data. Primary data was collected with the help of questionnaire method. The questionnaire was developed in consultation with management experts, psychologists, psychiatrists, legal experts, forensic medical examiners focusing on the following aspects such as behaviour patterns, interrogation skills, knowledge of legal consequences of occurrence of custodial deaths, provisions of law and D.K. Basu guide lines, human rights sensitivity and awareness of investigators, role and outcome of magisterial enquiries, judicial commissions of enquiry, human rights commissions, and standardization of post-mortem reports to minimize arbitrariness and scope for manipulation.
Secondary Data was collected from documents like FIR, inquest report, postmortem report, questionnaire, judicial commission reports, commissioner of enquiry reports, panchanama and interviews were relied upon. Videography and photographs, analysis of injuries, post-mortem reports, crime scene inspections, National Crime Records Bureau, New Delhi, India (NCRB), State Crime Records Bureau of Andhra Pradesh, India (SCRB) data, and database of Section 176 CrPC (Criminal Procedure Code 1973) cases were obtained from authenticated access of Crime Criminal Tracking Network System, India.
- Statistical Tools - The Primary Data was analysed with the help of certain statistical tools like percentages, chi-square test and summated rating procedures and inferences were drawn from the study.

5. SCOPE AND LIMITATION OF THE STUDY

The study is limited to the selected regions in the identified police stations in the study areas. Death in jails are avoided although technically they are Custodial deaths. Obtaining relevant report and interviewing of accused police officer was a challenge as they perceived that their statements would be inculpatory and stand against them in departmental/ judicial enquiries. These aspects posed a major challenge to the researcher in the study process.

6. RESULTS AND DISCUSSION

Table 1: Frequency distribution of the respondents (Accused police officers)

S. No	Police Station	District	Number of People	Male	Female
1	Balanagar	Ranga Reddy	1	1	0
2	I-town PS	Vijayawada city	7	7	0
3	Kadiri Town	Ananthapur	8	8	0
4	Nagarampalem	Guntur	5	5	0
5	Ongole Railway Police Station	Ongole Railway PS	3	3	0
6	Pratipadu PS Guntur	Guntur	4	4	0
7	Suryaraopet PS Vijayawada	Vijayawada	4	0	4
8	Tadipatri Tq. PS Ananathapur	Ananathapur	3	3	0
9	Yadiki PS Ananthapur	Ananathapur	5	5	0
	Total		40	36	4

In order to have a comprehensive understanding of custodial deaths, the investigator felt necessary to present data on demographic variables of the sample i.e. persons who are accused and are under suspension for committing custodial deaths.

Of total accused, 36 were males and 4 were females. Since there is an increase in induction of women personnel into police department, there is a need to study and analyze if there are any gender correlation/differences/predilection in carrying on the custody operations in terms of various degrees of torture during custodial investigation. Due to the number of cases being few, a larger sample would have helped in better analysis with respect to gender (Table 1).

