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Dealing with Terrorism - iron Fists in Velvet Gloves

Umesh Sharraf, IPS*

Terrorism is a form of psychological warfare against a society. It is supposed to have effects that are utterly disproportionate to the actual lethality of the attacks. Thanks in part to the extensive media coverage that terrorist attacks attract, thanks also to the reaction of politicians who glibly talk of threats being “existential”, and thanks too to the security services who, for their own purposes, inflate the capability of terrorists, the perception of risk is typically far higher than the reality. For political leaders, the calculation appears to be that you can never be seen to be doing too much to defeat terrorism, even if a great deal of the apparent effort is ineffective displacement activity, described by experts such as Bruce Schneier as “security theatre”. Much airport security is like that.

Compared with other traumatic events, such as natural disasters, terrorist attacks tend to distress people who were nowhere near an incident and who knew nobody caught up in it. That is partly because of the seemingly random nature of attacks. It also shows that how disturbing is the idea of an “enemy within”. In the case of suicide attacks, the terrorists’ fanaticism adds a dimension of horror. As terrorism becomes routine, its capacity to shock diminishes. Gradually, the news media lose interest. Politicians also exhaust their capacity for hyperbole and settle for a tone of grim defiance. The greatest damage that terrorists do is almost always through the over- reaction their acts provoke. Given that this is such an obvious trap, it should be possible to avoid running full-tilt into it. An analysis of the ‘why’ along with the ‘what’ and ‘how’ of terrorism, therefore, becomes mandatory.

The Geo - Politics of Terrorism

Terrorism is often rationalized as a valid response to its “root causes”- mainly repression and desperation. Usually, the more terrible the terrorists’ violence, the more is the urge to

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look for the 'root cause'! But the vast majority of repressed and desperate people do not resort to the willful targeting of vulnerable civilians. The real root cause of terrorism is that it is sometimes successful! Terrorism will persist as long as it continues to work for those who use it and as long as the international geo-politics rewards it.

Democracies could defeat terrorism if they were willing to forego the Queensberry rules! But there are many obstacles in the way. One of these is the refrain, "One man's terrorist is another man's freedom fighter." It has been impossible to fix on a single definition of terrorism that satisfies everyone. There are certain components that tend to appear in most serious attempts to define this elusive term, but none is without its difficulties. The first focuses on the nature of the targeted victims. The deliberate killing of innocent civilians is a central element in most definitions of terrorism, but if this were the only criterion, then the bombings of Hiroshima, Nagasaki, and Dresden by the armed forces of the United States and Great Britain would have to be considered terrorism. On the other hand, the Pulwama attack is regarded as act of terrorism, even though the target was paramilitary.

Another element that often figures into the definition of terrorism is the nature of those who commit the violence. According to many definitions of terrorism, only groups that are not part of the official apparatus of the state can commit terrorism. Most acts of terrorism are difficult to pin on nation states. Instead, they are committed by unofficial groups that have no standing army and no "return address" where preventive or retaliatory actions can be focused. The terrorist kills and then blends back into the civilian population or is killed himself. However, the word "terrorism" itself has its historical origins not in the actions of shadowy groups but in acts of terror inflicted by the state on its own citizens: the "reign of terror" conducted by the revolutionary government of France was the paradigm. Terror was also an integral part of the Stalinist, Nazi, Peronist, and other totalitarian and authoritarian regimes.

A third aspect of many definitions of terrorism includes the mechanism by which those who engage in violence seek to influence the actions and attitudes of their intended audiences. Terrorists seek to attract attention to their cause by employing, or threatening, dramatic acts of violence that capture the attention of the media and terrorize large populations. A scholar had characterized terrorism as "propaganda by the deed". If "war is a mere continuation of policy by other means," as Clausewitz once observed, then terrorism is war by other means. Criminal organizations, such as the Mafia or Colombian drug cartels, also employ terror as a technique, but their object is more financial than military, religious, or nationalistic.

The object of the current "organized terrorism" is to attract attention to the terrorists' cause, to terrorize their enemies into submission, or to defeat an "evil" state that has more powerful conventional weapons. Among the principal differences between the current war against terrorism and more conventional wars is that this war may never end. Previous wars against nation-states eventually concluded at a specific time, with surrender, peace treaties, and declarations of victory. There will be no such clear

demarcation date in the war against terrorism. Individual terrorists will surrender or be killed. Certain terrorist bases or cells may be destroyed, but international terrorism will continue. Indeed, "poor man's warfare" may well proliferate, becoming the tactic of choice for many disaffected groups incapable of waging effective conventional warfare.

Terrorism will persist because it often works¹, and success breeds repetition. Terrorism is certainly not a new phenomenon: it dates back to the earliest history of humankind. Over its long history, terrorism has had a record of stunning successes and dismal failures - as judged by the achievement of the goals proclaimed by its practitioners. Recently, terrorism's successes have been more visible than its failures, and the international community- diplomatic, religious, academic - has been selective in its condemnation of terrorists. For these reasons aggrieved groups and individuals have increasingly found terrorism an acceptable, even attractive, option. Nearly every nation has made some use of terrorism. Nearly every cause has supported or benefited from some form of terrorism. Many individuals have terrorist groups they "approve of," "refuse to condemn," "understand," or apply a more permissive standard to than the one they use for other terrorist groups. The United States has supported, financed, and trained groups that are widely regarded as terrorist, such as the contras in Nicaragua, the mujahideen in Afghanistan, UNITA in Angola, and Samuel K. Doe in Liberia/Sierra Leone. Many Jews supported the Irgun and the Stern Gang during Israel's struggle for independence. The anti-apartheid movement in South Africa employed terrorism, with widespread support from many African Americans (and others as well). To a far lesser extent, small numbers of blacks supported, or at least refused to condemn, such American terrorist groups as the Black Panthers, the Revolutionary Action Movement, and the Black Liberation Army. Some Irish Americans assisted Catholic terrorists in Northern Ireland. A small number of Jews supported the Jewish Defense League during the late 1960s and the early 1970s. A substantial number of American Muslims have contributed money to Islamic terrorist groups. We ourselves supported the LTTE.

If one seeks to construct a continuum of condemnation for terrorist acts, several factors would have to be considered. Among them would be the nature of the people being targeted, with the most innocent and vulnerable civilians (babies, children, old people, and so on) being at one end, and active military personnel at the other. In the middle would be political, diplomatic, civil service, and police personnel. Another factor would be whether terrorism is being used in self-defense against state-supported terrorism, genocide, or mass murder of innocent people. Since terrorists and their supporters generally regard their terrorism as justified, no objective continuum of terrorism will ever receive universal acceptance.

Terrorism in India is divisible in different categories. 'Naxalism' in select areas of the country favourable to their operations and 'Jihadism': The genesis of these two is vastly different, as also their objectives, short or long, besides the entire gamut of the

¹ Alan M Dershowitz, *Why Terrorism Works*, Yale University Press, 2002

ingredients comprising the “war” they prosecute against the State and society. The list includes the dramatis personae, recruitment and training systems and patterns, modus operandi, logistics build up, strategic thinking and execution and finances. The type prevailing in Kashmir is of a different genre. It is to a high degree, a proxy war being waged against India by Pakistan since 1990, in its nearly half century old, multifaceted efforts to annex Kashmir. Insurgencies in the North East too have a unique historical and geo-political connection. Accordingly, the CT/CFT strategy for each will have to be framed out distinctly and implemented independently and separately, while keeping in mind the civil liberties framework of our democratic system.

An important tenet of civil liberties is that the greatest dangers to liberty come from the powerful state. The greatest disasters throughout history have been inflicted by states. The Crusades, the Spanish Inquisition, the Stalinist murders, the Holocaust, the Cambodian genocide - all were inflicted by governments. Hence, the focus of civil libertarian concerns has always been on the abuse of power by state actors. The relatively new phenomenon of terrorist groups- organizations that are not themselves states but that are nonetheless waging war and seeking access to weapons of mass destruction challenges that paradigm. Of these, the largest threat that we face is jihadi terrorism. This article will therefore focus on this aspect of modern terrorism,

Emergence of Jihadism

Jihadism has evolved dramatically since the 9/11 attacks in the USA. The international community mobilized unprecedented force against an array of jihadis, with mixed results. The United States alone spent trillions of dollars in military campaigns, intelligence, law enforcement, homeland security, and diplomacy- to counter jihadism. The emergence of the Islamic State, also known as ISIS, ISIL, or Daesh, transformed the world of jihadism. After capturing large swaths of Iraq and Syria in 2014, the Islamic State attracted tens of thousands of foreigners who sought to build a new Islamic society in a modern caliphate. They included engineers², accountants, teachers and teenage girls, as well as fighters. In 2014, ISIS seemed to eclipse al-Qaeda. However, Al-Qaeda has played the long game, and it may prove to be a more enduring model than the Islamic State. Together, ISIS and al-Qaeda pose complementary threats to global security.

Jihadism has evolved through multiple phases since it emerged in the late 1970s. The first phase featured ideologues, such as Sayyid Qutb and his protégés in the Egyptian prison system, who were not all Salafi. But they all promoted the exclusivist

² *Engineers are, intriguingly, strongly over-represented among graduates among Islamist movements in the Muslim world. However, engineers are virtually absent from left-wing violent extremists and only present among right-wing extremists: Diego Gambetta & Steffen Hertog, Engineers of Jihad, Sociology Working Paper Number 2007-10, Department of Sociology, University of Oxford*

and violent rhetoric of “takfirism,” or excommunication of fellow Muslims. The second phase featured the expulsion of Muslim Brothers from Arab states and their employment or education in Saudi Arabia or Kuwait, a process that married the theological rigor of Salafism with the political activism of the Brotherhood’s Islamism. At the same time, jihadism among other ideologies and movements was increasingly “Salafized” in the 1980s and 1990s; the use of violent tactics and the religious ideology began to merge. The third phase began as Salafist activist ideas were spurred by historic events, including the Soviet invasion of Afghanistan from 1979 to 1989 and the first Gulf War in 1990–91, when hundreds of thousands of American troops were based in Saudi Arabia. The fourth phase featured bold attacks, such as the 9/11 on the World Trade Center. The fifth phase occurred after the United States entered Iraq.

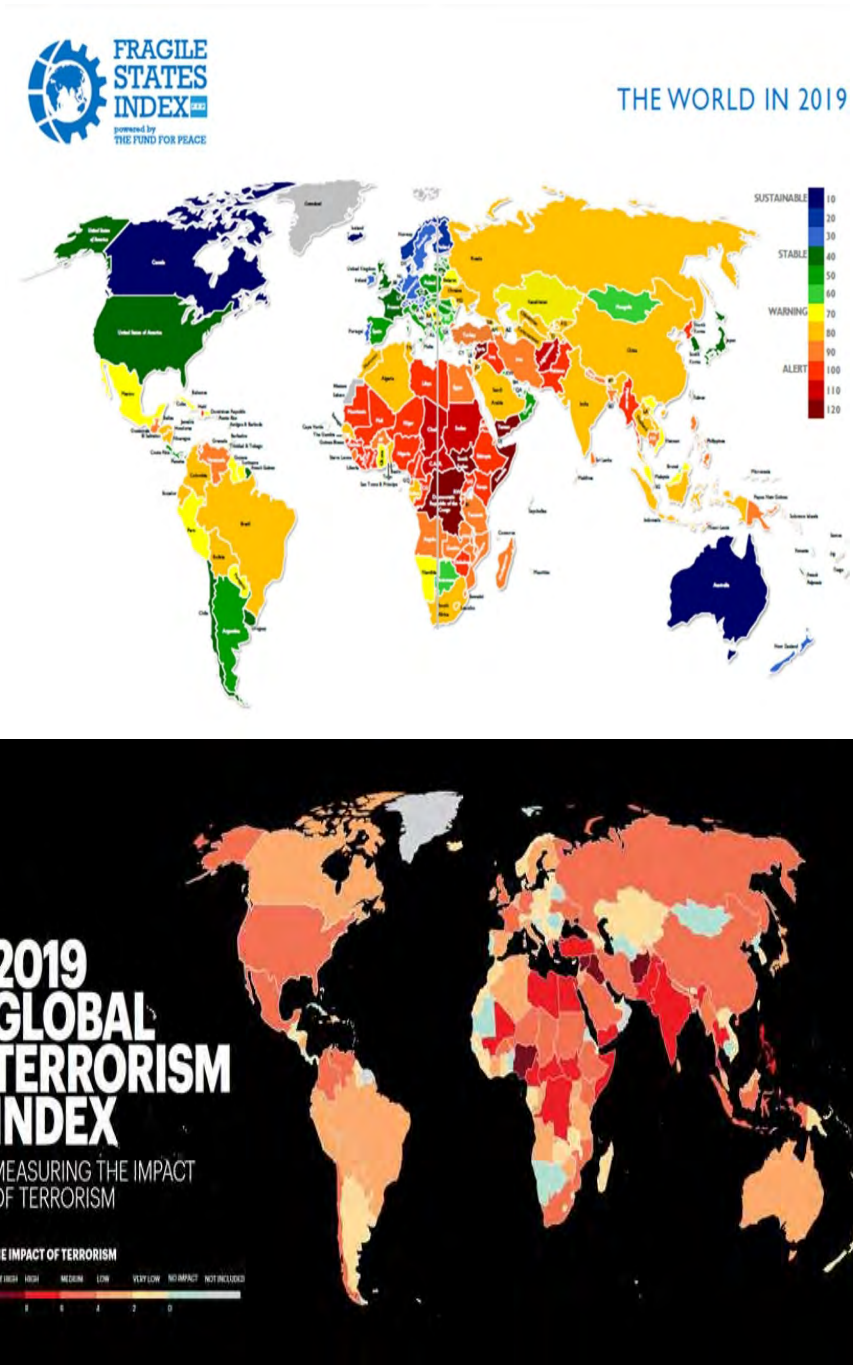
Over time, motives and inspiration have diversified too. What drove fighters to join Osama bin Laden and the original Arab mujahideen in Afghanistan in the late twentieth century varied significantly from what drove people to join groups such as ISIS and Jabhat al-Nusra in Syria or Iraq in the early twenty-first century. The current jihadis are now part of a third generation. Jihadism has always been produced by a confluence of factors. Some individuals are motivated to join jihadist movements by ideology, the desire for meaning and belonging, anger at the West. Other conditions enable jihadism to flourish. They include the volatile mix of shifting demographics, notably a surge of youth, higher literacy, and greater social aspirations intersecting with economic woes, growing unemployment, and deepening political malaise or disillusionment. The mix of personal motives and enabling conditions has become even more combustible since the Arab uprisings in 2011. These drivers of extremism are rampant in the Middle East. They differ in local contexts. Six enabling conditions are particularly pivotal today³.

The first condition driving jihadism is the frailty of states across the Middle East and North Africa. Four have either collapsed or come close. Others are so frayed that their long-term sustainability is in doubt. In the early twenty-first century, bad governance is widespread in the region; rampant instability has allowed extremist movements to embed politically and then exploit physically. The correlation is evident in the Fragile States Index⁴ and the Global Terrorism Index⁵, as can be seen below in a comparison of the two maps. As nation states fray, people across the region are retreating to more basic forms of identity, including sect, ethnicity or tribe. Religious and sectarian discourse is central to the jihadi narrative.

³ This is based on the 2017 report “The Jihadi Threat” of the United States Institute of Peace, Wilson Centre

⁴ <https://fundforpeace.org/2019/04/10/fragile-states-index-2019/>

⁵ <http://visionofhumanity.org/app/uploads/2019/11/GTI-2019web.pdf>



The second condition enabling jihadism is a deep ideological upheaval. Opposition across the region has been defined more and more by religion because of the failure of autocratic regimes and secular ideologies, from Arab nationalism to the Baathist socialism of Syria and Iraq. Jihadism, with its utopian goals, is an alternative, even for those who are not particularly religious. Salafism became one of the most dynamic currents in the Middle East. Salafism preaches a return to the way of life in the seventh century, when the faith was founded, and emulation of the first three generations of Muslims. Saudi Arabia has been the heartland of Salafism, in the form of what is often today called Wahhabism. Jihadi Salafism took form in the 1990s, when a Saudi version of Salafism merged with the revolutionary and jihad-oriented ideology from Egypt that is associated with the late Sayyid Qutb and his radical heirs. The result is a movement that puts a premium on the political requirement of jihad and the theological purity of Salafism.

Jihadism is about using precepts of the faith to fight for a utopian Islamic state on earth. Jihadism is part of the broader Islamist trend, but it is distinguished by its firm belief that violence is the only way to establish that utopian state. Jihadi Salafism is now more energetic than Islamism. It has also challenged traditional Islamic authority in ways that conservatives at Al-Azhar University, one of the oldest institutions of learning in the Muslim world, have not. Two broad categories of people joined ISIS, al-Qaeda, and their affiliates: One group included religious radicals who adhere to jihadi ideologies and narratives. They have been part of the fluid jihadi Salafist movement. The other included people who may not fully subscribe to a puritanical religious ideology but nonetheless believe in the political elements of that ideology. Their motives are often to repel regional and international influence.

In the future, jihadi Salafism is likely to increasingly draw Sunnis who feel victimized, marginalized, underrepresented, or excluded. Its promises are utopian; its supranational vision circumvents both formal structures like central governments and traditional identities like tribe, clan, or town. It fosters the illusion of an “imagined community” that will create a new homeland for people who have suffered displacement, dislocation, disillusionment, or discrimination. Its absolutist outlook and angry defiance virtually ensure confrontation and militancy.

A third enabling condition of jihadism is an environment with pre-existing violence. There is a synergy between jihadism and violence, whether perpetrated by repressive regimes, militia rivalries, terrorist groups, sectarian differences, tribal tensions, criminal organizations, or foreign intervention. Jihadism exploits local tensions; it fuels and is in turn fueled by these tensions. Violence can foster the rise of extremist groups by radicalizing organizations and individuals exposed to it. Jihadism tends to surge during periods of political tension or violence. There are abundant examples where war zones provided jihadi groups with permissive environments to proselytize and recruit: Afghanistan in the 1980s; Algeria, Bosnia, and Chechnya in the 1990s; Iraq, Somalia, and Yemen in the 2000s; Syria, Libya, and Mali today. Conflict also tends to marginalize

moderate political alternatives; polarization gives jihadists an advantage. In the future, jihadism is likely to grow because violence sparked by a host of local factors shows no signs of abating, especially in areas of weak or deteriorating governments. At the same time, the character of jihadism is likely to evolve as local groups adapt it to fit their needs.

A fourth condition enabling jihadism is foreign intervention that changes or challenges the political status quo. Such intervention can spark jihadism. Several of the most important turning points in the rise of jihadi groups have involved foreign intervention. The 1979 Soviet occupation of Afghanistan galvanized the Islamic world to fight a superpower. It also fostered the emergence of a whole new form of jihadism, reflected in the historic treatise “Defense of the Muslim Lands”⁶ by Palestinian ideologue Abdullah Yusuf Azzam. Azzam argued that all Muslims were compelled to liberate their lands occupied by foreign powers. His ideas redefined jihadism in the early 1980s, when he mentored Osama bin Laden. In 1984, bin Laden financed Azzam’s establishment of a Services Office in Peshawar, Pakistan, to support Arab fighters in Afghanistan⁷. The mobilization of American, Saudi, and Pakistani support to the Afghan mujahideen fighting the Soviets further enabled the new jihadism.

After Iraq’s 1990 invasion of Kuwait, the United States and its allies deployed more than a half million troops in the Persian Gulf, mainly in Saudi Arabia. Bin Laden wanted to marshal Arab veterans of the Afghan jihad to defend Saudi Arabia from further aggression by Saddam Hussein, but the kingdom ignored his plan. The reaction seeded al-Qaeda⁸. The U.S. decision to oust Saddam Hussein, and then keep tens of thousands of troops to prop up a new ally in Baghdad, drew extremists to a new affiliate, al-Qaeda in Iraq. It pledged to expel the world’s mightiest military from the Middle East. This sequence of events in turn spurred an insurgency and the evolution of Sunni extremism in uneven phases. It fostered the conditions, aggravated by the Iraqi government’s failure to develop a power-sharing formula to bring Sunnis into government that eventually produced the Islamic State caliphate, carved from large chunks of Iraq and Syria.

A fifth enabling condition concerns the complex confluence of factors that drives individuals to join a jihadist organization. Academic research has not found a causal relationship between socioeconomic indicators and the rise of extremism. But conditions on the ground help create a more permissive operating environment for extremist groups. Recruiters prey on underlying grievances to rope recruits into radical causes. Shifting demographics and youth unemployment play a role. In 2011, the year of the Arab uprisings, the Middle East and North Africa region had the world’s youngest population,

⁶ Abdullah Azzam, “*Defense of the Muslim Lands: The First Obligation after Iman*,” 2002, english.religion.info/2002/02/01/document-defence-of-the-muslim-lands/

⁷ “*The Life and Death of Osama Bin Laden*,” Washington Post, May 2, 2011, www.washingtonpost.com/wp-srv/special/world/timeline-life-of-osama-bin-laden/

⁸ Ronald Brownstein and Robin Wright, “*Bin Laden’s Goals Seemingly Elusive*” Chicago Tribune, October 5, 2001, www.chicagotribune.com/news/nationworld/sns-worldtrade-binladen-lat-story.html.

after sub-Saharan Africa. Unemployment and civil war go hand in hand, although it's not clear that unemployment actually *causes* civil war. Sometimes unemployment is a societal flashpoint that contributes to civil war, while sometimes civil war produces greater unemployment.

A sixth enabling condition of jihadism is access to technology, which has provided advantages earlier movements did not have. Extremist ideologies have always spread through social contact, whether physical or virtual. Terrorism was internationalized in the late 1960s and 1970s by advances in transportation and communications. In the twenty-first century, the huge leap in technology, through social media, has altered traditional politics by circumventing government media and control of physical space. Technology has multiplied ways to convey messages and mobilize. Social media has also often fostered extremist voices that have had less access to large audiences in the past. Even fringe extremists can now share their identity with people they did not know existed 20 or 40 years ago. Incrementally, they can create a narrative for the masses. Social media was an important tool in luring foreign fighters into Syria and Iraq by the tens of thousands. It has also been more subtly exploited to enable al-Qaeda's affiliates, especially since bin Laden's death.

Defeating jihadi extremism and preventing its return requires a long-term policy that not only eliminates fighters but also undermines the legitimacy of violence as a means of obtaining political ends. Eliminating an extremist group physically does not defang its ideology or change the underlying circumstances that allowed the group to gain traction in the first place. Reconstruction, rehabilitation, and particularly reconciliation are just as important as any military counterterrorism campaign in building societal resilience against the appeal of extremism. Failure to carry out these steps has been a recurrent problem. After the Soviet Union's withdrawal in 1989, the outside world did little to rebuild Afghanistan, which descended into civil war. The Taliban seized power in the mid-1990s and offered refuge to al-Qaeda. In Iraq, the al-Qaeda franchise suffered serious setbacks between 2007 and 2011 as a result of the Sunni Awakening and the U.S. military surge. But Baghdad did little to alleviate the grievances of its Sunni minority, and its inaction contributed to the re-emergence of ISIS.

Talking to Jihadists

Policymakers set out different but interrelated practical arguments for why governments should not talk to these new terrorists⁹. The first is that they are religiously inspired and therefore less susceptible to rational approaches. Some even claim that it is impossible to talk because the new terrorists are Islamic and Islam has not enjoyed a reformation. There are, however, good reasons for thinking that talking to religious terrorists is just as possible as talking to Marxists or nationalists. Religious difference

⁹ Jonathan Powell, *Talking to Terrorists*, Penguin Random House, 2014

was, after all, one of the factors in Northern Ireland. It has proved perfectly possible to negotiate with Islamic states, and peace has already been made with a number of Islamic armed groups, including the MILF in the Philippines and the GAM in Indonesia.