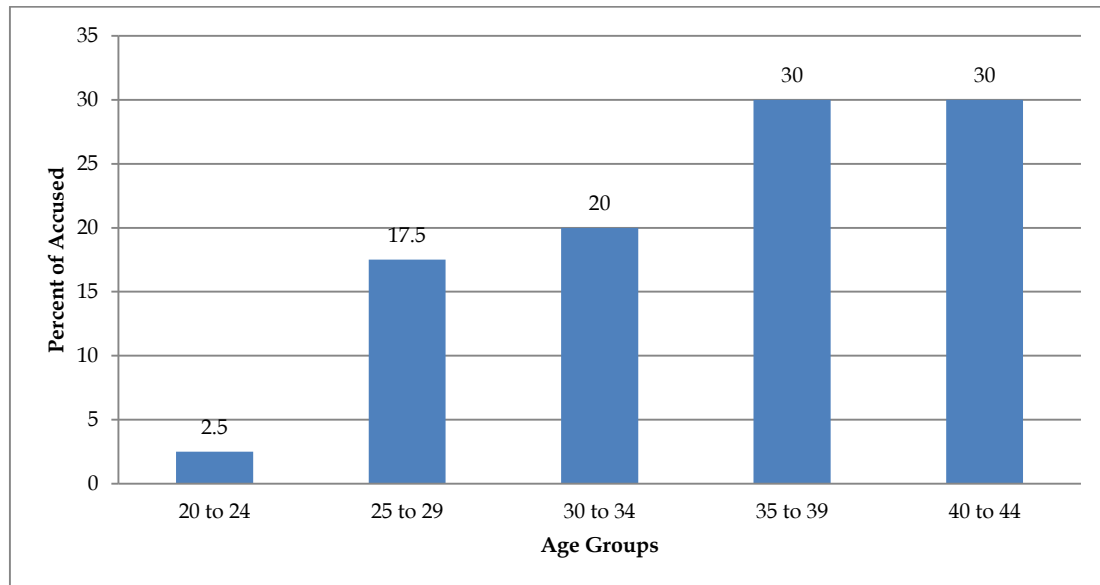


Fig. 1 Age wise distribution of the respondents

It is seen from the Figure 1 that 60% of the sample belongs to the age ranging between 35 to 44 years and 40% of the sample belongs to the age ranging between 20 to 34 years. It may be noted that young adults and middle aged police personnel with considerable amount of experience in dealing with police interrogation have committed custodial death

It may be seen that only 2.5% of the sample are in the age group of 20-24 years who might have entered the services recently and may not have had wide experience in police functioning and interrogation procedures. The factors which would have contributed in addition to lack of experience in interrogation and being young in age are analyzed.

6.1 Influence of Rank

It can be seen from the Fig. 2 and the majority of members rank-wise responsible for custodial deaths are police constables i.e. 65% and then 15% are sub-inspectors. We are aware that the police management is highly structured and their communication is linear, stringent and flows in a hierarchical manner. Since, constable belongs to last rung to carry on the operations of interrogation he/she is likely being held responsible for the custodial deaths. Due to its structured nature, it requires that a police constable must completely obey and execute the orders issued by the officer. Since, various methods of interrogation (first, second, third degree) prevail and used on the suspects who are in police custody, if such an order is passed by the authority the constable executes.

Perhaps one of the explanation, though pre-mature could be due to the ineffective police management and officials themselves giving instructions/sanctions to the juniors to use violent and aggressive ways of dealing with the interrogation. It can be brought to the notice of the reader at this point just as occurrence of suicides is said to be contagious perhaps aggressive way of dealing with

interrogation could be contagious and there are chances of junior officers modelling such behaviour of the senior officers in dealing with victims.