The second argument is that there are two kinds of terrorism: rational terrorism, such as the Palestinians, and apocalyptic terrorism like al-Qaeda. Traditional terrorists use violence as an instrument to attain their goals; absolute terrorists are those whose action is non-instrumentalist, a self-contained act that is completed when it has occurred and is not a means to obtain some other goal and so are beyond negotiation. The Provisional IRA and the PLO were considered absolutist groups in their early years, unwilling to compromise, but then negotiated in the end. The aim of the 'new terrorists' is not extermination. Even for them, violence is a means to an end. Within this 'absolutist' or 'apocalyptic' theory is the idea that there can be no compromise with these groups because their demands are incoherent and un-negotiable. While it is true that it is unlikely any existing state is going to agree to a caliphate covering a large part of the world as demanded by al-Qaeda, it is equally true that the British state wasn't going to agree to force the majority population of Northern Ireland to leave the United Kingdom against their will. The IRA, when it entered talks, had to drop its absolutist demand for a united Ireland. The Spanish government had no intention of recognising an independent Basque state, nor the Indonesian government of recognising an independent Aceh. Armed groups always start with un-negotiable demands. If they didn't, they wouldn't have resorted to violence in the first place. The point about talking to them is to persuade them to moderate their demands so that they abandon their initial claims and settle for something else that can meet their interests. The government offers them certain compromises that persuade them they can pursue their aims politically.

It does take some time for armed groups to make this journey. It is much easier for them to shelter behind vague and undeliverable slogans, like 'Troops Out', which was the demand of the IRA and is the demand of the Taliban, than to persuade their followers to accept the difficult compromises that are necessary for a lasting settlement. The MILF and the GAM both had to be persuaded to give up their aim of independence and settle for autonomy. Experience suggests the stated aims and ideology of the armed group should not therefore be the decisive factor in determining whether they are willing to compromise or not.

Thirdly, there is the argument that because al-Qaeda are a global terrorist group unconfined by national borders, this makes it harder to deal with them. It may be true that because al-Qaeda networks straddle borders, the mechanics of engaging with them are more difficult, but that is not a reason for thinking it is impossible to talk to them or even to find an agreement. Indeed the very fact that they cross borders means that there are local al-Qaedas, in Somalia or in Yemen, who have different, specific interests with which one can engage.

One of the striking characteristics of these arguments about why the so-called 'fourth wave' of terrorism¹⁰ (following on from the anarchist wave, the anti-colonial wave and the New Left wave) is different, uniquely evil and impossible to engage with, is that they have been deployed about all the terrorist groups encountered before in history. There is of course a perfectly legitimate discussion to be had about how we should go about engaging these new groups in practice. They are not all the same, even if they appear so when observed from a distance. For example, it is argued that Hamas is 'engageable'; that al-Qaeda is not; and that the Taliban are somewhere in between.

Countering Terrorism

However, talking to terrorists is likely to be fruitful only if effective Counter-Terrorism (CT) and combating of terrorist financing (CFT) measures have also been taken¹¹. The major legislations dealing with CFT in India include The Unlawful Activities (Prevention) Act, 1967;

The Prevention of Money Laundering Act (PMLA), 2003; Foreign Exchange Management Act (FEMA), 1999; Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974; Smugglers and Foreign Exchange Manipulators (Forfeiture of Property) Act, 1976; Narcotic Drugs and Psychotropic Substances Act, 1985 and the Foreign Contribution (Regulation) Act (FCRA), 1976 and its rules. To combat terrorism effectively, strong domestic measures need to be complemented by strengthened international and regional cooperation to ensure that the fight against terrorism is not restricted only to the perpetrators but also encompasses the countries who sponsor them. Attacking terrorist financing is one of the means to destroy terrorist organizations and to prevent terrorist acts. When funds available to terrorists are constrained, their overall capabilities decline, limiting their reach and effect. Choking of terrorist funds needs to be integrated into the larger CT effort of the country.

Effective CT should reduce terrorists' capabilities and opportunities to reach and harm targets or to produce or acquire weapons and tools, and minimize the facilitating conditions to perform an attack¹². The proactive CT technique strives to thwart the terror attack prior to its instigation. This model has been practiced by law enforcement for decades to deal with terrorism. It is based on intelligence gathering and analysis, and

¹⁰ David C. Rapoport's "The Four Waves of Modern Terrorism," is one of the most influential and widely debated theories in the field of terrorism studies. Following the 9/11 attacks, Rapoport created his theoretical framework for modern terrorism by grouping previously indistinguishable patterns of political violence into four distinct waves, each lasting a generation and inspired by ideologies derived from anarchism, anti-colonialism, socialism, and religious fundamentalism.

¹¹ S. K. Saini (2008) Problems and Prospects of Combating Terrorist Financing in India, *Strategic Analysis*, 33:1, 85-100, DOI: 10.1080/09700160802518593

¹² Clarke, R., & Newman, G. (2006). *Outsmarting the terrorists*. Westport, CT: Praeger Security International.

operational execution. Typically, law enforcement intelligence identifies potential terrorists, collects incriminating intelligence and evidence, and foils the crimes/attacks before they occur, by arresting the perpetrators. The core of this scheme, which has been classified as "high policing"¹³, is the employment of covert intelligence gathering, surveillance, and operational prevention tools. Proactive prevention seeks to harm terrorist organizations and individuals physically, psychologically, and financially, to strike at their operational capabilities, infrastructures, morale, and motivation. However, there can be no universal formula for this.

Key to India's failure in combating Maoist insurgency, for instance, is a one-size-fits-all security doctrine. In essence, state responses have consisted of pumping in forces for conventional, ground-holding operations in the hope of displacing guerrilla forces; maintaining high force levels over sustained periods of time; and, using this military presence to push forward with developmental and political initiatives to deprive insurgents of their political legitimacy. The durability of insurgencies in the northeast and Kashmir shows that only population-centric strategies don't work. The former DGP Punjab, Sri K.P.S. Gill's main contribution was demonstrating that alternatives to population-centric counter-insurgency could succeed. Instead of engaging in protracted, large-force operations, Mr. Gill focussed on offensive operations targeting the leadership and cadre of Khalistani terrorists. In effect, unconventional war-fighting methods were used to defeat unconventional war-fighting methods. In Jammu and Kashmir, the Special Operations Group succeeded in decimating the leadership of the Hizb ul Mujahideen. Andhra Pradesh's Greyhounds destroyed a once-powerful Maoist insurgency. Tripura defeated an intractable tribal insurgency.

By developing quality intelligence and instituting operational capabilities, proactive offensive CT enables police to identify and respond to terrorist threats before they actualize, and to uproot terrorists and their infrastructure. This proactive scheme is based on two capacities: producing quality intelligence and creating operational capability. Quality intelligence is the capacity to collect, in real time, reliable information about the terrorists' capabilities, intentions, and specific plans, analyzing and disseminating this intelligence for use in police operations. Police and security resources are limited, while the number of potential targets is endless. Yet, not all targets are similarly attractive for terrorists. Therefore, the police need to conduct an efficient defensive effort by using vulnerability and risk analysis based on intelligence to build an effective protection plan. Vulnerability and risk assessment must then drive operational responses to create an effective policing apparatus against terrorism. Intelligence and risk assessment allows security forces to protect, in advance, potential targets that may be selected by terrorists.

¹³ Bayley, D., & Weisburd, D. (2009). *Cops and spooks: The role of police in counterterrorism*. In D. Weisburd, T. E. Feucht, I. Hakimi, L. F. Mock, & S. Perry (Eds.), *To protect and to serve: policing in an age of terrorism* (pp. 81-99). New York: Springer.

The plan needs to prioritize the allocation of defensive tools to harden the more vulnerable potential targets¹⁴.

Law enforcement's intelligence and security apparatus should produce a hostile environment for terrorists. That should be done primarily through potential terrorist support structures, constantly changing the terrorists' operating environment by establishing "bottleneck passages" and force terrorists to take counteractions, involving other co-conspirators. The participation of other co-conspirators forces the usage of extra communication channels, leaving 'intelligence footprints', thus increasing the prospects for intelligence collection- by both human and signal technical channels.

To defeat the goals of terrorism, the main object of CT strategies should be to strengthen the population's resilience, enabling them to continue with their daily routines. It is expected that a swift clearing of the terrorist scene reduces the psychological consequence of the attack. Punctual treatment of the scene is also important for forensic reasons, to collect evidence before the scene is contaminated. In the Israeli model, all of these activities of working on clearing and normalizing a terrorist scene are expected to be completed in a maximum of 4 hours!

An effective response to terrorism requires the ability to organize and respond quickly and proficiently to prevent or at least reduce the damage of a terrorist attack. Police officers must thus be trained and equipped to confront the terrorism threat. All police officers, including those whose central task in the police force is not counterterrorism, ought to go through basic counterterrorism training. This training should drill officers for an unanticipated encounter with a terrorist episode. It should focus on imparting first-response expertise (such as isolating the location of a terrorist attack effectively).

The most important component of counterterrorism is preserving the population's resilience. An important mechanism for achieving this goal involves maintaining the vital communication channels between the police and the public. The police need to educate and update the public before, during, and after a terrorist event. Before terror attacks, as part of 'target hardening', the police should play a central role in preparing and educating the public. The members of the community need to be part of the defensive alignment by harnessing the citizens' vigilance as part of an early warning system. Even from an early age, the public needs to be made aware of indicators of possible terrorism events, and be trained to report their suspicions to the police.

In Israel, for example, police officers teach children in elementary schools to be attentive toward suspicious people and objects, and to notify an adult or, if possible, a police officer. The police in Israel handle every report/call as if it were an actual explosive device or some other security threat, in spite of the fact that the vast majority of security calls to the police are false alarms. By behaving in such a manner, the police display their responsiveness to the public, who are expected to continue calling because

¹⁴ Bratton, W., & Kelling, G. (2006). *Policing terrorism. Civic Bulletin*, 43, 1- 10.

of the potential damage from every terrorist attack. Similarly, in the United Kingdom, the police invest a great deal of effort to encouraging public attentiveness to suspicious behavior (suspicious short-term tenants, suspicious people who have bought or rented a car etc.). The police there strive to develop appropriate reporting mechanisms, alongside establishing working relationships with the private business community to protect businesses from potential threats and to provide guidance on appropriate security measures.

In Conclusion

A 2008 RAND study¹⁵ - on how terrorism ends- had studied 648 terror groups since 1968 (of which 136 were still continuing) and found that of the ended groups, 43% had transited to a political process and 40% had been ended by the police and 7% by the military. However, 10% had succeeded in their aims. In a separate study¹⁶, the demise of terrorist groups was classified into Negotiated Settlements (e.g. IRA in N. Ireland), Success for the terrorists (e.g. the Vietcong in Vietnam, Sandinistas in Nicaragua), Failure for the terrorists (e.g. M19 in Columbia); Reorientation into crime (e.g. FARC in Columbia); Decapitation of the leadership (e.g. PKK in Turkey); and State Repression (e.g. LTTE in Sri Lanka).

It is evident therefore that CT policing and political outreach have to complement each other. Terrorism has come to stay in our body politic and has national and international linkages. A sustained and holistic approach in dealing with this threat to peace and order will necessarily have to combine tactical as well as strategic elements. In the immortal words of Sri Ramdhari Singh 'Dinkar': क्षमा शोभती उस भुजंग को जिसके पास गरल हो- उसको क्या जो दंतहीन, विषरहित, विनीत, सरल हो। That is, the quality of mercy is appreciated only in a serpent that has the capacity to strike - not the one that is toothless! That one feels, says it all.

¹⁵ *How terrorist groups end: lessons for countering Al Qa'ida*, Seth G. Jones, Martin C. Libicki.
<https://www.rand.org/pubs/monographs/MG741-1.html>

¹⁶ *How Terrorism Ends: Understanding the Decline and Demise of Terrorist Campaigns*, Audrey Kurth Cronin, Princeton University Press, 2009



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Smart Cities and Public Safety

Durga Shanker Mishra, IAS*

It is afternoon. Sanjeev Kumar, Deputy Commissioner of Police (Central Delhi) arrived at his office, flanked by two junior officers. Around a dozen men and women are waiting patiently in a room next to his chamber. "Please give me a few minutes", Kumar tells the visitors and on his desktop, opens a colorful geospatial map of the area under his control. He zooms in on a micro-scale section of the area, which has crime hotspots marked in red. Kumar applies some filters on the new crime-mapping software and examines the calls made to the police control room about street crimes such as snatching, robbery and vehicle thefts in his territorial district.

Pausing for a few moments, he reaches for his wireless handset and connects all ACPs and SHOs of his district one by one. "Deploy two bike patrolling teams on either side of Bahadur Shah Zafar Marg in the press area. There were two snatching and robbery calls between 7 pm and 1 pm last night from that stretch. I don't want a rerun of the crimes tonight," he sternly tells the SHO of the IP Estate police station over the wireless set before scrolling through the application again.

Thus, the DCP identified the crime hot spot and possibility of any repeat of the crime in the area through a new software called CMAPS (Crime Mapping Analytics and Predictive System). The web-based software accesses real-time data from Delhi Police's Dial 100 helpline and uses ISRO's satellite imageries, spatially locates the calls and visualizes them as cluster maps to identify crime hot spots.

Bridging citizen safety and law enforcement capacity

Today, when more than one-third of the citizens live in urban areas and it is growing rapidly, our individual futures are interwoven with the future of our cities. A city's ability to provide safety and security to its most vulnerable residents, businesses and visitors is a

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crucial determinant of its economic competitiveness as well as the quality of life it offers. A city should be safe enough to allow a woman to walk alone at night or take public transit without the fear of being harassed or assaulted. It should let an elderly couple feel secure living in a house by themselves and not worry about burglary or violent crimes. It should be able to allow a child play in public spaces without care-givers fearing any harm or let a teen bike to school without fearing traffic accidents. It should allow every segment of the society exercise their rights and responsibilities without any discrimination.

As per the National Crime Records Bureau, annual incidences of crime in India's top 19 metropolitan areas jumped from 3,43,749 in 2009 to 7,29,174 in 2017. Crime against women and children also increased in this time period. Beyond crimes, issues such as road fatalities caused by inadequate traffic management and deteriorating health due to increased air pollution also contribute towards unsafe and insecure living conditions. As per the World Health Organization (WHO), 300,000 people died in India due to road accidents in year 2018. This is alarming because while India has 3% of global vehicular share, it accounts for 12% of the world's road fatalities. 21 of the world's 30 most polluted cities (with 6 in the top 10) are in India, according to the data compiled in IQAir AirVisual's 2019 World Air Quality Report.

While data shows an increase in crime, State Police Departments are constrained with limited resources and capacity to tackle security challenges on their own. A study conducted by the United Nations has revealed that while, on average, there is one police officer per 333 civilians globally, India's ratio is one officer per 761 civilians¹. Furthermore, national work force studies not only report high vacancy rates in State Police but also low morale and exhaustion among available officers. Local governments are also stretched to provide the level of high-quality citizen services and emergency responses that are demanded of them.

This gap between increased need for safety and security in urban India and limited response capacity is opening numerous pathways for solutions that are both technology enabled, and innovation driven. The Smart Cities Mission under the Government of India is uniquely positioned to foster these innovations that are needed to promote safe and secure living conditions in urban India.

Smart Cities Mission: an opportunity to take risks, learn and scale

With the realization that multi-dimensional problems facing urban India needs a cross-sectoral, creative and nimble approach - Smart Cities Mission was launched on 25 June 2015 by Hon'ble Prime Minister, Shri Narendra Modi. The mission bases its work on four principles to achieve triple goals of livability, economic-ability and sustainability.

¹ <https://scroll.in/article/815555/community-policing-has-made-bengaluru-safer-and-other-cities-can-learn-from-it>



These are: (i) **citizen at the core**: keeping citizens and communities at the center of development; (ii) **more from less**: being conscious of resource optimization to generate high impact; (iii) **cooperative and competitive federalism**: providing platform for collaboration as well as creating competition to promote excellence; and (iv) **technology as means, not goal**: leveraging context relevant technologies for value addition

The Smart Cities Mission recognizes that a strong relationship with the community is critical to the success of every law enforcement or local governance organization. Building close ties within the community is not only about traditional outreach and local involvement, but it is also about leveraging tools to help people communicate their needs and their risks directly. Whether with police to report crimes or with local authorities on civic services, new technologies can help develop ties to the community, by enabling officers to be more aware of and responsive to the needs of their constituents.

Following examples show some of the technology-enabled pathways adopted by cities under the Smart Cities Mission and other global cities towards safe and secure urban experiences:

1. Command and Control Centres

India's Smart Cities are leveraging data and technology through Integrated Command and Control Centres (ICCCs) to reduce crime, maximize information availability, decrease reaction times, improve traffic, protect city infrastructure and deter criminal acts. 49 such centers have been created in the smart cities, equipped with high resolution image processing tools, real-time video feeds, data integration and analytical applications. Work is under progress in another 33. These centers have helped enhance the capacities of their local governments to monitor, analyse and respond to civic needs and risks. These are, however, not unique to India and are understood by a range of different names – although all of them functioning as intelligent brain and nervous system of the city for local authorities.

Case Study 1: Safe and Secure Amdavad (Ahmedabad, India)



Figure 1: Amdavad Integrated Command and Control Centre (ICCC)

Smart City Ahmedabad has set-up an Integrated Command and Control Centre with state-of-the-art technology under the Safe and Secure Amdavad (SASA) Project. It helps monitor and control various utilities, including 6,000 smart street lights that can be switched on/off and dimmed remotely. It also helps manage pollution and noise levels through environmental sensors that have been installed across the city as well as traffic management through 6,200 cameras and 126 VMD boards.

Case Study 2: Rio Operations Centre (Rio de Janeiro, Brazil)



Figure 2: Rio Operations Center

Rio City Hall's 24x7 Operations Centre helps assess and respond to challenges ranging from extreme weather, to traffic congestion, to upcoming mega-events such as Rio+20. It receives real-time information that support its 600+ high-skilled operators to anticipate natural disasters like landslides to human incidents of traffic accidents and fire. It works with 30 city agencies and departs to alert affected communities and reduce response time.

2. Incident Management

Public Safety Incidents² refer to criminal activities such as vandalism, thefts/ burglary, domestic violence, kidnapping, assault, hit-and-run cases, parking complaints, etc. India's Smart Cities are using sensor data and real-time video feeds from CCTV cameras in public places for monitoring and surveillance. This is helping cities to gain better situational awareness, enabling real-time communication with first responders like police, fire, rescue and medical emergency units. Advancements in social media and communication platforms have enabled citizens to report incidents with greater ease. Thus, in a way, citizens have become city sensors.

² An Incident is an occurrence due to a combination of unforeseen circumstances, which, if not handled in an appropriate manner, can escalate into an emergency or disaster or crisis. Incidents which result in damage to properties and loss of lives due to riots, terrorist attacks, fire accidents, natural disasters, flooding, etc., are referred as emergencies and require quick responses/action.

Case Study 3: Locked House Monitoring System in Amaravati (Andhra Pradesh, India)



Figure 3: Locked House Monitoring System

Andhra Pradesh (AP) Police has developed a mobile application called 'Locked House Monitoring System (LHMS)' to prevent property offences. On receipt of a 'Watch Request' from a citizen, an LHMS Camera is installed in the house and real time footage is monitored from the AP State Real Time Governance (RTG) Command Control Centre (CCC). Any intrusion generates an alarm which allows police teams to reach the house and intercept the offender. Created under Amravati Smart City, the system is now extended to the entire State.

Case Study 4: Crowdsourced convictions in London, UK



Figure 4: Facewatch App

To help catch suspects of London 2011 arson and riots, the London Metropolitan Police asked citizens to download a Face Watch ID smartphone application and help identify convicts through from over 3,000 images taken from CCTV footages. If an image was known to them, citizens entered the name or address of the person, and sent to the police immediately and confidentially. This enabled the police to effectively apprehend suspects and led to charges being filed against 1,000 perpetrators.

3. Crowd Management

Management of crowds in busy market areas and transit hubs in cities or in case of large public events like fairs, festivals, processions, etc., is an essential function of public safety authorities. India's Smart Cities are using crowd management solutions equipped with video analytics (counting number of people in certain area, facial recognition) to provide important situational alerts in real time. The solutions are helping to generate alerts for overcrowding and analyze crowd flows. Cities like Ujjain, Nashik, Prayagraj and Agra have effectively used these solutions during major public events. In addition to video-feed based solutions, Smart Cities are adopting sensor-based tools in collaboration with mobile operators for crowd management. Tracking mobile phone location and analyzing data collected by mobile-enabled IoT (Internet of Things) sensors provides an extremely accurate way to monitor and manage crowds.

Case Study 5: Crowd Management during Kumbh Mela (Prayagraj, India)



Figure 5: Kumbh Mela at Prayagraj

Cameras also helped identify any suspicious activities and alert the police. The cameras were connected to two Integrated Command and Control Centres (ICCC), one at Kumbh and other at Police Lines in Prayagraj. These centres were equipped with technologies like the Automatic Number Plate Recognition, Red Light Violation Detection System and Face Recognition System.

Kumbh Mela in Prayagraj, the single largest congregation of people in the world, used artificial intelligence (AI) to manage crowd safety, ensure smooth traffic and garbage disposal in 2019. As many as 1,100 CCTV cameras were installed at over 260 vantage points across the 3,200 hectares site. Equipped with sensors, these cameras raised a soft alert when the crowd density exceeded three people per square meter, and a stronger alert on recording five people or more.

Case Study 6: Crowd Monitoring Tool (City of Antwerp, Belgium)



Figure 6: Crowd Management-Tour de France, Antwerp

Orange Belgium, a Belgian Telecom Company, collaborated with Cropland, a local service provider, and the City of Antwerp to deploy a crowd management solution for local events such as the hosting of the Tour de France and the Tall Ships Races. During the event, Orange Belgium provides real-time data stream of the location of all mobile phones connected to its network within a given area. A dashboard shows density of people within small squares across the given area, and allows the city to monitor the crowd in real-time. It can also be used to forecast the number of people that will be entering certain areas as they arrive at the event, and move around venue.

4. Traffic Management

India's Smart Cities like Bhopal, Ahmedabad, Indore, Jabalpur and Vadodara have deployed Intelligent Traffic Management System (ITMS) solutions, which enable detection and tracking of moving vehicles and traffic-flow monitoring and management. Adaptive traffic control technologies enable traffic signals to adjust based on real-time traffic conditions and send traffic data to connected vehicles. In-depth analytics of traffic flow data enables traffic managers implement strategies to mitigate congestion and plan improvements.

Case Study 7: Jabalpur Intelligent Traffic Management System (ITMS)



Figure 7: Jabalpur ITMS

Key components of Jabalpur ITMS include intelligent traffic control system at Junctions, public address (PA) system, traffic junction surveillance. Traffic enforcement features include Red Light Violation Detection (RLVD) System, Automatic Number Plate Recognition (ANPR) System, Speed Violation Detection (SVD) System and E-Challan System. Traffic signal efficiency is through optimized cycle times to regulate and maintain free flow of traffic. Citizens get real-time update on traffic and plan better; real time traffic monitoring helps authorities to manage violations effectively and prevent accidents. The real-time historic traffic data helps analytics and decision making.

Case Study 8: Case Study: Seoul TOPIS (Seoul, South Korea)



Figure 8: Unmanned enforcement camera (fixed and mobile)

Seoul Transport Operation and Information Service (TOPIS) is implementing advanced unmanned enforcement system to detect and punish illegally parked or stopped vehicles on urban highways as well as vehicles driving in bus lanes through use of unmanned enforcement cameras. The cameras cover all vehicles within a 200m radius in all directions on all roads. Vehicles captured by the camera are confirmed in as little as five minutes. Portable or bus-equipped enforcement systems detect vehicles on all roads of pertinent route. Of the four cameras equipped on buses, two cameras are at 45 degree angle to detect illegally parked vehicles on the shoulder of the road. The fixed enforcement cameras are installed in all regions of Seoul, and the bus-equipped cameras are being monitored to detect vehicles on main freeways in real-time.

5. Emergency Response

Emergencies involve public safety incidents such as traffic accidents, riots, terrorist attacks, fire accidents and natural disasters such as flooding etc., which result in damage to properties and loss of lives. Emergencies require immediate and collaborated response from multiple emergency responders such as police, ambulance, fire-safety, etc. Response time is a standard measure to benchmark the efficacy of emergency services. India's Smart Cities of Raipur, Agra, Pune and Visakhapatnam are using emergency response solutions like accurate location services, real-time video streaming, voice-over-IP, etc., to enable access to crucial information sources for emergency responders. Such solutions enable reduced decision- making time, improved resource allocation, and reduce errors.

Case Study 9: Dial 112 (Chhattisgarh, India)



Figure 9: Dial-112 Emergency Response System

Chhattisgarh's Dial-112 Project covers all emergency services offered by Police (100), Fire (101) and Ambulance (108) to single number 112. This has eliminated the citizen's need to dial multiple numbers. Based on emergency type, multiple services can be activated immediately. The Dial 112 services are rendered 24X7 through a 'Centralized Command & Control Center' which is enabled with state-of-the-art technologies. It was implemented in September 2018 pursuant to the Emergency Response Support System (ERSS) guidelines provided by Ministry of Home Affairs.

Case Study 10: Integrated Security & Emergencies Center (Madrid, Spain)



Figure 10: Madrid CISEM

Post terror attack in 2004, Madrid City Council established the Madrid Integrated Security and Emergencies Center or CISEM. The calls for traffic, security, fire emergencies are responded from this central system, which collects and turns signals to the emergencies' units required for the specific needs. CISEM is organized in two command emergency centers, four mobile coordination and 1,000 vehicles allocated for incident response. Response time has become 30% faster, crime decreased by 15%, and cost-effectiveness improved, thanks to the joint actions by different entities and increased citizen satisfaction.

6. Predictive Policing

Predictive policing uses data-driven analytics to prevent criminal activity by predicting it before it happens. Predictive policing harnesses the power of big data and analytics to see through historical public safety data, police records, criminal behavioral data, camera feeds, social media, and more to predict when and where crimes and other forms of public disorder are likely to occur. The analysis helps police in creation of profiles for past crimes, identify hotspots for criminal activities and assign crime abatement teams to address regional or seasonal hot spot location.

Case Study 11: CMAPS-Crime Mapping Analytics & Predictive System, Delhi

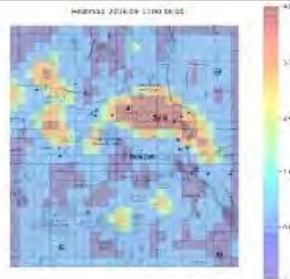


Figure 11: CMAPS of Delhi Police

Delhi Police developed CMAPS (Crime Mapping Analytics and Predictive System) software to identify crime hotspots and reduce the possibility of repeat crimes in the region. The web-based software has real-time access to Delhi Police's Dial 100 helpline data and, using ISRO's satellite imagery, the application spatially locates the calls and visualizes them as cluster maps to identify crime hotspots. The software updates the data every three minutes, replaces Delhi Police's mechanical crime mapping—which involves manually gathering data at an interval of 15 days. On the basis of scientific and objective analysis of data, the statistical models and algorithms of CMAPS software help the police understand where and when a next crime is likely to occur.

Case Study 12: PredPol (Los Angeles, USA)



Figure 12: PredPol of US

Los Angeles, a city with over four million people, had a very high crime rate in 2015. Its Police Department knew that it needed to act swiftly. They piloted a new tool incorporating some of the top Smart Security thinking called PredPol. The mission of PredPol is simple—to place officers at the right time and location to give them the best chance of preventing crime. PredPol has been piloted in Los Angeles and Santa Cruz police departments. It uses three data points—past type, place, and time of crime—to predict criminal behavior. These data points are fed into a unique algorithm, which incorporates criminal behavior patterns. These predictions are highly specific and accurately predict places and times of most likely occurrence of crime. During pilot implementation stage, PredPol brought down property crimes by 13 percent in one of the divisions.

7. Miscellaneous

Video cameras on the roads and streets have also helped in keeping vigilance and solving crimes in certain cities (bringing down the numbers!), improving compliance of traffic rules through faceless monitoring of violations and reporting through number plate recognition. It has high potential to reduce crime against women, children and elderly in public places with effective tele watch on the activities and nabbing the violators. Various Smart Cities like Nagpur, Vadodara, Surat, Bhopal, Delhi etc. have narrated anecdotes, which need to be scaled up. Use of machine learning and artificial intelligence along with IoT brings immense possibilities in improving policing-getting more from less!

Conclusion

Data and technology may help bridge the capacity gap rising from limited resources with city government and law enforcement on the one hand and growing complexity of services needed to provide quality life for all citizens on the other hand. New capabilities can log locations, listen for gun shots, stream video, flag license plates, scan databases,

and go on virtual patrol, allowing officers unprecedented awareness of their environments. These capabilities can provide the raw data which more detailed analytics can use to likely enhance response efficiencies. Thus, digital tech will not just help officers be in the right place, at the right time, but also serve as an aid when on field. It can also help build greater trust in communities they serve and can facilitate responsible participation of the citizenry in crime prevention.

Over time, digital technologies will change the way officers perform their day to day duties and in turn the type of trainings designed for them. Regulating authorities and leadership must recognize these changes not only to recruit the right personnel, but also to manage them effectively in a world shifting from bricks and mortar to bits and bytes. And though technologies, methods, and tools may continue to evolve, the core of law enforcement and local governance remains the same: i.e. tirelessly working to citizen well-being, safety and security.

The 100 Smart Cities have been test beds for some of these innovations. However, the work is far from done and will keep evolving as greater transparency gets built into how data is collected, who collects it, who owns it and how it is used. ‘Privacy by design’ as well as ‘security by design’ will have to be embedded in all services delivered by city government and law enforcement. We will have to find creative ways for public to have the ability to give explicit and informed consent to data collection in the public realm – that is building ‘data trust’. While digital technologies promise greater insight and safety than before, we will have to collaborate to answer the many questions on ethics and transparency that come with it – with an appetite for risks and failures for greater public safety, security and confidence.



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Inculcating Desirable Attitudes in Police in India

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Introduction

An attitude refers to a set of emotions, beliefs, and behaviors toward a particular object, person, thing, or event. Attitudes are often the result of experience or upbringing, and they can have a powerful influence over behavior. While attitudes are enduring, they can also change.

Attitudes of police in India have been under scanner for a long time now. Despite many efforts to improve the police functioning in India, there is a general feeling that police in India lacks right kind of Attitudes. This study examines the current state of police Attitudes as perceived by various stakeholders and recommends measures to improve attitudes of newly recruited police officers and men during training.

2. Attitudes Defined:

Psychologists define attitudes as a learned tendency to evaluate things in a certain way. This can include evaluations of people, issues, objects, or events. Such evaluations are often positive or negative, but they can also be uncertain at times. For example, you might have mixed feelings about a particular person or issue.

Researchers also suggest that there are several different components that make up attitudes¹.

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¹ Gans and MD, "How Can Our Attitudes Change and Influence Behaviors?"

<https://www.verywellmind.com/attitudes-how-they-form-change-shape-behavior-2795897>

The components of attitudes are sometimes referred to as CAB or the ABC's of attitude.

- **Cognitive Component:** your thoughts and beliefs about the subject.
- **Affective Component:** how the object, person, issue, or event makes you feel.
- **Behavioral Component:** how the attitude influences your behavior.

Attitudes can also be explicit and implicit. Explicit attitudes are those that we are consciously aware of and that clearly influence our behaviors and beliefs. Implicit attitudes are unconscious but still have an effect on our beliefs and behaviors.

Attitudes and Behaviours - How are they connected?

It is generally understood that behaviours are external manifestation of one's attitudes. For e.g. it is not possible to measure visually or aurally if a person has Empathetic attitude. But it is almost easy to measure the same how that person 'behaves' with poor and down-trodden or those in trouble. Even here, 'behaviour' can be measured by measuring how far this person 'listens' to and 'Communicate' with such person. Similarly how 'empathetic' is this person to such people and how 'Fair' is he in his dealings. To summarize, the attitude of a person finally boils down to measurable behavioural aspects like listening, Communication, Fairness, Empathy and so on. Thus, what we may focus eventually on is these factors, to determine the Attitude of an individual. Thus, one can say that attitudes decide, to a large extent, the behaviour of a person, which can be measured through certain quantifiable terms as described above.

Factors that Influence Attitude Strength

People are more likely to behave according to their attitudes under certain conditions²:

- When your attitudes are the result of personal experience.
- When you are an expert on the subject.
- When you expect a favorable outcome.
- When the attitudes are repeatedly expressed.
- When you stand to win or lose something due to the issue.

3. How Attitudes are formed?

There are a number of factors that can influence how and why attitudes form.

i. Experience

Attitudes form directly as a result of experience. They may emerge due to direct personal experience, or they may result from observation.

²Gans and MD, "How Can Our Attitudes Change and Influence Behaviors?"

ii. Social Factors

Social roles and social norms can have a strong influence on attitudes. Social roles relate to how people are expected to behave in a particular role or context. Social norms involve society's rules for what behaviors are considered appropriate.

iii. Learning

Attitudes can be learned in a variety of ways.

Operant conditioning can be used to influence how attitudes develop. Imagine a young man who has just started smoking. Whenever he lights up a cigarette, people complain, chastise him, and ask him to leave their vicinity. This negative feedback from those around him eventually causes him to develop an unfavorable opinion of smoking and he decides to give up the habit.

Finally, people also learn attitudes by observing the people around them. When someone you admire greatly espouses a particular attitude, you are more likely to develop the same beliefs. For example, children spend a great deal of time observing the attitudes of their parents and usually begin to demonstrate similar outlooks.

4. Why certain Attitudes are important for police in India?

Police are one of the most ubiquitous organisations of the society. The policemen, therefore, happen to be the most visible representatives of the government. In an hour of need, danger, crisis and difficulty, when a citizen does not know, what to do and whom to approach, a policeman is expected to give a helping hand and support such people. Whenever the rights of citizens are violated, they look upon the police to help them get their rights.

During the British Raj, the government of the day used police to suppress any uprisings by the locals. Even today, the police is not totally free from this stigma. In a democracy, the police is to function as any other public service, which renders services to the community and not as a *Force*. It is said that³:

“Every member of the force must remember his duty is to protect and help members of the public, no less than to apprehend the guilty persons. Consequently, whilst prompt to prevent crime and arrest criminals, he must look upon himself as the servant and guardian of the general public and treat all law abiding citizens, irrespective of their position, with unflinching patience, courtesy and good humour”.

Thus, the ideas of police as a Service rather than a force, encompasses the idea of effective accountability, citizen centricity and respect for human rights and the dignity of the individual. Thus these values should permeate all aspects of policing⁴ the above

³“The Indian Police Journal Vol 63, No2-3, April-September 2016.”

⁴“The Indian Police Journal Vol 63, No2-3, April-September 2016.”

comments on the Indian police being service and not a Force, aptly explains why police need to have certain attitudes as without such attitudes they cannot do what they are expected to do.

When one looks into the Model Police Act of 2006, section 58 says⁵:

Every police officer shall:

- (a) behave with the members of the public with due courtesy and decorum, particularly so in dealing with senior citizens, women, and children;
- (b) guide and assist members of the public, particularly senior citizens, women, children, the poor and indigent and the physically or mentally challenged individuals, who are found in helpless condition on the streets or other public places or otherwise need help and protection;
- (c) provide all requisite assistance to victims of crime and of road accidents, and in particular ensure that they are given prompt medical aid, irrespective of medico-legal formalities, and facilitate their compensation and other legal claims;
- (d) ensure that in all situations, especially during conflict between communities, classes, castes and political groups, the conduct of the police is always governed by the principles of impartiality and human rights norms, with special attention to protection of weaker sections including minorities;
- (e) prevent harassment of women and children in public places and public transport, including stalking, making objectionable gestures, signs, remarks or harassment caused in any way;
- (f) render all requisite assistance to the members of the public, particularly women, children, and the poor and indigent persons, against criminal exploitation by any person or organised group; and
- (g) arrange for legally permissible sustenance and shelter to every person in custody and making known to all such persons provisions of legal aid schemes available from the Government and also inform the authorities concerned in this regard.

Thus, it is abundantly clear that police is expected to have a set of attitudes which are necessary for fulfilling the expectation of the democratic society to which they serve.

5. Current experience of attitudes of Police in India

The Indian Police Commission appointed in July, 1902 under the chairmanship of Sir A.H.L. Fraser concluded⁶:

“The police force is far from efficient; it is defective in training and organisation; it is inadequately supervised; it is generally regarded as corrupt and oppressive; and it has utterly failed to secure the confidence and cordial co- operation of the people.”

⁵“Model Police Act: Bureau of Police Research And Development, Government of India on www.bprd.nic.in.”

⁶“Report of the Indian Police Commission 1902, available at SVPNPA Library.”

One could say that this was the situation in 1902 when British were ruling us. Things must have changed by now. However, a few observations are worth noting down:

- In the month of September, 2019 in a notice issued to the Chief Secretary and the DGP of a State, in a matter involving suicide by a rape victim in the police station, the National Human Rights Commission termed the police behaviour as 'insensitive and lackadical' towards the victim.
- On June 16th 2019, a few police officers and men got into physical scuffle with a tempo driver and his son in Delhi. The matter attracted wide-spread criticism and in an inquiry conducted by a senior police official of Delhi Police, it was observed that:
"The above act on the part of the two Constables involved in the scuffle is 'unprovoked, indiscreet and highly unprofessional' and that too in full public view, such act is contrary to the training imparted to them. The use of feet and shoes to hit an already overpowered person is an 'uncivil and abhorrent act'."
- According to a 2018 survey of 15,562 respondents across 22 states on perceptions about policing, the Lokniti team at the Centre for the Study of Developing Societies (CSDS)⁷ found that less than 25% of Indians trust the police highly (as compared to 54% for the army). It is worth noting that Trust between two parties has a direct correlation with Integrity, Benevolence and Competency. Thus, two out of three factors that actually results into trust are about Integrity and Benevolence which does not fall into Knowledge or skills set of a police officer but are part of the desired Attitudes.
- In 2013, while hearing a matter wherein a 65-year-old woman protesting against the rape of a minor was assaulted by a police official, the Supreme Court of India said, "Police Behaviour is worse than the mad animals" and warned all the States against such behaviour of police officers⁸.
- In its 2009 report, "Broken System (Dysfunction, abuse and Impunity in the Indian Police), the NGO Human Rights Watch said⁹, "A dangerous anachronism, the police have largely failed to evolve from the ruler-supportive, repressive forces they were designed to be under Britain's colonial rule. While sixty years later much of India is in the process of rapid modernization, the police continue to use their old methods. Instead of policing through public consent and participation, the police use abuse and threats as a primary crime investigation and law enforcement tactic. The institutional culture of police practically discourages officers from acting otherwise, failing to give them the resources, training, ethical environment, and encouragement to develop professional police tactics.

⁷ "CSDS on <https://www.csdn.in/research/projects>."

⁹ "Police Behaviour Worse than Mad Animals", Will Intervene Directly Now, SC Warns States - Indian Express."

- There are innumerable reports appearing in newspapers, wherein attitudes/behaviour of police officers has been shown in a poor light. This shows that all is not well with the police attitude and something needs to be done to correct the same.

6. Attitude change during training - is it possible? Experience in India and from other countries. (Efforts being made currently in training academies in India and abroad)

When the author discussed this issue with some police officers and trainers about changing attitudes through training, many of them were of the opinion that it may be rather difficult to do so through training. They were of the opinion that by the time, a person joins the police service; he has already formed his beliefs, opinions and attitudes. Thus it may not be easy to change the same in a short period of training when too much time is spent on imparting knowledge and skills. Some others were of the opinion that the real attitudes are amenable to change depending upon the organizational culture. They opined that a person joining the police is likely to change his attitudes once he joins the job in his State or district, rather than in training academy. However, some of them were of the opinion that it is possible to change the attitudes to a limited extent during the training period and it is worth trying.

Efforts being made currently in some police training academies in India

Most police training academies in India have been found to be largely focussing on Knowledge and Skills. There is little focus on attitudinal formations. But some efforts are definitely being made in the current system of police training. Some examples are¹⁰:

- Visits to Children Homes, Old Age Homes etc
- Talks by Eminent Speakers
- Meeting with Commercial Sex Workers, Surrendered Naxals etc.
- Session on Officer Like qualities

Similarly, when the author spoke to the Director of a State Police¹¹ that trains the Deputy SPs and the Sub-Inspectors', it was found that following efforts are being made currently for bringing about the desired attitudinal changes in the new recruits:

- Orientation about expected Attitudes in the Initial week of joining
- Talks by eminent Speakers
- Training sessions on Emotional Intelligence

¹⁰"www.svpnpa.gov.in. Personal experience of the author at the academy"

¹¹"Discussion with the Director of Maharashtra State Police Academy over Telephone."

In an interesting report on the impact of attitudinal changes on police through training is the case of Emotional Intelligence training experiment conducted in Nagpur Police, of Maharashtra State. The experiment, as has been reported in a newspaper¹², has resulted in “The police recognising and managing emotions and being able to avoid miscommunication and stress.” The police officer and men who underwent this training programme have been found to be better listeners, patient and empathetic to the complainants and people approaching them in distress.

Efforts and Experiments Abroad

i. Singapore Police Academy(Home Team Academy)

While personally discussing¹³ this issue of attitude formation in new recruits with a senior officer from **Singapore Police**, it was found that the Singapore Police Academy is currently making the following efforts:

- a. Singing songs or shouting loudly or pledging using the wordings of their core values – Courage, Loyalty, Integrity, Fairness- together as a squad or a class daily;
- b. Team bonding games;
- c. Classroom lessons;
- d. Performance by the squads of trainees during the functions/events at the Academy;
- e. Message by Commander or Commanding Officer or Course Manager from time to time.
- f. Pasting stickers on the laptops showing core values thus reminding the same to the cadets every time they are using the laptops.

ii. UK Police

In her research¹⁴ on the **UK police**, author Sarah Charman mentions that after four years of study over a few recruits of UK police she found that:

“The recruits’ views on the role of the police shifted during their first four years. They moved away from thinking that “crime fighting” and “upholding the law” were the main roles of the police. Instead, their focus turned towards “public protection” and “safeguarding”. One officer told me: “I can’t tell you the last time I went to a crime,” while another said “it’s 30% crime, 70% social work”. When asked what skills they needed to be police officers, they replied it was communication and empathy rather than authority and physical strength.”

¹²“Hindustan Times EPaper, English News Paper, Today Newspaper, Online News Epaper.”

¹³“Personal discussion with a senior police officer of Singapore police.”

¹⁴Charman, “How New Recruits Are Changing Police Culture for the Better.”

This study on UK police shows that it is not only the training academy but also the time spent on job that brought about the changes in the way these new recruits changed the outlook toward their job and their role towards the society.

iii. Australian Police

In another experiment¹⁵ conducted in **Australia** “Effects of Recruit Training on Police Attitudes Towards Diversity: a Randomized Controlled Trial of a Values Education Programme by Deborah Platz, Elise Sargeant and Heather Strang” on a ‘Value based programme called V4V’, 132 police recruits at the Queensland Police Academy received the training. Under randomised field trial conditions, the impact of the programme was evaluated to assess whether or not a values-based education programme at recruit level could increase recognition of racist and sexist behaviour, prejudice, empathy and tolerance of diversity. The results of the experiment were however mixed. The experiment did not clearly confirmed if such a programme positively resulted in desired level of change in the attitudes, though there were definitely certain levels of changes in the outlook of these recruits on these attitudes, post undergoing the programme.

iv. US Police

In an experiment¹⁶ conducted by Randy Gardener of Houston State University in USA, he found that “When a survey assessing individual’s attitudes towards policing and their distinctive imp actor effectiveness in law enforcement was administered to a group of academy cadets and the same individuals were again assessed one year post training. Their expressed attitudes on key issues had under gone considerable change, although most believed that their attitudes had remained stable.”

V. In another experiment¹⁷ “Consequence-Based Approach-Avoidance Training: A New and Improved Method for Changing Behaviour and Attitude”, interesting insights were found in the role of training in changing attitude and behaviour. The researchers, from Ghent University (Belgium), used Approach-Avoidance (AA) Training, which involves having participants repeatedly “approach” certain stimuli (e.g., moving a joystick toward images of healthy food) and “avoid” other stimuli (e.g., moving a joystick away from images of unhealthy food). In general, the

¹⁵“Effects of Recruit Training on Police Attitudes Towards Diversity: A Randomised Controlled Trial of a Values Education Programme | SpringerLink.”

¹⁶Garner, “Police Attitudes on https://www.researchgate.net/publication/229045509_Police_Attitudes_The_Impact_of_Experience_After_Training.”

¹⁷“Consequence-Based Approach-Avoidance Training: A New and Improved Method for Changing Behavior - Pieter Van Dessel, Sean Hughes, Jan De Houwer, 2018.”

research is mixed on the effectiveness of AA training, but these studies used a new version of the task that may produce more promising effects.

In particular, the researchers made sure that the AA training was clearly associated with positive and negative consequences. In their studies, participants played a modified videogame where they controlled an avatar that had to learn to approach or avoid certain foods with the goal of maintaining the avatar's health. For healthy foods (like carrots), making the avatar approach the food resulted in better health and avoiding those foods worsened health. For unhealthy foods (like cookies), the opposite was true; approaching led to worse health and avoiding led to better health. Rather than being explicitly told (or reminded) which foods were good or bad, participants now more subtly learned whether each food was associated with positive or negative consequences.

Although this game might seem a bit silly, the results suggest that playing the game changed participants' attitudes, goals, and behaviors. Compared to participants in a control condition, participants who completed the AA training game had more positive implicit (measured with an IAT) and explicit (measured with self-report) attitudes towards healthy foods. They also indicated a greater desire to buy healthier food both immediately after the training and again the following day. Most interestingly, participants completing this AA training did less actual snacking on unhealthy foods like potato chips at the end of the study.

These are some of the experiments in India and abroad on the impact of training in changing attitudes of police officers. These experiments do give us a hope that training can make some impact on the attitudinal changes in police in India.

In the second part of this paper, the author discusses the survey conducted amongst the police officers and others to know how desirable attitudes can be inculcated in the police officers.

Part 2

Introduction

In part 1 of this paper, the issues relating to the current attitudes of police in India were discussed. It was stated that all is not well with the current attitudes of police in India. Also efforts being made in India currently in some of the training academies and some of the experiments from countries like USA, UK, Australia, Singapore and Belgium were also described. The first part of this paper was concluded with a hope that there seems possibility of inculcating desirable attitudes in police in India through training interventions.

In order to take this work forward, the author conducted a survey involving police officers and civilians.

Survey Questionnaire analysis

Through a number of brainstorming and discussion sessions, a list of 15 attitudes which are essential for any police officer in India were shortlisted. These attitudes are shown as below:

1. Integrity
2. Empathy
3. Benevolence
4. Humility
5. Sensitive towards women, children, elderly, Poor and Down-Trodden
6. Active Listening
7. Dropping Biases and Non-Judgemental
8. Personal Resilience
9. Courage
10. Collaborative Negotiation and Mediation
11. Non-Violent Communication
12. Non-Discrimination and respect for diversity
13. Fairness
14. Friendly
15. Following the laws and rules in letter and spirit

Thereafter, a survey was created wherein responses were taken from more than 150 police officers and 150 others.