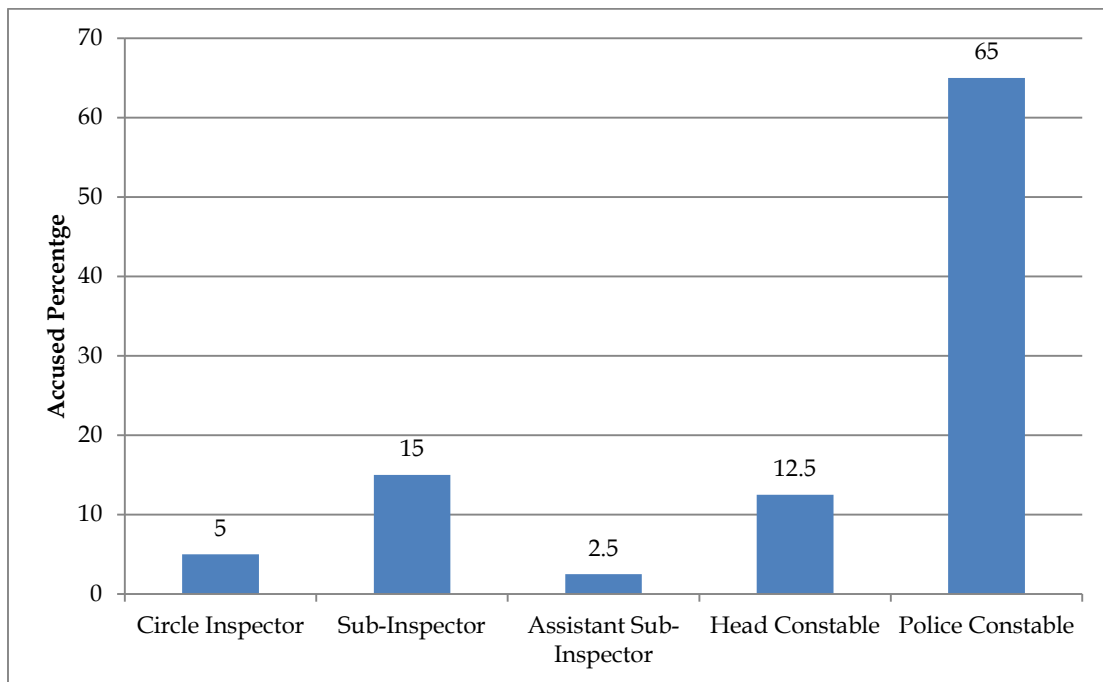


Fig. 2 Rank wise distribution of the respondents

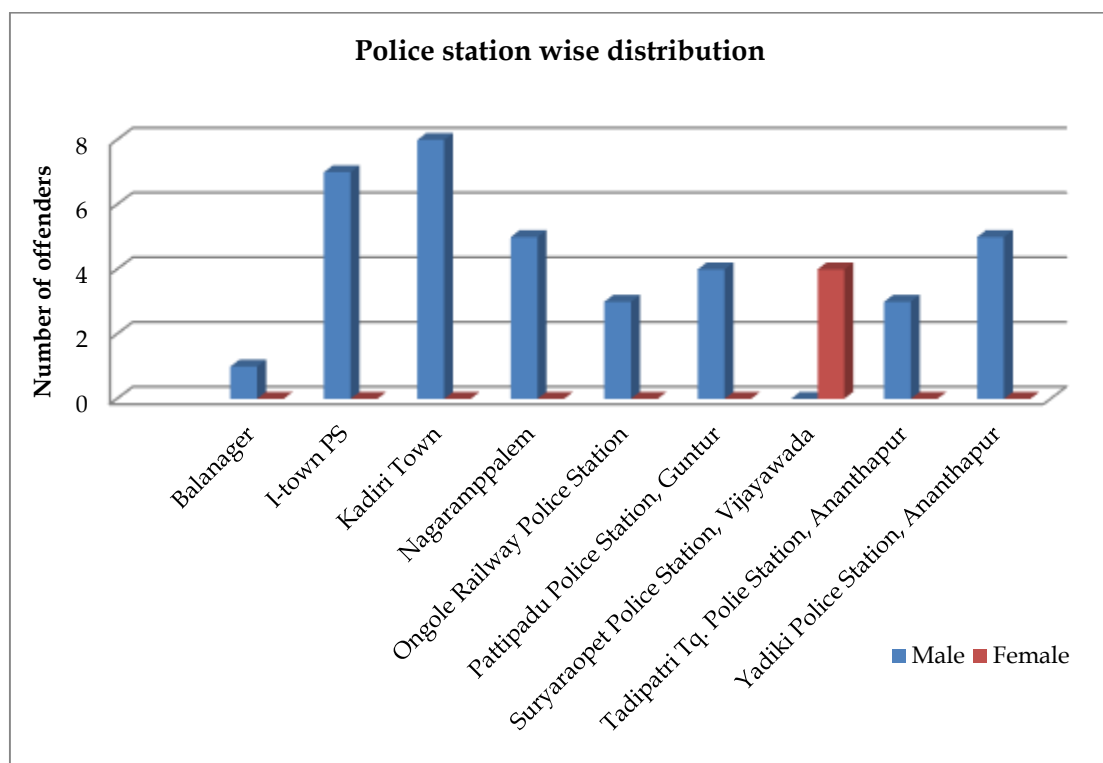


Fig. 3 Police station wise distribution of the accused

In order to reduce the occurrence of custodial deaths in the country several acts, policies have been suggested by police, political, human rights and other agencies. Research in the area of organizational, psychological, medical parameters has increased tremendously and has contributed to the understanding of human factors involved in unwarranted, unacceptable performance and blunders committed in an organizational setting. Considerable amount of research has been conducted to

identify blunders in order to apply suitable strategies to reduce or eliminate such deviations so that the congenial organizational climate and good reputation is preserved.