The results of the survey are as shown below:

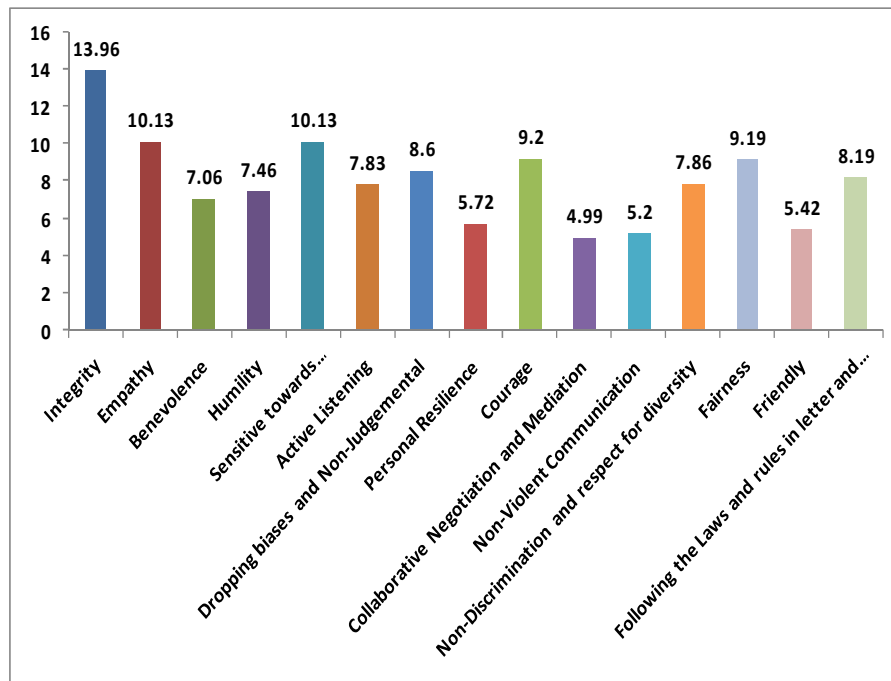
Q1: Arrange the following attitudes which are absolutely essential in a police officer in order of most important to not-so-important from the list given below. If you do not agree with any item in the list, please mention the same in the 'Not Applicable' space.

A Police officers:

Integrity	13.96
Empathy	10.13
Benevolence	7.06
Humility	7.46
Sensitive towards Women, Children, elderly, poor and down-trodden etc	10.13
Active Listening	7.83
Dropping biases and Non-Judgemental	8.6
Personal Resilience	5.72
Courage	9.2
Collaborative Negotiation and Mediation	4.99

Non-Violent Communication	5.2
Non-Discrimination and respect for diversity	7.86
Fairness	9.19
Friendly	5.42
Following the Laws and rules in letter and Spirit	8.19

The scores are depicted in bar chart as below.



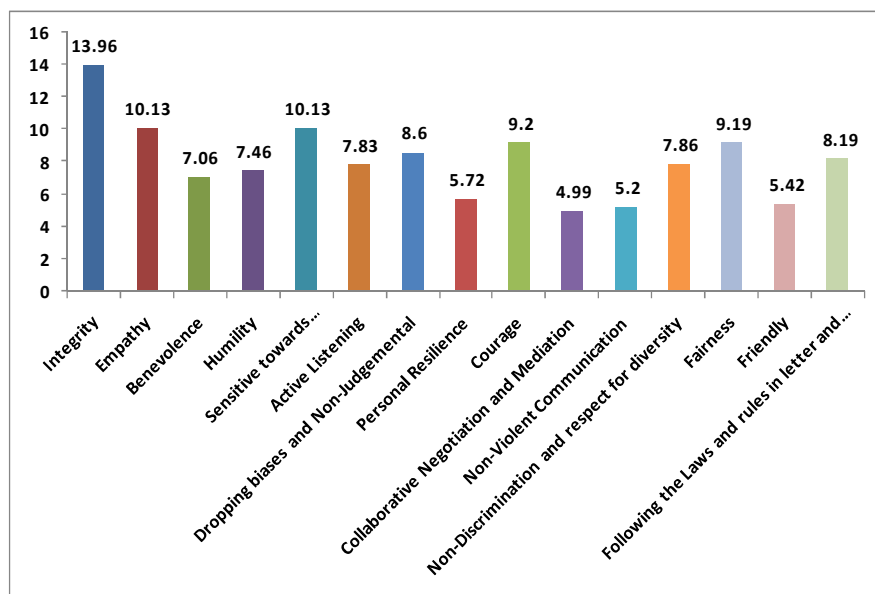
As can be seen from the chart above, the maximum importance has been attached to “Integrity, Empathy, Sensitivity towards the weaker sections of the society, Courage, Fairness, Dropping biases & being Non-Judgemental and following laws & rules in letter and spirit” as the top behaviours for the police officers.

The police officers have also indicated that “Non-discrimination and respect for diversity, Active Listening, Humility and Benevolence” are next important behaviours in a police officer.

Finally, the police officers who participated in the survey, opined that attitudes like “Personal Resilience, Friendly, Non-Violent Communication and Collaborative Negotiation and Mediation” as the bottom ranking attitudes.

B. Non-Police officers/others

Integrity	13.41
Empathy	10.13
Benevolence	8.47
Humility	9.64
Sensitive towards women, children, elderly, poor and down-trodden etc	11.52
Active Listening	8.48
Dropping biases and Non-Judgmental	8.08
Personal Resilience	7.08
Courage	8.82
Collaborative Negotiation and Mediation	5.89
Non-Violent Communication	6.39
Non-Discrimination and Respect for Diversity	6.09
Fairness	7.01
Friendly	5.08
Following Laws and Rules in letter and Spirit	6.31

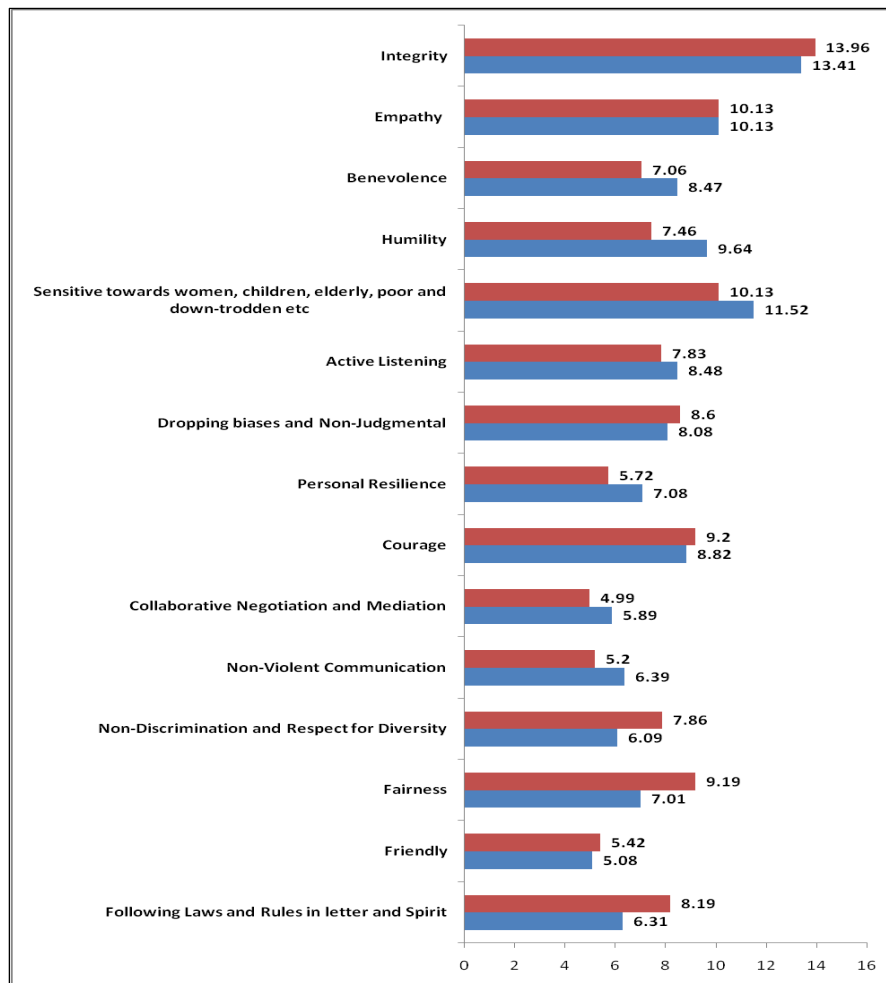


As can be seen from the chart above, the maximum importance has been attached to “Integrity, followed by Sensitivity towards the weaker sections of the society, Empathy, Humility, Courage, Active Listening, Benevolence, and Dropping biases and Non-Judgemental” as the top behaviours for the police officers.

The non-police officers/others have also indicated that “Personal Resilience, Fairness, Non-Violent Communication, Following laws and Rules and in letter and spirit are next important behaviours in a police officer.

Finally, the common people who participated in the survey, opined that attitudes like “Collaborative Negotiation & Mediation and Friendly” as the bottom ranking attitudes.

The two survey results when plotted together are seen as below:



The bars in Red are for police officers while the ones in Blue are for others.

There are certain interesting observations when the two charts above are compared:

1. Both police officers and common people gave highest importance to Integrity as the topmost attitude in a police officer in India.
2. On Empathy, the responses of both police officers and others are equal.
3. People expect police officers to be more benevolent than the police officers themselves. Similarly common people want police officers to be with much more humility.
4. Both police officers and common people give fairly high and equal importance to the attitudes of sensitivity towards women, children, down-trodden etc. and dropping biases and being non-judgemental.
5. Interestingly, common people felt more need for personal resilience for police officers than the officers themselves.
6. Courage is seen as an equally important attitude both by the police officers and common people.
7. People expect police to use non-violent communication. This goes well with the common complaints against the police regarding improper or abusive/threatening language used by the police.
8. Surprisingly, police officers gave very high importance to Fairness than the common people and slightly higher importance to non-discrimination and respect for diversity.
9. Both police officers and common people think that police should not be friendly. This is against the common belief that people want their police to be friendly.

Thus the above comparison gives some idea about the perception of police officers and others towards the desirable attitudes and relative importance attached to each of the fifteen attitudes.

The respondents were also asked to mention if they would like any other attitudes in the police in India. Some of the important responses are as given below:

A. Police Officers

1. Courage of Conviction.
2. Honesty and dedication to duty.
3. Must have courage and follow the rules and principles. b. To set example as an individual Police officer.
4. Intellect, power of discrimination
5. Initiative, proactive.
6. Personal bearing and conduct. Soft skills

7. People friendly, supportive
8. Ability to remain relaxed in a tense situation **b.** High Emotional Intelligence **c.** High emotional control
9. Be very polite towards public.
10. By his personal and professional act he should be able to win the confidence of the general public.

The non-police officers and others responded as below:

1. Respectfulhelpingtrust worthy
2. People friendly not fearsome to general public but to criminals
3. While performing his duties he should not conclude immediately without verifying facts. Should educate common man about general provisions of law in a friendly manner. Should not be egoist.
4. Reliability
5. Politeness
6. Human approach
7. (a)Ability to get away from the influence of Politicians, (b) Courage and conviction to tell the Superior/s what is correct and/or right (c) Ability to instil confidence in his Team.
8. Ability to Command.
9. The common man should not feel afraid to approach the police for help.
10. Should be able to think as the victim

It can be seen that most of the suggestions above, are largely covered in the list of 15 desirable attitudes already shortlisted in this study. Similarly some of these responses fall in the category of 'Knowledge and Skills' and hence are not considered further.

Lastly, the respondents were asked to give their opinion as to how these 15 attitudes can be inculcated in police officers through training. The noteworthy responses are as below:

A. Police officers

1. Conduct Case studies. Motivational talks by Sr. officers. Organize outdoor training activities.
2. Training academies are the best place to check anyone's attitudes and to rebuild someone's personality. There must be a provision of aptitude test before joining the job and after leaving the academy. While passing out if someone has got required attitude then only one should be posted in that field. Posting places can also be classified as per the requirement of attitudes.
3. Case studies discussion, cases across the globe, each highlighting not just the attitudes of important nature but also which should take precedence at such times. Group discussion about individual attitudes and their importance Personal

experience of a police officer and the reason why he /she took that particular decision at that point of time both right and wrong decisions which have happened should be discussed with equal footing.

4. May be case studies involving the working methods of police today to what is desired
5. Training structure should have psychological aspects.
6. Good case studies discussions. Team and leadership management games Classes on soft skills.
7. Putting Role Models as Trainers who can instil and reinforce faith in the system
8. Faculty and the serving officers should be the role models. Trainees learn by seeing more than listening.
9. By exposing to multiple stakeholder and providing skills to do scientific investigation and behaviour.
10. Experiential learning tools.
11. The parameters mentioned above should be integral part of course and consciously included in each training sessions- indoors and outdoors. In fact each course should be checked for adequate focus on above mentioned attributes. Example- case study while being analyzed should spend time on the attitudes of the police officers involved in that case and look for scenarios- if the officer was better listener, then how would the results have changed? The trainers and seniors should be role model- they should also consciously follow the attitudes described above. A special session each week should be on reflection on self. With regards to the identified attitudes. Recognize those with best behaviors and coach those who have difficulty. Feedback from public and peers could be used for triangulation of results.
12. Make them visit old age homes, remand homes, orphanages so that they can have a glimpse of the sufferings of the have not's and empathy can be developed, make them study some universal religious teachings which can develop benevolence, integrity etc in them.
13. Management training.
14. Behavioural training program should be inculcated.
15. We should teach ethical attitude training human behaviour, sensitivity towards women and children and always follow rules and regulations.

B. Non-Police officers and others

1. Rigorous and consistent training in all aspects of practical problems in consonance with theoretical knowledge. More to respond on very practical problems and issues of the society.
2. They shall sensitize them to real situations. We can have play or drama kind of thing to train them.
3. Train them for empathy.

4. By learning to acquire the trust of the society about their fairness and impartiality.
5. By including real incidents as case studies specially incidents covered in media.
6. Humanity
7. Just and Unbiased nature.
8. By training in simulated situations
9. Inculcating a sense of integrity while understanding the need.
10. By doing gap analysis of their state of mind by psychometric test and job requirements and then filling that gap by training.
11. Training academy can definitely inculcate good habits but most important is that the senior officers need to set example.
12. They should be approachable & empathy should be imbibed through case studies.
13. Screen international films where positive and good role played by cops. Interactive sessions with society members giving out their expectations.
14. They should be told and groomed to serve the public and not rule them. The attitude has to be of serving the nation and protect its resources and not to be ruler and misusing and looting the resources.
15. Interaction with peoples from all walks of life.

Thus, a number of suggestions have been given by both police officers and others as to how the desired attitudes be inculcated in police officers through training. Some of these have been incorporated while framing recommendations in this project.

Recommendations

Based on the responses of the respondents to the questionnaire and the brainstorming session, **following recommendations are made to inculcate right kind of attitudes in police officers through training:**

1. Most of the research in India and abroad has shown that it is not possible to completely bring the desired attitudinal changes in Police officers and men through training per se. Even the literature in psychology on attitude formation shows that apart from the training, there are other factors that influence attitude change. Thus, we may begin by agreeing that while several interventions may be made to bring in the desired attitudinal changes through training, (here training refers to training in a police training academy, though training may take place on job as well), we may not get 100% success. The key is to continue efforts on job as well, at least for first few years till the attitudes are well formed and settled in the individuals.
2. First effort that training academies may make to bring about desired attitudinal changes in their police officers is to give them first-hand **experience** of results of poor attitudes. Some of the initiatives that may work are:

- Sending the trainee officers on day one of their training to a local police stations incognito, and asking them to get one FIR registered. This is a very powerful experiment that will expose the trainees how our police station staff behaves. It will give them firsthand experience of the lack of empathy, poor listening, and poor communication skills of our police station staff in many cases. Even if some of them had a good experience in a particular police station, sharing and listening to the experiences of the entire class will surely make them realise how difficult it is to get a FIR registered and more than that how our staff lacks proper attitudes.
 - Arrange for visits to Women home, children home and Juvenile Homes. Let them interact with the women and children and many of them will realize that a little better sensitivity towards these women and children would have probably changed the narrative of some of the stories they heard from them. Probably, a little more Empathy and Integrity on part of some of our police men would have probably changed the course of lives of some of these women and children.
 - Even arranging interaction with some criminals, surrendered naxals, children in conflict with law etc would make them realize how lack of some of the attitudes in a few police officers can completely change the lives of some of the people, making it worse. They may also come across with stories of how some good police men helped a youth from turning into a hard core criminal. Such firsthand interaction will have a hundred times better impact than a police officer or a faculty talking about the same in the class.
 - Another experiment can be done at the training academies. The trainees should be attached with some of the villages in the vicinity. They shall be made to visit their assigned villages at least 5-6 times during their training period without being escorted by senior officers. Help of well meaning and genuine NGOs may be taken to organize such visits. Once they connect with the people of the village and develop some kind of trust, they will understand what important role a police station or officers therein can play in the lives of ordinary citizens.
3. Another way of forming attitudes is through **role modelling**. It is important that only those officers, who are fairly high on the selected attitudes mentioned above, are selected for positions in our training academies and schools. The faculty members should be first themselves clear about the desired attitudes in young police officers and then demonstrate the same in every act of theirs. The trainees observe very closely how the faculty members operate on these attitudes and try to imbibe/copy the same. Thus in everything that a faculty does-even a small thing like not talking to people belonging to his own region in the regional language, equal treatment in sanction of leave or giving punishments, allocation of marks, selecting group leaders for educational trips, selecting trainees who will be welcoming a guest or reading out vote of thanks etc, the faculty must show that he is fair to all and does not discriminate on any grounds.

If we expect the trainees to imbibe the attitude of empathy, the faculty must be empathetic to the problems of the trainees. For example, if leave policy does not provide for leave on a particular weekend, but if a trainee has a genuine problem, then making an exception giving cogent reasons can go a long way in forming empathetic attitudes.

Many senior police officers are poor listeners. They do not have patience to even completely listen to what others have to say. Thus, such an officer who does not listen to trainees and intervenes every now and then cannot expect the trainees to imbibe the attitude of active listening.

Similarly during the training period, it is advised that police officers who are generally held in high esteem by a large number of people, be invited to address the trainees. Since, such officers are highly admired and talked about, they become role models for the new trainees.

4. As the psychologists prescribe, "Social roles and social norms can have a strong influence on attitudes". It is felt this can be effectively used to inculcate desirable attitudes during training period and beyond.

Social roles relate to how people are expected to behave in a particular role or context. There is a wonderful example in most of the training academies to substantiate this theory. In all the training academies in India, it is taught to the trainees how to salute and when/whom to salute. They are made to practice the same hundreds of times on the parade ground. The outdoor trainers and even others tell them and even admonish them if they do not salute a senior officer or others. Thus, over a period of few months, it is abundantly clear to the new trainees when to salute and whom to salute and that it is an essential norm in a hierarchical organization like police to salute to ones seniors. Thus it proves that the above psychological prescription does work in police training. Now the challenge is to extend this concept to inculcating the right attitudes in the police officers.

The solution can be found in the above paragraphs where what these very same academies are doing with regard to saluting- Hammering! The academy that hammers into the minds of every trainee that they shall salute appropriately, fails to hammer the attitudes like Integrity, Empathy, Listening, Fairness, etc. The references to these attitudes come occasionally in some talks etc but there is no hammering of these into the minds of trainees. Thus, these become more of words than the norms. And things which are not presented as norms do not get imbibed as desirable attitudes in these young officers.

Here, there is something to learn from the Singapore police academy. They are exactly doing the required thing-Hammering the norms. As mentioned already, the Singapore police academy does a few interesting things which may look trivial to start with:

- Singing songs or shouting loudly or pledging using the wordings of their core values – Courage, Loyalty, Integrity, Fairness - together as a squad or a class daily.
- Message by Commander or Commanding Officer or Course Manager **from time to time.**
- Pasting the stickers showing core values on the laptops of the trainees so that they are reminded of the same whenever they are working on the laptops.

This is nothing but hammering again and again the core values of Singapore police in the minds of young trainees so much so that these becomes internalized in them. This is what our academies should do rather than just one session in classroom. Every faculty and staff of the academy shall look for any abrasions on the core attitudes and bring it to the notice of the trainees. Similarly display of these attitudes by a trainee shall be suitably appreciated.

Similarly, as per theory of psychology, **social norms** involving society's rules for what behaviours are considered appropriate, also have a strong influence on the behaviour formation. This concept can be used once a trainee is on-the-job training in field or once he joins his first posting and is still under learning phase. Here the senior officers in the field can play a very important role by first becoming good role models, then constantly reminding the new officers about the desired attitudes and correcting them if they go wrong. If a young officer displays an undesirable attitude, he can be counselled and if required reprimanded by the senior officers. If this is done in initial years of the career of an officer, the officer will understand the social norms as far as the desirable attitudes are concerned and will change his attitude to confirm the attitudes of the organization.

5. Operant Conditioning can also be used to change the attitudes of police officers.

Operant conditioning relies on a fairly simple premise - actions that are followed by reinforcement will be strengthened and more likely to occur again in the future. If you share an anecdote in class and everybody connects with the same leading to greater learning, you will probably be more likely to tell that anecdote again in the future. Because the behavior was followed by reinforcement, or a desirable outcome, the preceding actions are strengthened. Conversely, actions that result in punishment or undesirable consequences will be weakened and less likely to occur again in the future.

This theory is already being used in our police training academies where unacceptable behaviours like coming late for the class, remaining absent or coming back late from leave etc are penalized. However, this should be further extended to penalize the indicators of non-compliance to desirable behaviours. Similarly good behavior displayed by any trainee shall be rewarded.

6. Case studies specifically written with focus on desirable attitudes can also be used effectively during the training. Two types of case studies can be used- one where the protagonist in the case has already taken a decision and the trainees are asked to

evaluate and argue about the correctness or otherwise of those decisions in light of their being fair, legally correct, empathetic etc. In second types of cases, the protagonists be shown in a dilemma, and the trainees may come up with different possible course of actions, while justifying why they think such action should be taken in that situation. Such case studies, if discussed with proper preparation and giving sufficient time, can have a reasonable impact on the thinking and resultant behaviour of the trainees.

7. Another experiment that has worked very well in some of the training institutions is of organizing documentary movie festival. A number of carefully selected documentary movies can be selected and efforts be made to invite the Director/Actors of these movies. Movies on the issues that affect the society like -Integrity, Sensitivity towards weaker sections, fairness, following rules and procedures in letter and spirit etc can be screened for the trainees. Thereafter an interaction session with the Director/Actors be arranged where the subject of the topic, the motivation behind making a particular movie etc be discussed. It has been found that such an effort results in ignition of thought process and crystallization of desired attitudes in large number of trainees. When faced with the similar issues in real life, they tend to recall the movie and the respond in an appropriate manner.

While designing various courses, the academies should ensure that the discussion on Attitudes should be integral part of every course and consciously included in each training sessions- both indoors and outdoors.. Example- case study while being analyzed on legal aspects should also focus on the attitudes of the police officers involved in that case. Try to look for optional scenarios- if the officer was better listener, then how would the results have changed? If the officer had followed the rules and regulations in letter and spirit, what would have been the outcome of the scenario at hand?.... and so on and so forth. This will ensure that desirable attitudes become integral part of every aspect of training and not just in isolation for a session or two.

8. The attitudes mentioned above should be explained on day one of the training and then in every aspect of the training- be it field trips, sports, exams, practice sessions etc., the trainees be constantly evaluated whether they are improving upon these attitudes. A special session each week should be devoted for self-reflection with regards to the identified attitudes. Open recognition of those with best behaviours will encourage others to follow the behaviours of those who were recognized. Special coaching sessions may be conducted for those who have difficulty in adapting to these attitudes.
9. Another time tested method of bringing desired attitudinal changes are through Story Telling. Though quite underrated in police training, researchers have great things to say about the impact the stories can create.

Vanessa Boris a Senior Manager, Video Solutions at Harvard Business Publishing

Corporate Learning in an article¹⁸ mentions, "Telling stories is one of the most powerful means that leaders have to influence, teach, and inspire. What makes storytelling so effective for learning? For starters, storytelling forges connections among people.

Stories about professional mistakes and what leaders learned from them are another great avenue for learning. Because people identify so closely with stories, imagining how they would have acted in similar circumstances, they're able to work through situations in a way that's risk free."

Thus, police leaders with substantial experience can be invited to share their stories of success and failures and the behaviours associated with each of their stories. If the research on importance and impact of storytelling is to be believed, such stories will stick to the trainees and they may remember the same when faced with similar situations in their career.

10. Desired attitudes can also be reinforced by conducting experiential activities, highlighting specific attitudes. They also a nice tool to 'hammer' the desired attitudes in a participative manner without the need to give lectures on the attitudes. However, while designing your own activities, following points must be kept in mind:

It must be realised that these activities are being designed for bringing about attitudinal changes. These are not for imparting any knowledge or skills. Thus the activities have to be designed through experiential methods as it connects to learners' hearts, feelings and life experiences.

The activities must Change minds by touching hearts. The activities shall move the trainees out of their comfort zone, while, at the same time, creating a safe and respectful environment to help them reconnect with their self and our desired attitudes.

The activities must help the young officers help learning from within and shall be based on an open-ended approach to learning, where the trainee is not told what to think or do, but rather develops his or her own position and commitment through critical reflection and exchange of ideas with peers.

Conclusion

Attitudes are very important and desirable part of every police training academy curriculum. In fact it should be the central thought process around which the knowledge and skills should be woven to make a complete package for the new entrants into service. Sadly, most training academies in India are lacking in this central idea and are largely focusing on the knowledge and skill aspect of training only. It is well known fact that a majority of complaints from various stakeholders against police officers in India

¹⁸"What Makes Storytelling So Effective For Learning? - Harvard Business Publishing on <https://www.harvardbusiness.org/what-makes-storytelling-so-effective-for-learning/>."

are not about their knowledge and skills, but about one or the other attitudinal issue. While almost every vision statement of police academies and organizations do 'mention' right attitudes as integral part of a police officer, in reality they remain mere words. This paper has tried to look into the attitudinal aspect of making a good police officer. While comparing the best practices from some other countries as well as a survey seeking opinion of police officers and others, certain recommendations have been offered to add on the much desirable aspect of Attitude to the training curriculum of police officers training in India.



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Blockchain Technology and Cryptocurrencies Part I: Basics for Police Personnel

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Abstract

In last one decade, Cryptocurrencies have emerged as a new challenge for the law enforcement agencies worldwide. Relatively new technology, anonymity it gives to the owner, borderless reach across the world and absence of central regulatory agency accountable for it makes cryptocurrency a formidable challenge for police agencies. Blockchain technology is the one over which these cryptocurrencies are built. This paper is an effort to explain basics of blockchain technology in simple terms so that even a non technical person understands it. The paper explains the comparison between conventional currencies and crypto currencies. It discusses

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about various stakeholders in the Bitcoin ecosystem. It explains in brief about miners, nodes, wallet owners, wallet service providers, exchanges etc. Then with the help of one transaction, the journey of the transaction is explained till the time it becomes part of a block and that block becomes part of the blockchain.

Keywords

Blockchain, Cryptocurrencies, Mining, Wallets, Bitcoin, Exchanges

Introduction

On 3rd Jan 2009, first block of Bitcoin was mined and the world was never same again. On May 22, 2010 a programmer Laszlo purchased two pizza worth \$ 30 by giving 10,000 Bitcoins¹. This is believed to be the first economic transaction by use of Bitcoin in real world. Today when this article is written, the price of one Bitcoin is 7,15,418 INR or \$ 9,248 and Bitcoin is world's most popular cryptocurrency.

The police personnel around the world would not have bothered about this another “**Tech Thing**” had it not been used for illegal activities. Feb 2011, a website called “Silk Road” became operational². It was an online black market and the first darknet market for selling illegal drugs. This was just the beginning. Today hundreds of such online black markets are functional and more than thousand virtual currencies have come in the market.

Technology is a double edged sword. The Blockchain Technology is the next best thing after internet that is going to change the way we live. It's an emerging area but the expert believe that it will change the way how governments work and how businesses are run. At the same time, criminals too are making best possible use of this technology to fill their pockets, specially by the use of cryptocurrency.

Why and what police officers need to know about Cryptocurrency?

26% of the users and 46% of the transactions in Bitcoin were associated with illegal activities in 2017. According to one estimate, in 2017, total 37 million transactions worth 76 Billion USD took place in Bitcoin alone³.

Cryptocurrencies are getting used for illegal transactions like -

- a) Money Laundering
- b) Trade in Narcotics

¹ <https://www.investopedia.com/news/bitcoin-pizza-day-celebrating-20-million-pizza-order/> date 15.6.2020

² [https://en.wikipedia.org/wiki/Silk_Road_\(marketplace\)](https://en.wikipedia.org/wiki/Silk_Road_(marketplace)) date: 15.6.2020

³ <https://academic.oup.com/rfs/article/32/5/1798/5427781> date 15.6.2020

- c) Terror fundraising
- d) Ponzy schemes
- e) Illegal hacking , corruption etc

To understand about Cryptocurrency, one needs to understand the technology behind it. Blockchain is the technology based on which all the cryptocurrencies in the world operate. Blockchain Technology can be explained with the example of Bitcoin⁴.

Bitcoin

It is a digital form of money. Unlike conventional money, there is no central bank that controls the supply of this money. Rather, the financial system of Bitcoin is maintained by thousands of computers distributed around the world called as nodes. As on 15.6.2020, there are about 10535 reachable nodes in the world spread across 101 countries⁴.

Facts associated with Bitcoin

- a. Satoshi is the smallest unit of Bitcoin. One Bitcoin = 100 Million Satoshi.
- b. Code for Bitcoin is designed to produce maximum 21 million Bitcoins.
- c. Code for Bitcoin will run till 2140 and after that Bitcoin mining will stop.
- d. Original block size of Bitcoin was 1 MB.
- e. Original reward for mining a block was 50 Bitcoins.
- f. Average time to add a block to blockchain through mining is 10 min.
- g. After mining of 2,10,000 blocks, the reward for mining gets halved.
- h. Current reward for mining a block is 6.25 Bitcoins.
- i. In 2140, the reward for mining a block will be 1 Satoshi and mining will stop.
- j. Value of Bitcoin depends on demand and supply like any other thing.
- k. Any person can buy bitcoin through Bitcoin Exchanges, Bitcoin ATM's and through Peer to Peer Exchanges.
- l. One can get paid in Bitcoins in exchange of goods or services.
- m. Bitcoin is just one of the crypto currencies. There are more than 2000 crypto currencies in the market, more than 200 Exchanges in the world and more than 70 countries have Bitcoin ATM's.
- n. Bitcoin can be purchased in most of the currencies of the world including rupees.
- o. Marshal Islands have created their own cryptocurrency as a form of national legal tender. Many countries have banned Bitcoin. In many countries it has

⁴ <https://bitnodes.io> on 15.6.2020

a status of commodity. In India, RBI had issued a circular in 2018 which directed that all the entities regulated by it shall not deal in virtual currencies or provide services for facilitating any person or entity in dealing with or selling those. On March 4, 2020, Hon'ble Supreme Court in its judgement mentioned that the ban by RBI on virtual currencies as unjustified.

Stakeholders in Bitcoin Transactions

1. Miners - Miners are the people/groups who have requisite hardware, software and sufficient electricity to do mining of Bitcoin. Mining process is highly electricity intensive. Unlike conventional mining, the Bitcoin mining involves use of computational power to solve a mathematical puzzle using trial and error method. Miner who solves mathematical problem first is rewarded in Bitcoins. Thus mining process leads to creation of Bitcoins. The miners sell these Bitcoins and that is how it comes in circulation.
2. Nodes - Every miner is a node but every node is not a miner. Nodes are basically any system that has requisite Bitcoin software and it updates Bitcoin blockchain regularly. Nodes are very important part of Bitcoin ecosystem as they are responsible for transmission of transaction over network, verifying the authenticity of the transaction and in validating the right block.
3. Wallet holders- From user perspective, Bitcoin wallet is nothing more than a mobile app or computer program that allows user to send and receive Bitcoins.
4. Wallet Service Providers - These are agencies that allow users to have wallets. The type of wallets, their safety issues etc will be covered in investigation aspect of it.
5. Cryptocurrency exchanges - These are just like Stock exchanges. Instead of shares, bonds, mutual funds etc, one purchases or sells cryptocurrency there.
6. ATM - Cryptocurrency ATM can be one way or two way. Two way ATM's allow getting fiat currency in lieu of Bitcoin or allow getting Bitcoin in lieu of fiat currency.
7. Bitcoin code contributors - Original code for Bitcoin was written by Satoshi Nakamoto. It's an open source code. Updation of the code has been assisted by contributors⁵.

⁵ <https://github.com/bitcoin/bitcoin/graphs/contributors> date 20.06.2020

The difference between conventional currency and the Cryptocurrency can be explained with the help of following table

	Regular Currency	Crypto Currency (e.g. - Bitcoin)
1	Backed by Central Bank of a Country	There is no central bank that controls this currency. Also this currency do not belong to any particular country.
2	Currency is printed by Currency Printing Press. That is how, it comes in circulation.	Currency is generated by a process called as mining.
3	Currency printing is a highly confidential operation and fully controlled by government	Bitcoin mining can be done by anyone who has requisite hardware and software. Software is available in open source
4	Currency printing and circulation can go on as long as government wants it.	Bitcoin mining is limited. Maximum 21 million Bitcoins can be mined and it will be over in 2140.
5	Smallest unit of Indian currency is one rupee.	Smallest unit of Bitcoin is Satoshi. One Bitcoin = 100 Million Satoshis
6	Database of transactions of a bank is Centralised.	Database of transactions of Bitcoin is decentralised.
7	Bank transactions are confidential and can be seen only by authorised persons.	Bitcoin transactions are open and can be seen by anyone.
8	For online transactions, third party is a must.	Transactions in Bitcoin do not need third party.
9	Settlement time for international transactions is 2-3 days	Settlement time for Bitcoin is in minutes
10	Currency counterfeit is always in circulation	No one can counterfeit Bitcoin
11	Bank servers are vulnerable to Cyber attacks	Blockchain of Bitcoin is almost hack proof.
12	Process of opening bank account in regular banks is tedious and half the population in world do not have access to bank accounts	Bitcoin account (Wallet) can be opened in minutes and at free of cost

	Regular Currency	Crypto Currency (e.g. - Bitcoin)
13	Regular currency can be digital as well as physical	Bitcoin is only digital
14	Regular currency ATM's are almost in every country and they are one way.	Bitcoin ATM's are in about 72 countries and they are two way ATM. You can get Bitcoin by depositing cash or you can get cash by giving Bitcoin
15	INR is respected as currency in all countries in the World.	Some countries treat Bitcoin as currency, some treat it as commodity and some countries treat it as illegal

The working of Blockchain of Bitcoin

Bitcoin is a pseudo anonymous, transparent, decentralised, peer-peer network. It is called pseudo anonymous because users identity is not known. Users are known only based on a public key that is made up of 34 alphabet - numeric combination. It is transparent because every transaction is in public domain and anyone can see each and every transaction.

It is decentralised because no one central authority controls it and in case one has lost Bitcoin or has been cheated with, one cannot approach any authority that can take responsibility on behalf of Bitcoin. It is peer to peer network because the transactions are at the core of the Bitcoin ecosystem and that happen only peer to peer.

Mr X wants to send one Bitcoin to his friend Mr Y. The wallet public key looks like this - 16ftSEQ4ctQFDtVZiUBusQUjRrGhM3JYwe. Mr X can receive funds in this wallet by sharing this public key but he can spend the Bitcoin only with the help of Private key. Thus the private key ensures that the authentic owner only is spending the Bitcoin.

This transaction goes to the nearest node of the Blockchain. Fully functional node of the Bitcoin is one that has Bitcoin core client on a machine instance with complete blockchain. Node does three important functions. Node receives transactions and blocks, they validate the same and then relay the same on the network.

Transaction once broadcasted on the network, is received by each node on the network. Then it lies in memory pool of the miner nodes till confirmed. Miner nodes collect the transactions and put them in a block. There is limit to maximum block size and it is 2 MB.

Each block is made up of transactions, timestamp, hash value of the previous block and a **nonce** value.

Nonce is an abbreviation for “number used only once”. It is a number added to hashed or encrypted block in a blockchain that, when rehashed, meets the difficulty level restrictions.

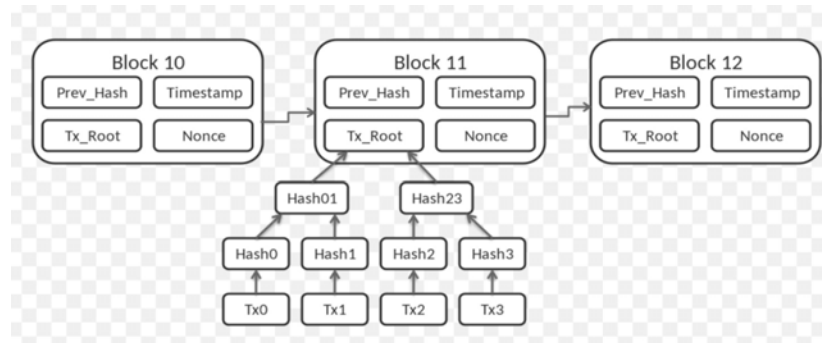


Fig. Block contents and linkages

Proof of work (PoW)- It is a consensus algorithm in Bitcoin blockchain. With PoW, the transactions are confirmed and new blocks are created and added to the existing chain.

Every block with its transactions, previous block hash value and time stamp is a unique data set. Every time when a new nonce value is added to this data set, its hash value changes. Mathematical puzzle in Bitcoin blockchain is to find a nonce value which when added to block data set, generates a hash value that is lesser than the given value. To put it in a simpler words, miners try to generate hash value that has given number of zeroes in the beginning.

e.g. 00000000FF

This selection of nonce and calculation of hash value and comparing it with the target hash is the job of mining machine. Initially when there was less competition, mining could happen with simple computers. Then with competition, miners migrated to GPU mining and at present ASIC - Application Specific Integrated Circuits are used to carry out mining.

Miner who gets the correct nonce, broadcasts the result on network. When more than 51 % of the nodes validate that the nonce is correct, the block get validated and becomes part of the blockchain. Only when a transaction has become part of the block included in blockchain, the transaction is valid. All the nodes update their database with the transactions in the new block.

Since 2009, Bitcoin has travelled a long way and has become a big challenge to centuries old established currencies across the world. The high value of Bitcoin attracted many people towards it and it resulted in increased difficulty in mining. It led to creation of mining pools. People started pooling up their mining resources so that they have higher probability of creating new blocks and getting Bitcoin in reward.

Some of the most popular mining pool are shown below

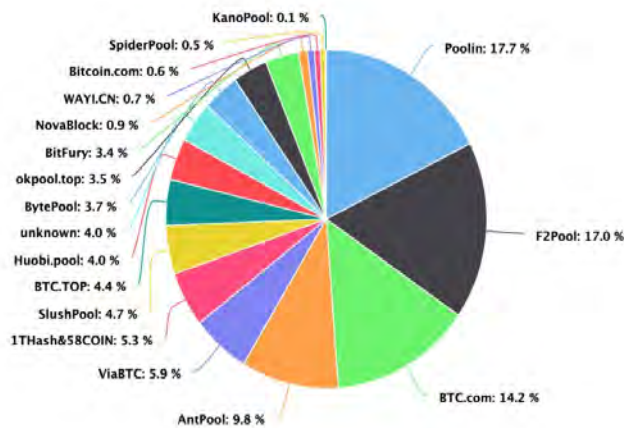


Fig. 3 - Mining Pools for Bitcoin⁶

Mining one block usually takes average 10 minutes and difficulty level is changed after 2016 blocks⁷. As on 20.06.2020, about 6,35,593 blocks have been created in Bitcoin blockchain⁸.

This basic understanding of the blockchain technology can assist the police officer in understanding Bitcoin in a better way and hence it can assist them in the investigation of offences involving Cryptocurrencies.

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⁶ <https://www.buybitcoinworldwide.com/mining/pools/date> 20.06.2020

⁷ <https://en.bitcoin.it/wiki/Difficulty> date 20.06.2020

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Rethinking Global Anti-corruption Campaign

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Abstract

In this work I make seven remarks on two topics viz, 1. Corruption control paradigm and 2. Implementation issues which are closely related with the new corruption control campaign. The arguments are about the relationship between corruption and growth; conceptualising corruption; corruption measurements; empirical relationship between corruption and other indicators of governance; continuing corruption control dilemma in developing countries; lack of demand from the powerful for controlling corruption and the need for looking beyond corruption merely as a problem. This work attempts to bring out inadequacies of the current corruption control approach both on conceptual and contextual aspects. This study argues in favour of a rethinking by making the corruption control efforts comprehensive and beneficial to the developing world.

Keywords: Contextual drivers; corruption measurements; corruption control dilemma)

Introduction

A vast majority of countries supports the new anti-corruption campaign in their appetite for development as this movement talks corruption control as an inevitable means of achieving economic growth. This campaign further claims that incidence of corruption comes down with increasing level of development (Enste, 2017); and developing countries face the problem of systemic corruption (Wigwe, 2016). The idea of good governance asserts that corruption needs to be controlled for increasing the economic growth (Chimezie, 2016). The neo-liberalism driven multinational initiatives like OECD¹, UNCAC² etc. do attempt to harmonise the practices across jurisdictions for

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¹ Organisation for Economic Development and Cooperation

² United Nations Convention Against Corruption

better corruption control. The UN, World Bank and donor agencies talk about global programme against corruption covering institution building; enforcement; international legal cooperation etc. (UNODC, 2004). Regional efforts like, the African governance initiative etc. talk about the need for context specific interventions for better corruption control. As a result, many countries have taken measures to incorporate the provisions of the initiatives like, UNCAC; and made revisions in their regulations wherever the provisions were overlapping.

But, review of anti-corruption works over the period of past three decades gives the idea that corruption control efforts have not been received with equal enthusiasm by all countries (Khan, 2013; UNODC³, 2004). It is evident that from 1990s the anti-corruption movement has consciously built the narrative that corruption control is essential for economic growth by considering corruption as an independent variable. But, both the approach and claim of the current anti-corruption movement are contested by scholars as the effect of corruption control in increasing the growth rate is not very evident; and no country in the world has achieved economic development by controlling corruption (Khan, 2013). It is widely believed that the current campaign understands corruption in a very narrow sense of mutual demand and supply between two corrupt actors; and is driven by the concerns of market competition.

I organise this work as a set of seven remarks on topics 1. Corruption control paradigm and 2. Implementation issues as these topics are closely related with the current approach of corruption control. Essentially, in this work I highlight the need for new thinking on the paradigm shift in corruption control from 1990s; and argue in favour of a new finding on the relationship between corruption and governance by addressing the underlying causes of corruption. In this context, I examine the issues of quantifying corruption; applicability of tailor made anti-corruption interventions in different settings; and the evidences of corruption control on economic development. Discussion on conceptual and theoretical inadequacies of the current corruption control approach forms a substantive part in this section. On the topic implementation issues, I make three remarks. In this section, I focus on the continuing dilemma of corruption control in developing countries and reasons thereof by describing the structural drivers of corruption and their impact on policy. This part of the work shows that corruption control have more to do with the contextual political economy rather than with the global understanding on corruption.

1. The relationship between corruption and growth is not well identified; and outcome of the projected gains of corruption control are predominantly aspirational

Argument for adopting the anti-corruption campaign goes on the following lines: Corruption undermines legitimacy (Bhargava, 2005; Meon & Weil, 2010); and

³ United Nations Office on Drugs and Crimes

corruption has negative correlation with economic growth (Mauro, 1995; Tanzi & Davoodi, 1998; Aghion, et al, 2004). The new governance agenda pushes through corruption control as a means of achieving economic growth by arguing that corruption negatively impacts growth. If so, the new corruption control campaign should pass the following tests: 1. historical data should be consistent in showing significant negative correlation between corruption and economic growth and 2. the causality between corruption and economic growth should be able to be explained empirically in different settings. It is fact that the new corruption control programme recognises the mechanisms that allow internal regulation of social interactions within corrupt networks (Vannucci, 2015). Still, this neo-liberal view of corruption control is a historical (Bedirhanoglu, 2007).

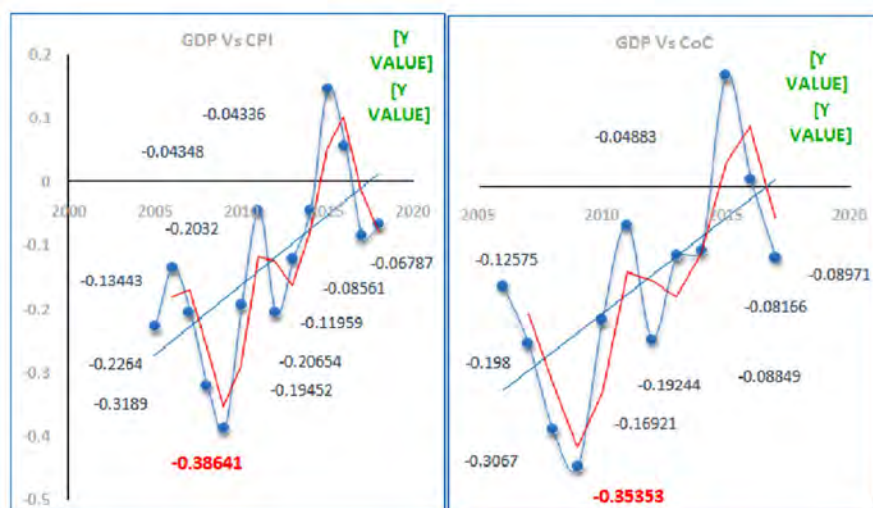
Khan (2013) argues that corruption control has not helped any country to achieve economic growth. Even the high growth developing economies like Japan, China, South Korea etc. did not take very active corruption control measures at early stages of their development. Blackburn, et al, (2006) also find little evidence to support the claim that corruption control promotes economic growth. They argue that many of the most poor and corrupt countries in the past still remain poor and corrupt. Similarly, the study conducted by Persson, et al (2010) found that the position of most of the African countries in corruption control remain the same since the anti-corruption reforms were initiated in the 1990s. Findings of Johnston (2005) and Kpundeh (2004) also indicate that corruption has become more entrenched in many developing countries along with their efforts to control corruption. The theoretical model developed by Aidt & Dutta (2008) shows that corruption has negative impact on economic growth in countries where institutional quality is strong and vice versa. Méon & Weill (2010) would also produce similar evidence in their study. The study of Egger & Winner (2005) for seventy three countries shows that corruption stimulates growth by eliminating government failures emphasising the functional effects of corruption.

These views lead to the argument that corruption control could be the function of economic development and the *vice versa* need not necessarily be true. It is also true that the neo-liberal way of approaching corruption has created governance crisis in developing countries by increasing the costs of corruption control and by undermining the contextual drivers of corruption.

In this context, this work studied the impacts of corruption on GDP growth for 159 countries using the GDP growth rate published by the International Monetary Fund; Corruption Perception Index and Control of Corruption Index released by the Transparency International and the World Bank respectively. Panel data for the period from 2006 to 2018 were studied through correlation and linear regression analysis. It was aimed to see impacts of corruption on GDP growth of various countries over the period of time. The following table shows the correlation values of GDP growth Vs Corruption Perception Index; and GDP growth Vs Control of Corruption Index for 159 countries from 2006 to 2018.

Year	GDP and CIP	GDP and CoC
2006	-0.12575	-0.13443
2007	-0.198	-0.2032
2008	-0.3067	-0.3189
2009	-0.35353	-0.38641
2010	-0.16921	-0.19452
2011	-0.04883	-0.04348
2012	-0.19244	-0.20654
2013	-0.08849	-0.11959
2014	-0.08166	-0.04336
2015	0.13857	0.1459
2016	0.0092	0.05848
2017	-0.08971	-0.08561
2018	NA	-0.0679

Correlation analysis clearly leads to the following inferences: 1. the association between corruption and GDP growth is normally negative, but weak; and 2. the direction and strength association between the variables are not consistent as they fluctuate over the period of time. The linear trend lines indicate the decreasing trend of negative effects of corruption on GDP growth over the years. Evidently, there was negative correlation of -0.38641 and -0.35353 for the two sets of variables under study for the year 2009. But for subsequent years, results show further decrease in the strength of association between the variables. Interestingly, results for 2015 and 2016 show positive relationship between corruption and GDP growth for both the sets of data. The results indicate that the corruption-GDP growth relationship is dynamic and can even be positive and thus, the axiomatic view that corruption impedes growth is well contestable. Distribution of correlation values; linear trend lines; and moving average lines for the variables under study give the pattern shown below.