Due to paucity of research in the area of police management understanding the problems and issues of its own work force was a serious concern for the investigator. Custodial deaths was and always viewed as an extremely negative and damaging feature of a police station which was treated in public as an unpardonable offence by the police, who apparently are the protectors of law and order. The very persons who protect and bring about order to the society when becomes disorderly, then it is a serious concern which needs to be addressed by investigating or by researching in a scientific manner for the details which contribute to such disorderliness.

6.2 Medical factors

The statistical range, frequencies and mean shown in the Tables 2 and 3, attempted here by the investigator shows that the reader at a glance can get familiar with the sample's status on different human factors which are involved in the present study.

In the following pages, a detailed discussion on the high scores or the deviant scores of the sample on various factors is discussed in greater detail. The investigator's focus from now onwards is on the risk factors which would have probably contributed to custodial death.

Table.2 Medical Profiles of the Sample Respondents

Medical Factors	Range			
	Distribution	Low	Normal	High
Blood Pressure	Frequency	0	16	24
	Percentage	0	40	60
Pulse Rate	Frequency	0	26	14
	Percentage	0	65	35
Diabetes	Frequency	-	Diabetic 6	Non Diabetic 34
	Percentage	-	15	85
Peptic Ulcer	Frequency	-	Have ulcers 25	No ulcers 15
	Percentage	-	62.5	37.5
Heart Ailment	Frequency	-	Have Ailment 5	No Ailment 35
	Percentage	-	12.5	87.5

Table 3: Alcohol and Psyotropic Substance addiction of the respondents

Range	Alcohol		Tobacco	
	Alcoholic	Non-Alcoholic	Smokers	Non-Smokers
Frequency	20	20	11	29
percentage	50	50	27.5	72.5

Source: Primary Data

Closely connected to both medical and psychological factors, it was also felt necessary to assess the substance addiction in the members of the sample. The data shows 50% addicted to alcohol and 27.5% addicted to Tobacco.

6.3 Psychological factors

The data on assessment of Tolerance to Ambiguity shows that 97.5% are not tolerant to situation which can be ambiguous as shown in Table 4. Since they deal with situations which are high on bringing order and the decisions have to be fair there is a need to be clear and in the process of seeking clarity ambiguity is not tolerated in police subculture.

Table 4: Psychological factors of the respondents

Psychological factors								
	Tolerance to Ambiguity(TOA)		Cognitive Styles- (Reflective or Impulsive)		Frustration			
Range	Tolerant	Non Tolerant	Reflective	Impulsive	Low	Moderate	High	
Frequency	1	39	24	16	15	13	12	
Percentage	2.5	97.5	60	40	37.5	32.5	30.5	

Source: Primary Data

On the factor related to cognitive style, 40% of the sample policemen have shown impulsive cognitive style of functioning. When intolerance combines with impulsiveness, it can lead to quick action on the part of individual which could, in certain circumstances, lead to aggression on the part of individual. Under critical circumstances, reflective tendency would always help in the direction of more accurate decisions compared to being impulsive.

On the sub-scale of assessing stress due to overload of work seems to be 100%, 63% of the sample appear to be experiencing frustrations, they either fall in to the category of experiencing stress due to frustration in the range of high and moderate.

6.4 Individual factors and their significance.

In order to study the relationship of the medical and psychological variables influencing on custodial death, the sample should contain the profiles of officers those who were involved and those not involved in custodial death. Hence, the sample includes 40 accused officers and 39 non-accused in Custodial Death cases. Data pertaining to the remaining 39 non-accused officers was collected from National Investigation Agency, Hyderabad where all the officers were recruited from various parts of Andhra Pradesh. These 39 officers performed interrogation during their service many a time, but not accused of any Custodial Deaths. Chi square test of independence was used to analyse the factors in relation with custodial death. The level of significance is tested at 0.05.

From the analysis, the individual factors which were identified having influence on Custodial Death are Test of anxiety, Cognitive style, Family problem, and Peptic ulcer. Chi square Test of Independence was used to analyze the data with Test of Anxiety as one variable and Custodial Death

as the second variable. There was a significant effect, $\chi^2 = 46.117$, $p = 0.000 (< .05)$, such that most of the officers among accused in custodial death are intolerant.