When the variables were regressed separately, the regression results produced the following:

SUMMARY: GDP Vs CPI ⁴		SUMMARY: GDP Vs CoC ⁵	
<i>Regression Statistics</i>		<i>Regression Statistics</i>	
Multiple R	0.366723	Multiple R	0.015113815
R Square	0.134486	R Square	0.000228427
Adjusted R Square	0.128973	Adjusted R Square	-0.006139544
Standard Error	2.02979	Standard Error	2.181546835
Observations	159	Observations	159

The regression results lead to the inference that corruption is not a strong determinant of GDP growth; and that the relationship between corruption and economic growth is not direct. Since the impacts of corruption on economic growth are dynamic and could even be positive, looking for direct causality to explain the negative impacts of corruption on economic growth can mischaracterise the relationship between the variables. The findings thus, while countering the assumption that corruption impedes

⁴ Corruption Perception Index

⁵ Control of Corruption Index

growth, indicate that corruption control strategies must focus on tackling the indirect drivers that may happen over the period of time impacting growth, instead of treating corruption as an independent variable.

2. Narrow conceptualisation of the phenomenon reducing corruption to a mere law and order issue is not accommodative to the varied aspects of corruption

Corruption is found to have different causes and consequences in different societies (Rodriguez-Sanchez, 2018). Still, conceptualising corruption remains a contested area both in academia and in policy arena as there is no single agreed definition of corruption (Perumal, 2019). The UNDP (2015) admits that the complex and evolving nature of corruption makes it difficult to have a commonly agreed definition. Nonetheless, there is convergence of understanding about the harmful effects of corruption (Brook et al., 2013).

Governance literature define corruption in a very narrow sense of abuse functions; bribery; accumulating disproportionate assets; embezzlement; cheating etc. that impact various aspects of governance. There is uniformity among the institutions that support the current corruption control approach in defining corruption. The World Bank (2013) defines corruption as abuse of public office for private gain. Transparency International (2013) relates corruption with abuse of entrusted power. According to the United Nations (2004) corruption is the abuse of power for private gain. To put in perspective, the new governance agenda based anti-corruption efforts limit their focus to those governance factors that cause or are affected by corruption; and by focussing on those behaviours that need to be criminalised instead of getting into the issue of defining corruption. Brooks, et al.,(2013) while criticising this approach argue that focusing only on bribery while trying to understand corruption will overlook the complexity of the problem. They further argue that corruption is the result of an illicit agreement and that there is a willing partner in a corrupt transaction to bribe the agent.

Literature show divergent views in understanding corruption in the society. Rational; cultural; anthropological and functional approaches try to define corruption from different perspectives with their own assumptions. Functionalism sees corruption as a way to distribute resources in the society and to generate economic growth for general welfare. For Samuel Huntington (1968) corruption is the way to grease the wheels to get things done. Similarly, the neo-functionalist approach sees corruption as a problem solving arrangement. But, for the rationalist approach corruption is dysfunctional to society; and actors to a corrupt deal aspire to maximise their profit (Pertiwi, 2017). Accordingly, the economic models of corruption like, the Principal-Agent theory and the Rational Choice approach see corruption as the result of profit maximising behaviour of rational actors at the cost of society. Institutional approach to corruption emphasises to understand corruption through the functions of institutions. Schwickerath (2017) argues that institutions can help to understand the key components of corruption. The neo-

institutional approach emphasises to consider also the mechanisms which allow the internal regulation of social interactions within corrupt networks; and their effects on individuals beliefs and preferences (Vannucci, 2015). Rose-Ackerman & Palifka (2016) see corruption as a particular form of unethical behavior which harms the organisation and the society as a whole. Cross-disciplinary approach to corruption focuses on understanding corruption by looking at what it means to individuals implicated by the phenomenon while engaging in social relations and situated in different contexts (Prtiwi, 2017). For Brubaker & Rogers (1998) corruption is a meaningful and culturally constructed social phenomenon. Seleim & Bontis (2009) see corruption in institutional collectivism. There are views that attempt to define corruption in also the context of relationships also. Anthropological approach, following social constructivism, prefers multiple views of ethics and morality rather than moral evaluations (Prtiwi, 2017) for understanding corruption. Similarly, fragile states do not have functional institutions and there is lack of rule following behaviour. In such contexts looking for the key components of the existing popular definition of corruption and detecting violations to rules is complicated (Schwickerath & Düsseldorf, 2017).

Apart from conceptualisation, also there is the problem of contextualising corruption by the new anti-corruption movement as these efforts apply the same rules and practices in all settings (Dixit, 2016) irrespective of context specific realities. Bratis (2003) argues that the universalistic approach of understanding corruption overlooks historical, cultural and social specificities that cannot be ignored while trying to understand corruption. Such context based issues may remain hidden and can act as drivers of corruption if go unaddressed. Also there are contentions about the spread of anti-corruption norms in global governance promoted by various international institutions. The basis of current universalistic movement against corruption like, increasing evidences about corruption and the convergence of views about fighting corruption are also under severe criticism (Gephart, 2009). It is true that the universalistic approach dominates the world of corruption control. But, premises of this approach can create false dichotomies between corruption and various other aspects of human life due to its narrow understanding of the phenomenon. Thus, the understanding of current corruption control approach both in conceptual and contextual aspects lacks comprehensiveness and is not inclusive as well.

3. Are we measuring the immeasurable?

One of the most significant outcomes of the current corruption control campaign is the corruption measurements that attempt to capture perception about corruption through various variables. Obtaining direct data about corruption is a challenge due to the secret and illegal nature of corruption and in order to overcome this challenge corruption measurements were developed. These measurements have strong implications on the issues of governance as they are perceived to be indicating the performance of governments. Now, many international and regional agencies are providing corruption

measurements and in spite of their merits in helping to understand corruption, corruption measurements have their inherent weaknesses as these are primarily perception based; and do not capture the actual instances of corruption. Andvig, et al., (2000) argue that perceptions about corruption may not reflect the reality as they depend upon perspectives of specific groups or business and political orientations. This apart, the understanding of people about corruption varies irrespective of the level of corruption (Kube, 2017). As a result, corruption measurements face both methodological and ontological challenges from critiques.

Actually, the corruption indices based on aggregating data from various sources emerged in the mid-1990s. It is claimed that the aggregate indicators attempt to look beyond subjective factors while measuring corruption (UNDP, 2018). These measures are called as composite indicators (Arndt and Oman, 2006) and aggregate indicators (Kaufmann, 1999). Incidentally, most of the corruption measurements aggregate data from various sources in different forms for quantifying corruption. Though the third generation measurements try to limit the level of data aggregation, composite measures dominate the corruption measurements for at-least two decades (Malida, 2013). Criticism faced by composite indices for aggregating the data are varied. Even the UNDP (2008) admits that aggregating the data from many sources may lead to lose of conceptual clarity while measuring corruption. Knack (2006) argues that the measurements based on data aggregation lack conceptual precision as aggregation of data may not be based on independent judgments. For Arndt and Oman (2006) aggregate indicators are susceptible to misuse due to their selection bias; poor methodology and scoring criteria. Rohwer (2009) has reservations about transparency in collecting information for aggregating the data. Since the composite indices simply re-assemble data from different units of measure, re-scaling them into a single unit is also a problem (Rohwer, 2009). As a result, there are difficulties in interpreting the statistical results; changes in methodology; and data sources (Kaufmann and Kraay (2007). In addition, there are issues related with comparison of corruption measurements over time and across countries. Also there are correlation errors in sources while aggregating the data from various sources. Kaufmann and Kraay (2007) argue that composite data have not been found effective for comparison over time and among various countries.

It is true that perception about corruption impacts decisions as political and business decisions are taken after taking public perception into account. Perceived level of corruption has been cited as one of the reasons for less effective anti-corruption interventions in different countries. Objective data about corruption can give precise understanding about corruption and its causes for correct decision making. But, objective measurement in corruption is extremely rare and most of the corruption indicators rely on subjective measurements (Francisco & Javier, 2007) though there are attempts to build objective corruption measurements through innovative tools (Duncan, 2006).

Subjective data have their inherent shortcomings like, lack of precision; potential interdependence of sources; problems in validating the underlying data sources etc., You

& Khagram (2005) argue that the perception based data for measuring corruption may be imprecise and biased; and they may not reflect the actual occurrence of corruption (Andvig et al., 2000). Donchev & Ujhelyi (2007) warn that using corruption perception indices measures of corruption may be more problematic than suggested by the existing literature due to lack of objectivity. Still, the UNDP (2008) believes that perceptions based data can be of use when data are not available with formal government institutions. Kobis (2017) views that it is important not to draw too strong conclusions from corruption indicators. These views lead to the argument that corruption cannot be quantified precisely and that the inherent shortcomings of corruption measurements need to be appreciated before accounting them in policy decisions.

4. Estimates of corruption are not uniform across settings; and the inferences resulting from empirical relationship between corruption and other indicators of governance do not present actually what the scenarios are, rather they are often misleading.

It is well understood that corruption measurements have conceptual issues. Considering the growing importance of corruption measurements in governance it is essential that they are consistent across settings because, inconsistent measurements with contestable validity can mislead the priorities in governance. Thus, it is imperative to examine if the corruption measurements have validity related issues when applied in different countries. There are studies that indicate that corruption measurements could not be validated in cross country studies (Shukhova & Yulil, 2017; Kaufmann & Kraay, 2007). Shukhova & Yulil (2017) argue that corruption measurements provide poor estimates of corruption level in countries with high corruption levels. Kaufmann & Kraay (2007) also agree with this finding. The broad aspects of validity related issues could be: 1. Content validity⁶; 2. Construct validity⁷; 3. Concurrent validity⁸; and 4. Predictive validity⁹. When these issues are adequately accounted, ideally, the corruption measurements should not face validity challenges and further, they should produce similar results across settings. Here, how far have the corruption measurements and the subsequent corruption control narrative altered the corruption control landscape could be a measure to assess the efficiency of corruption measurements as many interventions have been devised on the basis of insights given by corruption measurements. Considering the resource spent on the new anti-corruption campaign, the logical expectation is that the three decades of corruption control would have significantly enhanced the achievements of various countries in their efforts to control corruption.

⁶ Shows the coverage of all aspects of the variable.

⁷ Shows correlation among indicators of the same variable

⁸ Shows correlation with the initially valid indicator.

⁹ Shows predictability of the future outcome of a variable.

For studying this aspect, I test the following set of two null hypotheses: 1. There is no significant difference in the perception about corruption control among various countries and 2. There is no significant difference over the period of two decades in controlling corruption among various countries. Analysis of variance without replication test was applied for studying these hypotheses using secondary data developed by the World Bank (2019) for control of corruption index from 1996 to 2018 for 189 countries. The control of corruption index reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption; as well as capture of the state by elites and private interests (World Bank, 2019). The effect of time period of over two decades starting from 1996 to 2018 on the scores of 189 countries in control of corruption index was studied in this work.

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	3724.711	186	20.02533	483.3561	0	1.182198
Columns	1.009146	19	0.053113	1.282	0.183696	1.589452
Error	146.4128	3534	0.04143			
Total	3872.133	3739				

The inferential statistics tool two factor ANOVA without replication test for the given data set produced the above results. Results show that the calculated F-value for the time period considered under this study (483.3561) is less than the corresponding critical F-value of 1.182198, indicating that the calculated F-value falls in rejection region. This shows that there is statistically significant variation in the mean value of control of corruption index among 189 countries. But, for the mean column values which is related with the time period of 19 years, the changes were found to be random and did not have statistical significance as the P-value was found to be 0.183696.

Data analysis further reveal that the group of countries that had positive scores in control of corruption index right from 1996 do show significant difference in their mean values and this is negative in the case of top hundred countries that continue to score negatively from 1996 in control of corruption index. This second group of countries constitute the developing world.

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	542.5577	68	7.978789	701.1601	0	1.309517
Columns	0.765342	18	0.042519	3.736483	2.2E-07	1.612286
Error	13.9284	1224	0.011379			
Total	557.2514	1310				

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Rows	79915377	99	807226	1912970	0	1.253312
Columns	5.982919	19	0.31489	0.74623	0.772569	1.592046
Error	793.7355	1881	0.421975			
Total	79916176	1999				

When the Z-test for two population proportions, considering the countries with high score and poor score on control of corruption index as two independent populations, was conducted to test the null hypothesis that the mean values of the two independent populations were equal, the following results were obtained: The test Z statistic value of -11.067324 does not fall in the 95% critical value accepted range $[-1.9600; 1.9600]$ and $x_1 - x_2 = -50.34$ is not in the 95% accepted range $[-8.9100; 0.9600]$. The statistic S' equals 4.549. As per data analysis, the P-value is: 0.00000, i.e. $(P(x \leq Z) = 0.00000)$ which is less than the alpha value of 0.05. Results thus, show that the chance of type-I error (rejecting a correct H_0) is nil or very small. Thus, results support the claim that mean values of two independent populations under study are not equal indicating that there exists statistically significant difference between the group of countries with high and low corruption incidence over the period of two decades in control of corruption index.

Results thus, show that corruption measurements work differently in different settings and the developing countries have their context specific issues that need to be addressed for efficient corruption control. These inferences have implications on the current narrative of corruption control and on the standard corruption control strategy as they bring out the differences in the performance of corruption measurements in different settings. The gap in performance between the sets of countries under study is unlikely to close in near future as the reasons for gaps are not very clear; and, though the models evolved and tested in the developed world have been deployed in developing countries the drivers of corruption in developing countries are still localised. Further, studies suggest that differences in the institutional capability between developed and developing countries is also the reason for inconsistent performance of anti-corruption tools. But, these assumptions need particular empirical corroboration because developing countries, in general, have less efficient institutions (Khan, 2007) when measured against western standards.

5. The corruption control dilemma does live on in developing countries as many of the contextual drivers are more powerful than the corruption control efforts undertaken.

The convergence of understanding about corruption has not substantively altered the systemic nature of corruption in developing countries in the past three decades. According to Svensson (2005), corruption is systemic and rampant in developing

countries. The systemic nature of corruption distorts governance because in the environment of systemic corruption institutions of government that are supposed to prevent corruption also become corrupt (Klitgaard, 2004) and the rules become incapable of breaking the informal behaviours that nurture corruption (Nicholls, 2011).

Lack of competitiveness; low level of distribution of power and resources; and low capacity of the state to bear the costs of corruption control etc. have been found to be sustaining systemic corruption (Khan, 2007). The presence or absence of these drivers is the function of capacity of the state to enforce rules and to bear the costs of enforcement (Perumal, 2019). Khan (2007) argues that detailed rules for allocating resources and strong counteracting institutions help the developed countries to have low incidence of corruption which often the developing countries do not. As a result, anti-corruption enforcement in developing countries continues to be weak and their institutions are working in environments adverse to their efficiency (Perumal, 2019). While talking about historical reasons for corruption Angeles & Neanidis (2010) argue that colonialism is of paramount importance for understanding corruption in developing countries. It has been studied that significant disparity in the distribution of power and resources in developing countries was caused by their colonial past (Amundsen (1997). This disparity promotes competing interests among various groups for power and resources through patron-client arrangements.

The level of economic development remains to be a strong determinant of clientelism (Bustikova; Corduneanu-Huci, 2009) and in weak economic environment the cliental networks become powerful. Since, economy and institutions in developing countries are weak, the political leadership rely on cliental networks to remain in power. Interestingly, this patron-client relationship is repetitive (Semenova, 2018) as there is a typical exchange of loyalty and resources which cannot be done formally (Hicken, 2011).

In their study Trantidis, et al., (2017) argue that clientelism retains a politicised economy that fosters rampant corruption and makes no serious effort to control corruption in developing countries. Study of Arriola (2009) about patron-client networks in Côte d'Ivoire, Kenya, and Senegal suggests that leaders can achieve a degree of stability for their regimes by using state resources to facilitate intra-elite accommodation. Arriola further produces evidences of cabinet appointments to reinforce patronage based rule in many African countries. Such arrangements can be seen in many developing countries particularly where various social and economic groups are politically powerful. Clientelism is common in Asian countries also. Khan (1998) argues that the Malaysian clientelist networks co-exist with capitalist sector due to its vast mineral wealth. In Sri Lanka, due to penetration of politics into working class organisations strong patron-client system has developed (Gamage, n.d). While talking about the influence of clientelism in Ukraine and Russia, Miller (1998) argues that use of contacts and influence has shifted from the subtle towards an increased use of crude monetary bribes. In the case of India, power rests on multi-class coalition of patrons-client networks (Kohli, 2009).

Since clientelism is associated with higher levels of rent seeking (Hicken, 2011) and active support from those who are in power it has adverse implications on corruption control. Unless in the case of petty corruption where gratification and favour are exchanged, clientelism can result in grand corruption whereby rules can be framed to suit the interests of the interested groups. Thus, patron –client networks have the potential to distort the state policies for their own interest in developing countries by engaging in corruption at higher levels.

Costs of corruption control is a well-researched area in academia and it has been found that if the developing countries tend to enforce rules efficiently the costs of corruption control on their politics and economy will be so high that they will not be able to bear. For example, in the case of India, by amending the Prevention of Corruption Act, 1988 in 2018 (Government of India, 2018) it was made it mandatory for the anti-corruption agencies to take prior approval from the governments for instituting enquiry; inquiry or investigation against a public servant unless the public servant is apprehended while committing the offence. Though this provision is in contravention to the idea of independent anti-corruption agencies, it was perceived by the authorities that the anti-corruption enforcement was hampering the functioning of the government; and it was argued that (because of the 1988 Act which did not mandate prior approvals) many honest public servants were harassed; reputations ruined and a fear amongst decision makers was created leading to the tendency where civil servants would postpone decision to their successor rather than taking risks in decision making (Jaitley, 2018). This demonstrates the inability of the state to bear the costs of corruption control through functionally independent anti-corruption enforcement. In the case of Brazil, Ketchel (2019) argues that political parties act as vehicles of patronage facilitating negotiations between regional & economic interests and the government all in the guise of democracy. Her study about the political parties engaging in patronage politics in Latin American countries also provides similar results.

While talking about the politics of privileges, Weingast (2008) argues that privileges are not always arbitrary and they can serve the purpose of maintaining equilibrium in the society. Corbridge (2009) supports the view of positive effects of privilege politics by arguing that opportunities need to be provided to poor and excluded people in economic development in order to deter them from going in the paths of unrest and rebellion. Such commitments constrain the developing countries to reorient their policy priorities in such a way that their inability to bear the costs of corruption control does not distort their policy objectives. Thus, the conventional corruption control approach by assuming fair distribution of power and resources in governance ignores the governance obligations of developing countries for their socio-political transformations and the developing countries struggle between their commitments for socio-political transformations and meeting their corruption control objectives.

6. Lack of demand for corruption control from the powerful

Institutional approach to corruption looks upon demand from the stakeholders for controlling corruption. Theoretically, stakeholders constitute all the interested groups irrespective of their capability to influence the state. But, all stakeholders could not equally impress upon the state to make policies favourable to them. Here comes the role of powerful organisations with whom the state shares significant level of power and resources. Such organisations can be political parties, social movements, business corporations, pressure groups etc. Khan (2013) argues that the powerful forces in developing countries do not want to control corruption because of their inability to stand on their own without patronage. Evidently, patronage and illegal rent seeking are common in developing countries. Demanding corruption free environment thus, would go against the interests of powerful forces. The presence of organised groups in resource re-distribution have been found to have distorted the economic policies in Russia and in Bangladesh. Khan (2013) presents evidence about redistributive corruption through political patronage for uncompetitive, but politically connected corporations in the power sector of Bangladesh. In redistributive corruption, part of the public money is shared by the private players with those who illegally allot rents to them and this cannot be tackled by conventional anti-corruption approach because the enforcers themselves are party in redistributive corruption (Khan, 2007). In other words, the principals are part of the redistributive corruption. As a result, there is lack of demand for corruption control from powerful forces in developing countries. Absence of or weak rules for regulating political party funding; unregulated rent allocations; tailoring the rules to suit the interests of powerful groups etc. can explain the lack of interest among the powerful for controlling corruption. On the other hand, in developed countries there is demand for corruption free environment by their powerful organisations as they are more in numbers and they are competitive as well. Such organisations cannot work in the environment where there is informality in rent allocations. Even in developing countries like China, Japan etc. where the corporations have acquired global competitiveness there is demand for corruption free environment. This is evident from the fact that most of the developed countries like the USA, UK, France, Germany and developing countries like China, South Korea etc. have criminalised the practice of bribing foreign public servants. Thus, demand from the powerful stakeholders for corruption free environment is very critical for corruption control.

7. Looking beyond corruption merely as a problem: Should corruption not be seen as an opportunity to repair the institutions that sustain corruption?

The definition of corruption is often derived from the Principal-Agent model (Lambsdorff, 2007). But, as we see this approach is not a complete explanation to corruption because in spite of corruption control efforts based on the Principal-Agent

framework for years, corruption continues to remain and is pervasive particularly in developing countries. This has turned the scholars and practitioners towards Collective Action solutions (Persson, et al., 2013; Peiffer & Alvarez, 2014) for controlling corruption. Though there are arguments that these models complement each other, there is a definite difference in the approach between these two models in understanding corruption as the Principal-Agent model focusses on asymmetries in power and information between the Principal and Agent; whereas the collective action approach focuses on incentives to groups for resisting corrupt behaviours (Walton & Jones, 2017). But, the relevance of these models is shaped by their compatibility with social and legal norms. The principal agent theory can work well in environments where there is significant alignment between cultural and legal norms. In case where there is inconsistency between cultural and legal norms such contexts are likely be impacted by collective action problems of adverse selection and patronage politics (Walton & Jones, 2017). In such scenarios, Principal-Agent solutions become less relevant. Also it is true that the collective action solutions of awareness raising or value based training for controlling corruption may not work similarly in all the settings (Marquette & Peiffer, 2015) as the understanding of people about corruption differ. Thus, taking the prescriptions of Principal-Agent or the Collective Action models as universal solutions to corruption cannot actually solve the problem and there are evidences showing contestable validity of these models. Naidoo (2013) argues that in several instances, African anti-corruption efforts confronted both principal-agent and collective action theory type challenges due to weak legal framework and indirect encouragement to violate the mandatory norms.

Secondly, these theoretical models see corruption as a problem in a very narrow technical sense and attempt to cure the problem by controlling the agent and by encouraging the group to limit the corrupt behaviours in society. Thus, these models address one end of the problem where a corrupt agreement does occur. But, considering corruption as a problem may well ignore the real challenge of institutional weakness. What enables the agent to demand bribe is something which is the function of the quality of institutions that limit the discretions of agents. Thus, corruption is the manifestation of institutional weakness.

It is quite true that there is no fool proof arrangement to detect and punish all instances of corruption. It is also true that the primary objective of enforcement is to create deterrence by creating demonstration effect and as a result, many corrupt deals go undetected. Similarly, opportunities for engaging in corruption can differ; and the effects of corruption and subsequent enforcement in different sectors too can differ. These views make the case for the anti-corruption tools that look beyond enforcement by going into the structures that facilitate and sustain corruption. This can be the effort which will substantively complement the corruption control efforts through enforcement. To put in perspective, considering corruption as a symptom of underlying weak structures can help us to re-orient our approach towards controlling corruption. This could serve as an

opportunity to constantly locate the loop-holes in the institutions and to repair them in order to destroy the opportunity structures that sustain corruption. Though there are good number of studies that argue in favour of treating corruption as a symptom of underlying problem (Alam, 1995; Edgardo, 1995; Rose Ankerman, 1997), this approach has not built an alternative narrative to corruption control. Adopting this approach would help to understand the actual causes of corruption by examining the functioning of the institutions; and this may help to prevent the corrupt deals from happening. Thus, so long as corruption is treated only as problem the underlying causes will continue to sustain corruption.

Conclusion

Thus, there is more to understand both on theoretical and empirical fronts in understanding corruption; and corruption should not be limited to mutual demand and supply between two actors in connection with an official favour. Similarly, corruption measurements need to become more precise in both methodological and ontological aspects because explaining the causality with limited conceptual clarity can be misleading. In this work, I demonstrate that the impacts of corruption on economic growth is dynamic and could even positive. This leads to the argument that corruption can be functional to growth in developing economies highlighting that the prescriptions of current corruption control approach work differently across settings. This study further shows that the underlying contextual drivers are critical for the success of the global anti-corruption policy. State capacity and socio-political commitments of the political leadership tend to keep the corruption control efforts sticky to contextual factors and this has huge implications on global corruption control agenda. Low sensitivity to the anti-corruption movement could also be due to lack of complementary efforts from the powerful forces in developing countries. But, the scenario is quite different in the developed world where the forces that can influence the policies of the state cannot operate in uncertain environments and as a result there is demand for corruption control from the powerful forces. This contrasting reality between developing and developed countries strengthen the argument that the level of economic development itself can be a determinant of corruption control.

Lastly, on the theoretical front besides understanding the implications of the current narrative of corruption on growth we also need a better understanding of the links between corruption and other drivers in different settings. In this context how would the developing world really benefit from the global efforts against corruption can be an area that can take the corruption control efforts forward. This study further highlights the idea of repairing the institutions in order to destroy the structures that sustain corruption because treating corruption merely as a problem could not treat the underlying causes.

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Strategies for Managing Innovations in Indian Police

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The present system of policing in India owes its structure, functions, processes and procedures, primarily to the colonial system that the British had introduced in India in the mid-nineteenth century. The legal frame-work remains substantially the same notwithstanding the fact that the nation has become independent subsequently. However, the social, political and economic developments in the post-independent era have drastically altered the expectations of the public from the police and they expect the police to play a citizen-friendly role to redress their grievances rather than remaining as an oppressive State organ. Added to that, is the developments in the area of Information Communication Technology (ICT) which has revolutionised the flow of information and brought out technological challenges and solutions. The combined influence of all these factors in the policing have at times, resulted in a number of innovations, albeit, much localised and on a smaller scale. There have been some incremental changes in the legal and administrative procedures. There is an adoption of modern technology in bits and pieces. The changes that have been brought about are mostly reactive to the felt compelling needs of the situation or challenges that police faced. In short, there is no well-thought-out structured strategy on bringing in innovations in policing.

Innovations denote ideating, designing and implementing a new method or product or process, that results in better efficiency or outcome of the desired results. Innovations could be at individual level or organisational level. Innovations could be based on new products and materials, viz., Hard Technology innovations or based on software, viz., Soft Technology innovations. Also, innovations could be external or internal.

Literature Review:

There is little literature on the research on the innovations in the Indian Police. However, some meaningful literature is available on the innovations in Policing in

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general, especially in the context of the western countries, specially, the United States of America.

According to Zaltman (Zaltman, 1973), several structural features may promote innovativeness: centralization (the locus of authority and decision making in an organization), complexity (measured as the number of occupational specialties within an organization and their level of professionalism as reflected in formal training), formalization (the emphasis on following rules and procedures), and organizational slack (the availability of resources not committed to ongoing operations). According to him, police researchers have not shown much interest in learning and measuring the complex processes that shape individuals' perceptions, but presumably these have important implications for studying a particular innovation's adoption or rejection.

In *Varieties of Police Behavior* (Wilson, 1978), the author states that policing, like many other industries, is a source and frequent target of a buzzing variety of new ideas on strategies, legal and administrative standards, police management, and technology – community policing, Compstat, hot spots policing, civilian review boards, equal opportunity hiring and promotion policies, non-lethal weapons, Global Positioning Systems (GPS), and Mobile Data Terminals – to name but a few.

According to Kimberly and Evanisko (JR Kimberly, 1981), there are three clusters of predictors for the adoption of both administrative and technological innovations—characteristics of leaders, organizational context, and the organization itself—and they found the latter to be the primary determinants of organizational innovation.

According to Kimberly (Kimberly, 1987), an innovation is “state-of-the-art” or something new or different from whatever else is currently on offer. That something can be an idea, program, policy, practice, process, service or product as long as it is perceived as novel by the unit considering its adoption—be it individuals, organizations, or polities—or more generally by the field in which it occurs.

According to Damanpour (Damanpour, 1987), the structural features of organizations tend to be the most reliable predictors of innovativeness. According to him, the structures that appear to encourage experimentation or adoption of innovations may later inhibit the scope, intensiveness, or quality of their actual implementation. He cited the instance where a high level of diversity in an organization contributes to a broad knowledge base that can lead to the conception of innovative solutions, but it may also create divisiveness and consequently hinder any implementation efforts. Similarly, a low level of centralization can help facilitate innovation, but a higher level of centralization is beneficial for putting the new idea into practice as considerable “managerial control” is needed to be successful.

According to (AH Van de Ven, 1989), there are five basic concepts of the innovation process viz., (1) Ideas - the process of developing and implementing a new idea, including understanding what people regard as innovative; (2) People - the role of people as creators, facilitators, and inhibitors of innovation; (3) Transactions - the wide variety of relationships inherent to the innovation process; (4) Context - the institutional

environment or setting for the innovation process; (5) Outcomes - the degree to which people judge the innovation process to be meeting their expectations, or at the end of the process, to have succeeded (however success is defined).

Richard Wolfe's (Wolfe, 1994) review and critique of organizational innovation as a framework to enhance understanding about innovations in police organizations mentions three separate streams: diffusion, organizational innovativeness, and process innovation. In doing so, he suggested that police researchers should pay more attention to defining and conceptualizing innovation, to testing multiple theories explaining the spread of different innovations across police agencies, to analysing the structural and cultural bases of diffusion, to examining and comparing the effects of individual, organizational and environmental determinants on different innovations, and to designing systematic longitudinal studies on the entire innovation process. Wolfe attributes the instability of innovation research to the complex nature of innovation itself, a phenomenon that is not easily defined and whose adoption and implementation is contingent on the different contexts in which it arises. According to him, classifying organizational innovations is not easy and that some researchers have tried to do so on one dimension (programmed-non-programmed, radical-incremental, central-peripheral, high-low cost), while others have tried to capture greater variation by classifying innovations along multiple dimensions (pervasiveness, magnitude, etc.). According to him, compatibility is an innovation attribute that can be defined as "the degree to which an innovation is consistent with the existing values, past experiences, and needs of a potential adopter" while cost is "the extent of initial financial investment and ongoing expenses"; and, observability refers to the extent to which the results of an innovation are visible to others.

According to Moore (MH Moore, 1997), in policing, perhaps the most popular scheme is to distinguish innovations according to their different organizational focus -- programmatic, administrative, technical, or strategic.

According to Klinger (Klinger, 2003), there is a need for police researchers to better acquaint themselves with the extensive literature on innovations in order to cultivate a deeper understanding of its relationship to justice structures and processes. Distinguishing different research streams within the rather fragmented scholarship on innovation should help guide police scholars toward the literature that is most relevant to their particular study and toward some of the central concerns that characterize a specific sub-field of organizational innovation.

According to Rogers (Rogers, 2003), the diffusion of innovation is the spread of an innovation over time and across different populations. Some of the main elements of this approach are: (1) innovation attributes that contribute to diffusion; (2) how innovations are communicated; (3) the time or rate of diffusion, and (4) the structural characteristics of the social environment in which the innovation arises.

According to Zhao (J Zhao, 2003), the dominant theoretical perspective on the processes leading to the emergence and spread of innovations in police organizations is a

technical/rational or contingency one. From this perspective organizations strive to succeed in their environments by a rational process of adopting the structures and practices that evidence shows are best suited to achieve their ostensible (technical) objectives, such as community safety. Here organizations (or their leaders) survive and thrive or wither (or depart) according to their ability to compete with others in the marketplace for providing the relevant technical results.

According to Scott (Scott, 2004), an alternative explanation is institutional theory. According to this model, the structures and practices of organizations are not only influenced by rational calculations and technical imperatives, but by the cultural features of their environments. According to Crank (Crank, 2003), certain organizations operate in environments that are not well-developed technically: their products or services are not well specified, methods for their production are not well known, and competition is weak or non-existent. Many public service organizations including the police, tend to fall into this category.

According to Willis (JJ Willis, 2007), some police organizations may perceive an innovation as merely “old wine in new bottles” and therefore be less likely to adopt it, while others will find this feature particularly appealing as it enables them to appear innovative without having to go through the actual trouble of undergoing significant change. According to the author, some of the innovations that remain little explored include the replacement of the revolver with the 9 millimetre pistol, DNA analysis, automated finger-print identification, light-weight body armour, firearms simulators, non-lethal weapons (such as Tasers or pepper spray), crime-scene processing, affirmative action, civilianization, asset forfeiture, risk analyses, and some forms of police training. According to Bayley (Bayley, 2008), research by police scholars on the concepts, causes, processes, and outcomes of innovation are still in its infancy.

According to (D Weisburd, 2009), police innovation in the last decades of the twentieth century was a response to a crisis in policing that generated a perceived need for change. In response to rising crime rates and social unrest in the late 1960s that brought into question the effectiveness and legitimacy of the police, police organizations moved away from a professional and reactive policing model characterized by routine preventive patrol, rapid response to calls for service, and follow-up investigations. These changes in the police environment caused a performance gap between police organizations’ goals and the goals important stakeholders thought they should be accomplishing. Agencies responded by adopting innovations that helped them close these gaps. This rational response helps explain the emergence and diffusion of new policing strategies and approaches whose form and character meet these earlier challenges to police legitimacy (by redefining the role of the police in relation to the community) and their capacity to protect public safety (by reclaiming their capacity to fight and prevent crime and social disorder). According to (C Beck, 2009), the very recent emergence of a cluster of information technologies (IT) provides a rich

opportunity to apply a process-based innovation framework known as “predictive policing”.

Short-comings identified in Indian Policing and the remedies suggested:

A number of studies on various aspects of policing have been conducted under the aegis of Bureau of Police Research and Training (BPRD), over the past few decades and the studies have identified a number of areas where there is a need and scope for improvement. They are available as ‘National Police Research Repository’ in the website of BPRD, National Police Research Repository - BPRD. Some of the identified short-comings and remedies suggested are listed below:

- (1) While the jobs vary widely, all the personnel are given the same training in police training schools or police training colleges. The result is that for some jobs the training falls very much short of the requirement.
- (2) It is necessary that each job is treated separately and requirements are worked out for it. Specialised training is needed for jobs like traffic, wireless, M.T. etc.
- (3) In addition to volume, the pattern of crime has also changed due to changes in the economic scenario and growth of intricate financial transactions. Such crime cannot be controlled by traditional crime prevention strategy.
- (4) A Research Cell should be established at the Police Headquarters for scientific planning and growth.
- (5) A go down for Malkhana, to keep the case properties safe, should be mandatory for all police stations.
- (6) The Police cannot be isolated from sentiments, opinions and support of the society they serve. Community based policing will enhance the quality of police as well as communities.
- (7) For curbing the practice of professional sureties, the person who stands as surety for any accused for any specified amount should produce solvency certificate (mentioning name, other particulars of the accused and offence) from the Tehsildar. When any case of breach of bond comes to notice, the name of surety should be included in a black list maintained by the Court and the same be circulated to all the Courts in the District by the Court concerned.
- (8) Shift system of functioning in police stations needs to be adopted
- (9) The level of infusion of technology in police station work is also an issue to be decided at policy level by the government and the department.
- (10) Many possible measures to be adopted to economise on manpower, such as outsourcing of non-core policing tasks which will also improve the overall quality of policing.
- (11) A regular system of periodical manpower audit also needs to be put in place for police stations as indeed also for other units of police organization.

- (12) There is a need to undertake operations research to arrive at scientifically determined norms for different tasks in the police stations. This could also be coupled with ergonomic studies to obviate certain health problems resulting from the need for police presence in public places and other policing tasks.

On Police – Public relations:

The main reasons/perceptions for a common citizen not willing to go to the Police Station are:

- (i) The persons who go to Police Station to lodge report have to wait for an unreasonably long period of time.
- (ii) The criminals would take vengeance against respondents if they reported the crime and acted as witnesses.
- (iii) The Police would not entertain a report if it is against a person of high status or against a person with whom they have good relationship.
- (iv) The Police records reports only from influential persons and not from ordinary persons.
- (v) The Police does not act promptly on any information/evidence furnished to them with the result that its usefulness is lost.
- (vi) The Police are corrupt and would shield the true criminals, even if they try to aid in the detection of crime.
- (vii) Persons who go to the Police are frequently called to the Police Station.
- (viii) The Police would not entertain a report concerning a minor crime.
- (ix) The Police demands gratification for recording the report.
- (x) The citizens might be obliged to accompany the Police from place to place.
- (xi) The Police manhandles suspects and the citizens would not like to be a party to it.
- (xii) Persons who go to the Police, are repeatedly summoned by the Court.
- (xiii) The Police machinery is so ineffective that there would be no point in going to them.

In the perception of police officers, public do not cooperate for the following reasons:

- (i) Disinclination to get involved with the Police and Court proceedings.
- (ii) Lack of civic sense amongst them.
- (iii) Fear of reprisals from the criminals or goondas.
- (iv) Factional and partisan sympathies.
- (v) General distrust of the Police.

The following are the remedial suggestions made in the studies:

- (i) Police officers should distinguish between service and servility and between courtesy and softness. They must be firm but also courteous avoiding as far as possible giving an appearance of rudeness. The police should try their utmost not to give an impression of indifference or hostility when a person goes to the police station. The gestures of the officer should be pleasing and not officious, haughty, aloof or condescending.
- (ii) A person who goes to the police station with a complaint or for giving information should be attended to as promptly as possible.
- (iii) It is necessary that a copy of the FIR should be given to the complainant as soon as the case is registered.
- (iv) Test complaints should be made by superior officers to ensure the registration of all cases.
- (v) It is very necessary that all cognizable offences reported, are duly registered. It should be made clear that SHOs will not be penalised for the increased number of cases or low percentage of detection. In short, less emphasis should be placed on statistics to judge the efficiency or otherwise of the SHOs.
- (vi) Making complaints/witnesses come repeatedly to the police station should be avoided as far as possible. If any additional information is required, the Police Officer should go to the residence of complainant/witness.
- (vii) When any complaint is made at a Police Station, they should register the same, even if they genuinely believe that the offence was committed outside their jurisdiction. They may transfer the case to the concerned police station, later.
- (viii) Additional staff should be posted for attending to the complaints if the number of complaints received is very high to ensure prompt handling thereof.
- (ix) A complainant or witness who enquires about the progress of an investigation should be informed to the extent possible.
- (x) Members of the public, under no circumstances should be made to feel that when a complaint is made against a police officer, no serious action will be taken against him. It would also be desirable to inform a person about the action taken on his complaint.
- (xi) Complainants or witnesses who are in fear of reprisals by criminals should be given adequate protection.
- (xii) While dealing with the members of the public, the police should avoid arrogant behaviour and an over-bearing attitude.
- (xiii) Efforts should be made to eliminate delays in court by evolving systematic procedures by the Judicial Department.
- (xiv) Witnesses appearing in the court should be adequately compensated for their time as soon as the witness finishes tendering his evidence.
- (xv) The police should positively demonstrate that they do not discriminate between persons on the basis of their social, economic, educational and political status.

- (xvi) Dissatisfaction of complainants regarding the ultimate outcome of the case reported by them, could to a large extent be reduced by educating the members of the public about correct functions and procedures.
- (xvii) There should also be a greater contact with the students by participation in their activities such as instructing and helping in youth or sporting clubs or other such organisations.
- (xviii) It would be desirable to establish a local Public Relations Advisory Committee in each District where representatives of the public could express their problems vis-à-vis the police and the police officers in turn could try to solve the problems or explain the difficulties and limitations which they have in solving the problems.
- (xix) Efforts should be made to contact the general public through various mass media about the necessity for crime reporting and the harmful consequences of non-reporting of crime.
- (xx) The status and quality of the police officers, particularly, the lower ranks of Constables to Sub-Inspectors, who come into contact most with the public, should be improved by the authorities, to create a better image of the police.
- (xxi) Regular efforts should be made by the superior officers to impress on the subordinate ranks in the police the importance of good police public relations which can be achieved mainly by greater tact, courtesy, integrity and a spirit of service.
- (xxii) It is desirable that all the police officers, particularly of the rank of Sub Inspector and above, should maintain close contact with the respectable citizens in their respective jurisdictions so that they could enlist their cooperation at all times and obtain the confidence of the public to enable them to function more effectively.

On Maintenance of Law and Order:

The sources of the conflict and tension are inadequate land reforms, ineffective enforcement of the Minimum Wages Act, continuance of bonded labour, rural indebtedness and social disabilities. The police alone are not capable of dealing with this problem on account of its social, economic and political facets. These crimes are mere manifestation of deep-rooted socio economic and political maladies. Whenever administration has been faced with a difficult law and order problem, the emphasis has remained on the role of Police to maintain order rather than enforce the law.

On Crime Prevention:

- (i) To identify the main trends and patterns of development over a period of time.
- (ii) To examine the major trends and patterns of various forms of criminality in the selected region.

- (iii) To delineate the nature, typology, directions and strength of interactions or relationship between development and crime.
- (iv) To identify association or relationship between development and certain specific forms of crime (economic or white-collar in nature).
- (v) To evolve and test a methodological model to analyse relationship between development and crime in the context of a developing country.
- (vi) To identify specific issues in need of further study.

Launch of National Police Mission (NPM):

The Prime Minister of India announced the intent of the Government to set up a Police Mission in his address to the DGsP/IGsP conference (October 6, 2005) [BPRD - NPM](#). The Hon'ble Prime Minister declared "the Mission will seek to transform the police forces in the country into effective instruments for maintenance of internal security and facing the challenges of the next century, by equipping them with the necessary material, intellectual and organizational resources. The Mission should be charged with the responsibility of creating a new vision for the Police. It could decide proper time frame in which to accomplish this task. The Mission would need to pay special attention to empowering the police force at all levels; to appropriate decentralization and delegation of powers; to enhancing the skills and competency levels at the grassroots; to the promotion of a culture of excellence in police organizations; to enhance accountability to the people; to meet new challenges such as asymmetric warfare, new trends in urban unrest and disorder, and new forms of social unrest".

The NPM has emerged on the basis of the above said observations of the Hon'ble Prime Minister of India. While formulating the NPM, it was felt that the Police Mission, in comparison to other missions such as National Rural Health Mission, Rajiv Gandhi National Mission on Drinking Water and National Horticulture Mission, differs basically in that, whereas the other Missions mentioned above deal with developmental themes, the NPM would be the first mission in the field of regulatory and enforcement administration, linked closely to the sovereign functions of the State.

The following objectives have, in brief, been identified:

- (i) "Police" and "Law & Order" being State subjects, as per the Constitution of India, the needed police reforms and transformations have to be undertaken primarily by the State and U.T. Governments. As such, the NPM will have to strive, in consultation with the State Governments, to bring about the desired results.
- (ii) The Mission shall strive to redefine the police role in the context of the phenomenal changes that have taken place in the socio- economic scenario of the country, and the emerging challenges for policing and security of the State

on the one hand and, for ensuring good governance and effective delivery systems for the benefit of the citizens, on the other.

- (iii) The Mission shall endeavor to bring in the needed attitudinal changes, especially at the grass-roots level, by transforming the 'force psychology' into a 'service psychology'.
- (iv) The Mission shall simultaneously focus on appropriately empowering the police for enabling it to function as a more efficient, effective and responsive agency both as an instrument of the State and of service to the citizens. The Mission shall also lay down road map for bringing insensitivity among police personnel towards concerns of vulnerable and weaker sections of the society.
- (v) The Mission shall promote networking of police organizations with educational and industrial forums for taking up studies for bettering the policing methodologies. It shall also focus on tapping the vast community resources in various aspects of policing and in the process, also bringing about greater transparency and accountability.
- (vi) The Mission shall take an overall view of the resources and facilities available within the country and even abroad, which could be dovetailed to bring about the required specialization in areas such as counter terrorism, counter insurgency, cyber and specialized economic crimes, etc.
- (vii) The Mission, through its composition, shall draw its strength from presence of eminent persons from the fields of Science and Technology, Trade and Industry, Civil societies, academia, media etc., along with a vast pool of administrative and policing experts available at the Centre and in the States.
- (viii) The NPM shall endeavor to ensure uniformity in police rules and regulations, as far as possible, in the different States and Union Territories, which is necessitated by growing movement of men and material from State to State.
- (ix) The Mission shall focus both on the special requirements of the mega/metropolitan policing, and systems to strengthen policing in rural areas.
- (x) The Mission shall review the ongoing Scheme of the Government of India for modernization of Police Forces, with a view to enhance its impact, including proper utilization of the funds made available.
- (xi) The NPM shall also effectively utilize what have been set up to standardize police training in the States, and to establish specialized police training centers as Centers of Excellence.
- (xii) The Mission shall lay special emphasis on harnessing technology inlaid of policing, so that the challenges posed by modern day criminals, terrorists, extremists, and others could be matched with superior capability in the Police Forces.
- (xiii) The Mission would also examine issues, which have wider connotation beyond law and order, but are closely linked to internal security issues, including political under- pinning of insurgency, terrorism, etc.

- (xiv) In consultation with the State Governments, annual plans for modernization of police forces would incorporate the recommendations of the Police Mission and its micro-missions on technology to provide force-multiplier benefits and “decisive edge” advantage.

At the national level, eight micro missions have been formed to develop projects for achieving the objectives. They are as follows:

- (i) Human Resource Development: To address issues on Police Population Ratio, Career Progression, Leadership, Accountability, Performance Evaluation, Training, National Police University, Attitudinal Changes – Welfare of Police Personnel, etc.
- (ii) Community Policing: To address issues involving Community in Policing, Police Interface with Media Industry and other relevant segments, Police Image, etc.
- (iii) Communication and Technology: To address issues on POLNET (Police communication network), Crime and Criminal Information Systems, Cyber Techniques, Forensic Sciences, DNA, Narco- Analysis, etc.
- (iv) Infrastructure: To address issues relating to Building official and residential premises, equipment and weaponry, etc.
- (v) New Processes (Process Engineering): To address on-going Police Practices, Review and Impact analysis, Existing Best Practices –Innovations in India and elsewhere, and their adaptability, Procurement procedures, Delegation and Decentralization, etc.
- (vi) Proactive Policing and Visualizing Future Challenges: To address Extremism and Naxalism, Mob Violence, Cyber Crime, Money Laundering, Narco Terrorism, Human Trafficking, etc.
- (vii) Gender Crimes and Gender Related Issues: To address Prevention Strategies, Investigation Techniques, Training & HRD, Prosecution and Victimology
- (viii) Correctional Administration: To address new initiatives in Prison Reforms

In addition to the Micro-missions at the national level, a number of projects have been circulated to the States and Union Territories. They are as follows:

- (i) A Community Policing initiative for Children
- (ii) Automation of Weapon Licensing
- (iii) Community Counselling Centers
- (iv) Community Policing for Senior Citizens
- (v) Integrated Emergency Response System
- (vi) Investigation Support Units for Police Stations
- (vii) New sub-beat system
- (viii) Police Community Partnership
- (ix) Soft skills training for police personnel

- (x) Standardization of Equipment and other facilities for Post-Mortem
- (xi) Student Police Cadet project
- (xii) Gender Sensitization of Police: The need for Training intervention
- (xiii) Restructuring of Police Organization
- (xiv) Transfer Recruitment Process
- (xv) Welfare of Police Personnel
- (xvi) Community Outreach Programme
- (xvii) Community Policing Resource Centre
- (xviii) Reformation and Rehabilitation of professional criminals
- (xix) Crime reduction through Dispute Resolution
- (xx) Automated Traffic Monitoring System
- (xxi) Golden Hour Trauma Care
- (xxii) Technology Driven Traffic Management Project
- (xxiii) Cyber Dome
- (xxiv) Capacity Building of Police Station in Naxal affected areas
- (xxv) Capacity Building for State Police in Cyber Crime Investigation
- (xxvi) Effective Police Custody Management
- (xxvii) People Friendly Police Station
- (xxviii) Learning Management Systems
- (xxix) Pre-litigation Counselling Forum
- (xxx) Court Case Monitoring System

Towards a 'SMART' Policing:

The Honourable Prime Minister of India, during the Annual Conference of the Directors General of Police of the States, in the year 2014, exhorted them to usher in an era of 'SMART' Policing. By 'SMART' Policing, he meant "S for strict but sensitive, M for modern and mobile, A for alert and accountable, R for reliable and responsive, and T for techno-savvy and trained." However, further specific actionable projects on the same are yet to be rolled out.