Similarly the data was analysed with Cognitive Style as one variable and the happening of Custodial Death as the second variable provides significant effect, $\chi^2 = 9.535$, $p = 0.002$, such that the officers with impulsive behaviour tend to involve more in custodial death than Reflexive nature. Likewise the chi square test provided no significant effect, $\chi^2 = .315$, $p = .575$, such that no evidence is shown that the officers with diabetic behaviour tend to involve more in custodial death than those did not have diabetic complaint.

The test, $\chi^2 = 7.88$, $p = 0.005$, provided that the officers with Peptic Ulcer tend to involve more in custodial death than those did not have the complaint. The Chi Square test, $\chi^2 = 7.1$, $p = 0.008$, showed that the officers with Family Problem tend to involve more in custodial death than the officers did not have the Family problems. Finally, the test, got no evidence that the officers with Blood Pressure tend to involve more in custodial death than those did not have Blood Pressure.

6.5 Organizational Vulnerability

The study discusses the organizational vulnerability for custodial deaths. The data pertains to 40 accused officers of nine police stations. As all the 40 cases belong to 9 police stations, the results may be repeated where more than one accused belongs to one police station. Organization climate assessment involves assessing factors like decision making, responsibility, identity, support, organizational environment which are assessed through organizational climate tool.

It may be noted that the scale measures above mentioned factors but finally a single score is arrived at after combining scores on all these above factors. The assessment shows that 57.5% of the sample policemen perceive their work environment as Non-Conductive. Since the organizational climate is an interaction with the variables such as social system within the organization, social system within the culture, management, when members feels that their organization lacks in supporting/nurturing them, they will perceive it as a non - congenial and non-conductive climate which will eventually make them unhappy and unproductive and even emerge as a deviant in the work behaviour.

6.6 Legal issues

Compliance of arrest and interrogation procedures (D K Basu's Guidelines)

Only the guidelines 6 and 9 are followed in the case of arrest of the accused. The compliance of guidelines 3 and 5 is not significant. Other guide lines are not at all complied. The compliance of D K Basu guidelines has been depicted in Figure 4.

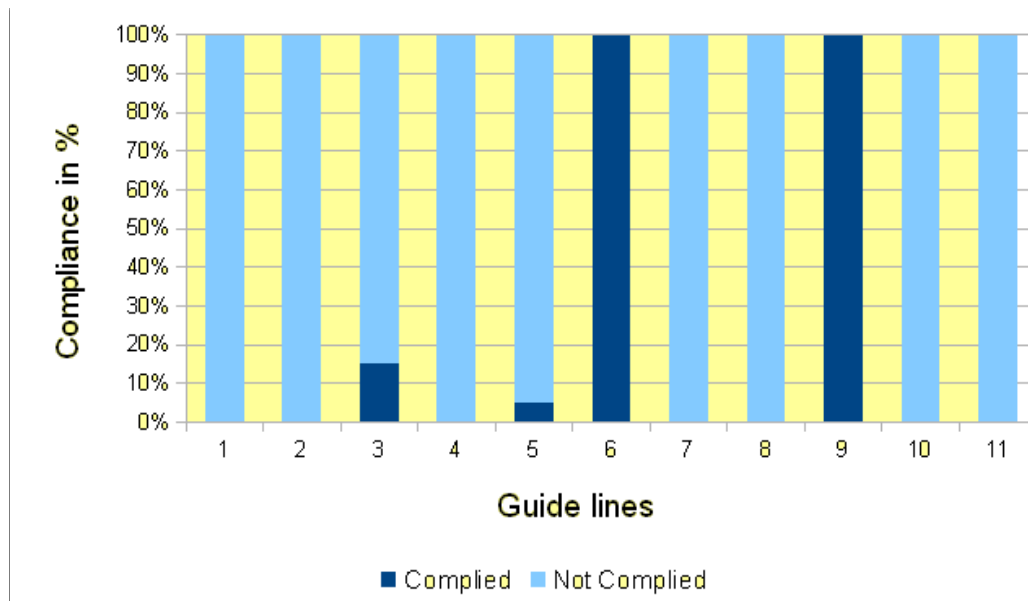


Fig. 4 Compliance of arrest and interrogation procedures (DK Basu guidelines)

6.7 Calculation of Vulnerability Quotient and Custody Quotient

The scores of vulnerability are calculated for Individual (health and psychological) (5 factors), Legal (11 factors) and Organizational (8 factors) using the following formula. The maximum value calculated as 1.00 that means 100% compliant.

$$\begin{aligned} & \text{Vulnerability Quotient/Custody Quotient} \\ &= (\text{Medical score} \times \text{Medical Weightage}) + (\text{Psychological score} \\ & \times \text{Psychological Weightage}) + (\text{Other score} \times \text{Other Weightage}) \end{aligned}$$

“Vulnerability Index” of custodial deaths is the coefficient value derived from numerical values obtained from testing the police officers on above factors. By calculating vulnerability quotient, we can identify whether a police officer can perform his duties of custody of detainee smoothly and prevent custodial deaths in the course of his investigation duties.

The results of vulnerability factors obtained by using above calculation for 40 accused police officers of different police stations are summarized in Table 5. The vulnerability indices ranged from 0.246 to 0.495 indicating that all the accused police officers were in the red zone and were not eligible to take up custody of the detainees.

It is evident from the study that, there was non-congenial and non-conducive climate prevailing in Police stations where the Custodial Deaths took place. This eventually made them unhappy and unproductive and resulted in deviant work behaviour. There is no compliance of DK Basu guide lines in case of arrests.

Table 5: Summary of Vulnerability scores and Vulnerability index of custodial deaths

Vulnerability scores of the custodial deaths									
Sl.No.	Name of the Accused Police Station	Individual (helath and psychological)	Legal 11 RFs	Organizational 8 RFs	Final Risk %	Weighted Average (Vulnerability Index)			
						Individual	Legal	Organizational	Total Vulnerability Index
	Weightages	20	40	40	100	0.200	0.400	0.400	1.000
1	I-town PS Vijayawada	32	10	30	22.4	0.096	0.03	0.12	0.246
2	I-town PS Vijayawada	34	10	30	22.8	0.102	0.03	0.12	0.252
3	Suryapet PS Vijayawada	30	30	60	42	0.09	0.09	0.24	0.420
4	Suryapet PS Vijayawada	42	20	45	34.4	0.126	0.06	0.18	0.366
5	Suryapet PS Vijayawada	42	10	45	30.4	0.126	0.03	0.18	0.336
6	Suryapet PS Vijayawada	36	20	30	27.2	0.108	0.06	0.12	0.288
7	I-town PS Vijayawada	52	25	45	38.4	0.156	0.075	0.18	0.411
8	I-town PS Vijayawada	64	25	30	34.8	0.192	0.075	0.12	0.387
9	I-town PS Vijayawada	46	35	35	37.2	0.138	0.105	0.14	0.383
10	I-town PS Vijayawada	46	35	30	35.2	0.138	0.105	0.12	0.363
11	I-town PS Vijayawada	24	35	45	36.8	0.072	0.105	0.18	0.357
12	Ongole Railway PS	54	35	45	42.8	0.162	0.105	0.18	0.447
13	Balanagar PS RR Dist	42	35	45	40.4	0.126	0.105	0.18	0.411
14	Nagarampalem PS Guntur	56	25	60	45.2	0.168	0.075	0.24	0.483
15	Ongole Railway PS	56	25	45	39.2	0.168	0.075	0.18	0.423
16	Nagarampalem PS Guntur	18	15	35	23.6	0.054	0.045	0.14	0.239
17	Prattipadu PS Guntur	42	25	60	42.4	0.126	0.075	0.24	0.441
18	Prattipadu PS Guntur	74	25	30	36.8	0.222	0.075	0.12	0.417
19	Prattipadu PS Guntur	40	35	45	40	0.12	0.105	0.18	0.405
20	Prattipadu PS Guntur	30	35	35	34	0.09	0.105	0.14	0.335
21	Nagarampalem PS Guntur	52	25	45	38.4	0.156	0.075	0.18	0.411
22	Nagarampalem PS Guntur	52	35	45	42.4	0.156	0.105	0.18	0.441
23	Nagarampalem PS Guntur	68	25	45	41.6	0.204	0.075	0.18	0.459
24	Kadiri Town PS Ananthapur	42	35	35	36.4	0.126	0.105	0.14	0.371
25	Kadiri Town PS Ananthapur	36	35	45	39.2	0.108	0.105	0.18	0.393

26	Yadiki PS Ananthapur	58	25	45	39.6	0.174	0.075	0.18	0.429
27	Yadiki PS Ananthapur	42	25	35	32.4	0.126	0.075	0.14	0.341
28	Tadipatri Tq PS Ananthapur	42	35	45	40.4	0.126	0.105	0.18	0.411
29	Tadipatri Tq PS Ananthapur	56	35	45	43.2	0.168	0.105	0.18	0.453
30	Kadiri Town PS Ananthapur	60	35	45	44	0.18	0.105	0.18	0.465
31	Kadiri Town PS Ananthapur	44	35	45	40.8	0.132	0.105	0.18	0.417
32	Kadiri Town PS Ananthapur	48	35	45	41.6	0.144	0.105	0.18	0.429
33	Kadiri Town PS Ananthapur	30	35	45	38	0.09	0.105	0.18	0.375
34	Kadiri Town PS Ananthapur	62	35	45	44.4	0.186	0.105	0.18	0.471
35	Kadiri Town PS Ananthapur	24	35	45	36.8	0.072	0.105	0.18	0.357
36	Tadipatri Tq PS Ananthapur	48	35	45	41.6	0.144	0.105	0.18	0.429
37	Yadiki PS Ananthapur	30	35	45	38	0.09	0.105	0.18	0.375
38	Yadiki PS Ananthapur	70	35	45	46	0.21	0.105	0.18	0.495
39	Yadiki PS Ananthapur	32	35	45	38.4	0.096	0.105	0.18	0.381
40	Ongole Railway PS	68	35	45	45.6	0.204	0.105	0.18	0.489
	Average	45.6	29.2 5	42.625	37.87	0.137	0.088	0.17	0.395

7. CONCLUSIONS

The Present Study made an attempt on the analysis of vulnerability quotient as a prediction tools for potential risk of custodial deaths in the identified police stations of the study area. An effort was made to identify the reasons behind custodial deaths. The key findings of this study are 60% of the accused (sample) belong to the age ranging between 35 to 44 years and 40% of the accused belongs to the age ranging between 20 to 35 years.

Young adults and middle aged police personnel with considerable amount of experience in dealing with police interrogation have committed custodial death. Majority (65%) of accused in custodial deaths is police constables and sub-inspectors constitute 15%. Certain characteristics of an accused officer, i.e. physical (Peptic ulcer), psychological (anxiety, Cognitive style) and other (family problems) having influence on custodial deaths.

It is evident from the study that, there is non-congenial and non-conducive climate prevailed in Police stations where the Custodial Deaths were taken place which eventually made them unhappy and unproductive and resulted in deviant work behaviour. There was no compliance of DK Basu guide lines in case of arrests. It is evident from the sample that the socially backward classes and unemployed

youth are more prone to be victims of police aggression when compared to the other classes in the society.

The vulnerability quotients ranged from 0.246 to 0.495 indicating that all the accused police officers were in the red zone and hence not eligible to take up custody of the detainees. Hence it came to be concluded that there exists a significant impact of the vulnerability factors on the performance management of the police personnel in the study area.

8. SUGGESTIONS

Based on the findings and interpretations made from the study, the following policy suggestions were made in order to improve the performance management of the police personnel. They are as follows:

- Provision for congenial and conducive climate in the police stations and other work environments in the police organisations
- Training programmes are to be conducted for the identified constables and sub inspector cadre police officers on the basis of their deteriorating health aspects in order to make them coping with the interrogation procedures and behavioural approaches towards the accused in the custody.
- Stress management strategies are to be implemented at the department level on mandatory basis.
- Compliance of arrest and interrogation procedures is to be practised by basing on the D.K.Basu guidelines.

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