Some Innovations and Best Practices in recent years:

- (i) The Criminal Investigation Department (CID) of Jharkhand Police had initiated three discrete, but connected campaigns as a basket approach to Child Friendly Policing by leveraging: Child Friendly Police Stations, End Violence Campaign (all forms of violence against children); and Operation MUSKAN, which is aimed at the rescue and rehabilitation of lost and trafficked children. More than 1,832 were rescued under operation MUSKAN, 27 Police Stations rendered Child Friendly, 453 policemen trained to be child friendly, 929 trained in acts and rules protecting children from abuse (like POCSO Act) and 13 workshops were held involving all stakeholders.

- (ii) In the year 2015, Central Industrial Security Force (CISF) found that commuters left behind cash of various denominations, jewellery, laptops, cell-phones and electronic items among others, worth a total of Rs. 32.15 crores in the security-hold area of the airports. The paramilitary force evaluated these items after seizure and facilitated bona-fide owners to claim the same back from the airport operator's desk after checking the list of recovered items, by using the lost and found web application on the CISF's official website. This web application has been a runaway success with regular updates of such items from all airports, which are under the security cover of CISF. In the year 2015, articles worth approximately Rs. 11 crores were restored to their bona-fide owners and articles worth approximately Rs. 21.5 crore to the airport operators.
- (iii) The Lost Report application of Delhi Police, is dedicated completely for making life easier for the general public of Delhi by letting them lodge lost article complaints online instead of visiting the police station multiple times. The application removes the geographical and time barriers for accessing this service. Any user, who wants to lodge a complaint for his/her lost article can download the Delhi Police mobile application and lodge complaint after following some simple registration steps. After lodging the complaint, a digitally signed report is instantaneously sent to the complainant's registered email ID and phone number. This report is valid everywhere as a proof of lost article and can be used to apply for a duplicate document.
- (iv) The launch of e-Saathi app as a pilot in South East district has led Delhi Police Beat policing and police station level local public police interface in the realm of digital technology. It has two facets, viz., one for policemen (e-Beat Book) and the other for public (citizen portal). E-Beat Book replaces traditional Beat Book. In its new avatar, the electronic log book collects and extracts data on a real-time basis. Further, its GPS enabled feature allows easy mapping of data. Citizen portal of e-Saathi connects citizens to their nearest police station by identifying the person's location.
- (v) To create confidence in the citizens and promote socially desirable behaviour among traffic enforcement officers, Hyderabad Traffic Police for the first time in India, introduced Body Worn Cameras (BWCs)
- (vi) Nagaland Police has developed an IT system in the form of Nagaland Police SMS Based Vehicle Monitoring System (NPSVMS), with the following objectives:
 - a) Maintain a common repository of vehicle information.
 - b) Provide an SMS gateway to disseminate this information to field personnel quickly.
 - c) Broadcast emergency messages to check posts and duty patrols.
 - d) Provide SMS helpline to the public for quick reporting of vehicular thefts.

The NPSVMS provides a facility for the public to quickly report the loss of vehicle by SMS to a public hotline number 8415900400. Via this service, a registered person can simply SMS the keyword LOST to 8415900400 and the details of his/her vehicle would be instantly broadcasted to all check posts in the State.

- (vii) Traffic Sentinel Scheme helps citizens to report certain traffic violations to the Delhi Traffic Police. The mode of reporting the traffic offences is clicking a photo or a video through the application on a smart phone and send the same. The application only asks basic information such as place of offence, date and time. However, in GPS enabled phones, the date/time/location is also automatically embedded on the photographs. To give incentive to the member of public who report a traffic offence, an attractive reward system is also a part of the scheme. The following violations are available on Traffic Sentinel Mobile App to report: Stop Line Violation, Without Helmet, Without Seatbelt, Defective Number Plate, Driving Against the Flow of Traffic, Using Mobile Phone while Driving, Yellow Line Violations, Triple Riding, Parking on Footpath, Dangerous/ Zig Zag Driving Red Light Jumping, Key Benefits to the Public and the Government. Now the traffic violators remain attentive and worry that somebody from the public can report their violations, at the click of a button. This is helping Delhi Police to control traffic violations on the roads. A major accomplishment of this project is that it is acting as a force multiplier. The App provides single window services of Traffic Advisory, Traffic Alerts, Taxi/ Auto rickshaw/ Cab Fare, Complaints, Signal Faults, Towed Vehicles, Emergency Contact, FAQs, Offences, Lost- Report and link to Face book, Twitter and Delhi Police website.
- (viii) The Tamilnadu Police in partnership with the IIT Madras and the Health Department of Tamilnadu, initiated a series of measures to micro-focus on the vulnerable stretches of road accidents, to ensure immediate life-saving treatment and trauma care of the victims in the golden-hour, etc., which have resulted in a reduction of almost one-fourth of the road accidents year-on-year for consecutive three years.

Similarly, a number of initiatives and ‘best-practices’ have been attempted and introduced by a number of officers in various parts of the country. Federation of Indian Chamber of Commerce and Industry (FICCI) is giving annually awards for the best-practices in the context of ‘SMART’ Policing, since the year 2016. The list of entries for such awards is available at [FICCI SMART POLICING AWARDS](#).

Scope for innovations in Indian Police:

There is a vast scope for innovations in policing in India. The challenges faced by the Police in India, are varied and in some cases, are unique, as compared to the rest of the

world. The social fabric of the Indian society, with multi-religious, multi-linguist, caste-based segmentation presents unique problems. There is a large-scale inter-state movement of people, which has its attendant problems. The existing colonial structure of police and the procedural quagmires present ample opportunities for innovation and improvement. The entire Criminal Justice System in India, with its colonial hang-over, and complicated inter-play of the roles between various constituents, mainly, the Police, Prison administration, Prosecution, Legal Community, the Judicial System, etc., provide ample opportunities for process innovation and structural changes. All the identified short-comings in policing and the challenges being faced by the police today, are all potential opportunities for all sorts of innovation, viz., product innovation, process innovation, procedural innovation, etc. The Information Communication Technology (ICT) revolution and the increased trans-border movement of people and goods, have given rise to a new genre of challenges, including Cyber Crimes, Hawala transactions, trans-national trafficking of humans, drugs, weapons, etc., which need innovative solutions. There is convergence of interests with regard to domestic policing, nation's internal security, nation's external security and inter-national security. The applications of existing advanced technologies to various aspects of policing itself, requires a lot of innovation. Thus, there is a vast scope for innovation in policing in India.

Existing eco-system for innovations in Indian Police:

The police forces in India, unlike in the USA and many other countries, are not vested with the local bodies and are organised at the State Level, and the central agencies at the National Level. The budgets are controlled at the State Level. The police forces function as 'Units' at the level of Districts and as 'Special Units' focussing on particular types of offences. The heads of the 'Units' have operational responsibilities and administrative responsibilities, within the given budget. Though much of the innovations need to happen at the operating unit level, the wherewithal with the 'Units' are limited. Also, many of the functions of the Police are standardized at the State Level by way of various Standing Orders or Rules and thus, the scope for procedural innovation and process innovations are limited. Also, most of the functioning of the police system is circumscribed by various laws, as the Police is primarily a Law Enforcement Agency and not a Service Agency. Hence, the procedural and process innovations need to be within the scope of the existing legal requirements. Notwithstanding the above, there is still a lot of scope for innovations in the area of service delivery, intelligence collection, crime investigation, man-power deployment, traffic management, grievance redressal, etc., and some innovations in bits and pieces have taken place too. A number of innovations or best-practices that have been attempted and adopted have not replicated in other areas. Similarly, a number of best-practices remain officer-oriented and once that officer is transferred out, it goes into disuse. There is no institutionalisation of the best-practices and innovations in a structured way. The innovations need to cross a threshold

to prove its utility and for that, it needs to be sustainable for a given period. Many of the works in police could not be evaluated, and that too in the short-run. Thus, it is a pre-requisite to put in place, an innovation enabling environment structurally in place, to facilitate a greater number of meaningful innovations.

Conclusion

Though a number of studies on various aspects of policing have been done over the decades, under the aegis of BPRD, they all remained just an academic exercise by a few interested officers and there is no systematic follow-up on the outcomes of the study. Similar, is the case with regard to the initiatives taken by various other agencies, National Police Academy (NPA), National Crime Records Bureau (NCRB), etc. The Crime Criminal Tracking System (CCTNS) being implemented by the NCRB is the only innovation being implemented at national level and is almost a decade, since its roll-out. Only in recent years, some attention has been focussed on bringing out major reforms in policing and thus, National Police Mission, with a number of micro-missions, has been launched. Even, the same, in it's over a decade of its coming into being, is yet to impact meaningfully in the field level. The concept of 'SMART' policing still remains an exhortation and there is a long way to go to realise its fruits. It is high time, that a policy frame-work is put in place, whereby innovations are encouraged at all levels and across all fields of policing; that reasonable funds are made available for the same; that they are facilitated to make a fruitful attempt in solving the focussed identified problems; that the innovations are nurtured to a critical threshold so that its sustainability could be assessed; that systems could be put in place to replicate successful models across other units and States; that collaboration with the academic institutions, industry and other stake-holders are systematised and that their impacts could be studied over a period of time.



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SWOC Analysis of Art & Craft of Police Training in India

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Abstract

In this paper, an attempt has been made to use SWOC Analysis (Strengths, Weakness, Opportunities, Challenges) framework to analyse the present state of Police Training in our country. Strengths included visionary Police leadership, experienced Police faculty, political will, good training infrastructure etc. Identified weaknesses included the absence of training policy, the weak linkage between training and research, least focus on training of trainers and the lack of collaborative linkages with the outside world. Many opportunities knock the door for further improvement of Police training. 'Better visionary Police Leadership' Involvement of Organizations of Excellence, besides Police for training of police trainers are important challenges identified as important steps in the improvement of training function.

Key terms: SWOC Analysis, Police Training System

1. Introduction:

Unlike SWOT (Strengths, Weakness, Opportunity, Threats) Analysis, SWOC (Strengths, Weakness, Opportunities, Challenges) Analysis gives us a proactive framework for managing the change in the organizational context. Word 'Threat' has been replaced by the 'Challenges'.

- Conceptual framework of SWOC Analysis
- SWOC Analysis of Indian Police Training System.
- Recommended Strategies for amplifying strengths and addressing the challenges.

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It is worthwhile to mention with pride that the SVP National Police Academy may serve as the model Police training Organization for other training institutions to emulate and learn various aspects for further improving their training function. NPA, too, has to learn and innovate more. BPR&D is very proactively initiating change initiatives for ensuring Police Organization excellence through Research and training. Its contribution is very significant in this direction.

2. Conceptual Framework of SWOC Analysis

A SWOC analysis is a strategic planning tool that can be used during the curriculum assessment and review process to make informed decisions. Within the context of curriculum and organization development, SWOC analysis can be used alone as a powerful framework to discuss and clearly identifying the strengths, weaknesses; opportunities and challenges of any existing systems viz. 'Training' and 'Research'. The objective of conducting a SWOC analysis (in conjunction with other curriculum assessment tools) is to develop key areas of focus for improving the curriculum and other organization functions.

SWOC Analysis focussed mainly on the following questions:-

Strengths

- ❖ What have been the strengths of our program?
- ❖ What are we known for?
- ❖ What are we most proud of?
- ❖ What are we doing well?
- ❖ What/who are our key resources and exemplars?
- ❖ What do we control (people, resources, knowledge) that gives us an advantage? What are our key areas of expertise?
- ❖ What resources or capabilities allow us to meet our mandate/mission?
- ❖ What positive aspects of the program /training have students/faculty or others commented on?

Weaknesses

- ❖ What are we doing poorly or struggling with?
- ❖ What frustrations/challenges have students/faculty expressed?
- ❖ What do we need to fix?
- ❖ What are the internal weaknesses and deficiencies in resources or capabilities that may be hindering the program's ability to accomplish its mission/mandate?

Opportunities

- ❖ What opportunities will most dramatically enhance the quality of our program/training?
- ❖ What changes in demand do we expect to see over the next years?
- ❖ What key factors may positively impact the program/ training?
- ❖ Where can we create more value for the program /training?
- ❖ What external or future opportunities exist for the program/training? What are some key areas of untapped potential?

Challenges

- ❖ What are the key challenges or threats to the quality of our program/ training that need to be addressed?
- ❖ What are others doing that we are not? What future challenges may affect the program /training?
- ❖ What external or future challenges or threats does the program/training face?

3. SWOC Analysis of Police Training

Many thoughts and observations have been crystallized by using his more than 3 decades of his experience in training at the SVP National Police Academy, Hyderabad, and the conduct of Video Conferencing with the eminent Police Officers and the academicians and Focus Group Discussion (FDP). Content Analysis of Data lead to the below - cited conclusions:

Strengths:

SWOC analysis led to the following set of identified strengths:

1. The political will to improve the police training interventions to match the current developments in our country.
2. Very well established 'Training Systems' especially for outdoor training.
3. Experienced Police faculty
4. Visionary Police Leadership for managing the training function.
5. Excellent training infrastructure in NPA, State Level and CPMFs training institutions.
6. Allocation of funds for Police training.
7. The mindset of Police Officers and men to accept training for enhancing their performance.
8. Willingness of the Field officers deputing police officers and men for training.

9. Some Police Officers and men are being exposed to the best training and technology in the world.
10. Conduct of Mid-career and pre-promotion courses.
11. Moderate inclusion of Technology for the upgradation in the Training Institutions.

Comments

At both State and Centre levels the presence of political will in terms of their attendance in the various functions like Passing Out Parades (P.O.Ps) and other important functions in the Police Training Institutions and granting adequate funds for training purpose is praise worthy. These funds are used for enhancing the effectiveness of learning and training infrastructure. Training allowance upto 30% of pay has also been allowed to motivate police officers etc. to come on deputation as faculty.

It has been noticed that outdoor training system in all the police training institutions is of very good quality. Trained outdoor instructors, training infrastructure and very well-developed outdoor training curricula are the hallmarks of outdoor training in the police organization. Other organizations like customs and central excise etc. send their trainees for specially designed outdoor training interventions for them in the National Police Academy and other Police training institutions of eminence. . As far as training delivery is concerned, the police officers from the field have startly coming willingly to serve the greater purpose of police training in the training institutions. In NPA, the experience ranges from 8-32 years in the field. Visionary leadership at the top in NPA and BPR & D has been responsible for continuous improvement of training strategy, training structure, training delivery methods, research-based training and the mechanisms for motivating faculty and staff to perform to the highest level of excellence. They have accepted in letter and spirit that training is one of the most important functions to ensure police organizational effectiveness. The days of neglect of police training have gone away.

Nominations for training are being received very well. It is no longer a paradigm-`Training for the spareables and by the spareables, many police officers and trainers have been exposed worldwide to the best police systems. They have applied their learning at their workplaces.

Conduct of Mid-Career training programmes and thematic courses of great relevance had been a hall-mark in Police to improve the functional and conceptual understanding of the police officers. PhD thesis of Paulson (2018) carries description of Mid Career Training in NPA. The Case-Study of NPA so far as Midcareer Training Programmes (MCTPs) will be of great relevance for other Police training institutions. Similarly, the Tactics Training Wing too. Gradually, technology is also entering into the psyche of police training institution

Weaknesses:

Below cited 'Weaknesses' have been identified-

1. There exists no validated training policy document reflecting the fulfilment of Vision, Mission and objectives of Police through training. It is at the draft stage only. Even the Vision and Mission of Statements of police have not taken the final shape.
2. To a considerable extent, a lack focus of training on the Police organization's goal is evident. Organic bonding is necessary between Training and organization's Vision/Mission/Objectives Quantitative and Qualitative Research studies are conducted less in the following domains:-
 - Identification of training needs.
 - Formulation of training designs and their validation design through pilot testing.
 - Standardization of the training material.
 - Developing an evaluation of training methodology and techniques.
 - Evolveing post-training evaluation methodology
 - Punctuation of training interventions with the field requirements,
3. Selection of effective Police faculty is also a major concern in training.
4. There is much less focus on Training the Trainers. The faculty is to be groomed on:
 - Training techniques/methodology
 - Use of training aids more effectively.
 - Use of IT in Police training.
 - Preparation of examination papers.
 - Training in the evaluation techniques.
 - Developing 'Incidents', 'Cases', 'Role Plays' and simulations for training.
 - Administration of training programmes.
 - Coaching and counselling techniques.
5. Very minimal/less faculty from outside Police exists in the Police Training Institutions as core faculty unlike in the Police Training Institutes situated abroad.
6. Collaborative networking with the institutions of excellence in India and abroad is very less except in NPA.
7. Less Organic Linkage of training interventions in Police with the following HRD Techniques is another concern-
 - Performance Appraisal

- Potential appraisal (Talent Management) (Developing Police Officers in super specialization)
 - Career Planning
 - On the job training
 - Role Analysis, role negotiation and clarity exercises.
 - Action Research.
8. Besides training, the Police Leaders are being trained less in theory and practices of Human Resources Management and the art and science of Organization Development.

Comments

Although BPR &D has been on the course of formulating 'Training Policy', 'Vision', 'Mission', but nothing concrete has seen the light of the day. Without these important documents police training cannot be focused on the National goals. Police training in our country will be strengthened further if research based 'Faculty Selection Criteria' is standardized. Enough attention is required. Research based 'Training Needs Assessment Methodology', 'Evaluation including examination techniques' 'Curriculum evaluation' are required to be developed and instituted. Creation of 'Question-Banks' in various police subjects seems to be necessary. NCERT, New Delhi may be approached. There is no Post training evaluation methodology available with the Police training institutions. Research studies conducted by Rajgopal and Saxena (2002) and Dora (2011) may be consulted in this regard.

For more than 3 decades the NPA has done yeoman service to the police training institution to train the trainers for conducting 'Management of Training', 'Training Administrators' and 'Training of Trainers' Courses. These courses have been discontinued. NPA is required to refocus on these by keeping its Mission in view. Mission mentions the paradigm of 'Training of Trainers'.

Almost the absence of 'Core Faculty' in the Police training institutions in the domains of 'Criminology', 'Psychology', 'Management Sciences', 'Law' etc. is very evident. British Police training institutions have such core faculty. NPA has an excellent collaborative network with the organizations of excellence but other training institutions are missing in this very aspect. The organizations include TISS Mumbai, Osmania University Hyderabad etc. are collaborators of NPA. The Academy has been very well connected with Charles Stuart University, Cambridge University, IIMs, ISB Hyderabad, NALSAR and many such institutions of excellence.

Opportunities

1. Better Political will, top management commitment, and 'out of the box' thinking of the Police leaders managing the training function in various

States and CPMFs will provide suitable opportunities for the improvement of police training.

2. There is an opportunity to design police training interventions scientifically to resonate with the needs of Indian Society.
3. Better training interventions will create more value for all the stakeholders including the public.
4. There seems to be ample opportunity to improve the training functions by exploiting internal and outside resources beyond police through establishing collaborative linkages through networking.
5. There is so much opportunity for Police to adapt the best practices in training from abroad.

Challenges

Based on the above analysis of the 'Strength' 'Weakness' and 'Opportunities', following Challenges have been identified:

1. Developing 'A Training Policy Document' for Police
2. Through networking with the organization of excellence around and the involvement of Police Leaders with proper aptitude in training.
3. Carrying out very scientific research by involving the Academicians from Universities IIM, IIT, NCERT etc for :
 - Training Needs Analysis projects
 - Formulation and Validation of training involvement Evolving right methodology for imparting training.
 - Developing of quality training material
 - Evolving Evaluation of training Methodology including post-training evaluation one.
 - Better IT use in Police Training
4. Training of Police Trainers continuously and developing 'Master Trainers' for imparting training in all major areas of training - eg. Law, Forensic Science, Behavioural Sciences, etc.
5. Subject-matter up gradation of various police subjects and equipping police trainers with that.
6. Recruitment of the civilian faculty from various important domains useful for Police as the core faculty.
7. Training the top and middle leadership in Police to improve training function further in the following aspects:
 - Visionary leadership and strategy formulation
 - Research methodology
 - Human Resources Development (HRD)

- Organisation Development (OD) interventions including change management - Their continuous exposure to world-class Organizations in India and abroad will facilitate proper action planning for systematic change rather than abrupt change plans by them.
- 8. Optimal use of available training infrastructure in Police.
- 9. Scientific selection methodology for police trainers.
- 10. Enhancing a better interface between 'Training Institute' and 'field'.
- 11. Convincing the Government for more funds based on very scientific plans on above - cited challenges enlisted above.
- 12. Creation of 'Knowledge Management Architecture in Police' seems to a better practice to improve the quality of training. It will cover the best practices in the field.

4. Recommendations

Based on the above cited SWOC Analysis, the following recommendations are being made:

- 4.1. Like the 'National Education Policy (2019)', 'Training Policy for Police' is the need of hour. It will cover the Philosophy, Vision and Mission and broader aim of Police training. It will be the heart and soul of Police education and training. Therefore, the final version of the 'Training Policy' should come out.
- 4.2. Training and Development (T & D) needs of Police Officers at various levels of hierarchy engaged in different functions viz. Traffic; L & O etc are to be assessed by adopting scientific research methods. Involvement of experts from the organization of repute in our country will be a nice idea
- 4.3. Based on T&D needs analysis data, draft course designs should be evolved and finalized after experts' validation and pilot testing.
- 4.4. Evolving 'On the job Training and Development' methodology seems to be an important step. Police Officers are required to be trained in the use of 'Performance Counselling', 'Coaching', 'Mentoring', 'Performance Feedback', 'Potential Appraisal', 'Role Analysis' and 'Negotiation Skills' for the development of human resources in police.
- 4.5. Talent Management for developing some police officers highly specialised in the areas of contemporary relevance in Police is necessary. An action plan may be chalked out in this regard.

- 4.6. Linking 'Research' with 'Police Training' lacks in our country. Research findings should be utilized for improving the contents and delivery of training. The Police leaders are required to be trained in quantitative, qualitative and action research methodology thoroughly. Collaborative research involving police and the organisations of eminence in various domains of knowledge should be further motivated.
- 4.7. Organizations of excellence in India like NCERT should be involved in standardizing the training techniques, learning material and evaluation methodology. Models for post training evaluation methodology to ascertain impact of training are not there. Evolving these models through research will be an important step to further improve the training interventions.
- 4.8. Training of the Police trainers should be a top priority. Training may focus on developing competence in –
 - art of delivering training
 - enhancing subject matter quality
 - administration of training

As per the recommendations of Gore Committee on Police training (1972), NPA has started the movement in our country in 1982. Again, NPA should be given this responsibility to restart it as it is the Model Police Training Institution. Active help of competent professionals of eminence should be sought.
- 4.9. Leaders initiate change and make the organizations vibrant. Therefore, they are required to be trained in the following aspects by adopting the experiential learning methodology rather than the use of lectures -
 - Policy formulation techniques
 - Strategic management techniques (evolving strategic plans for improving training)
 - Training and HRD Interventions
 - IT use in police training
 - Research methodology specifically for OD Interventions.
 - Training Evaluation Methodology
 - Visioning leadership for managing change.
- 4.10. For generation of adequate funds for the above - cited initiatives, the political leadership has to be convinced with scientifically devised plans for initiating change.

- 4.11. Knowledge management architecture is very necessary in Police for ensuring the continuous learning and development of officers. Experts' help seems to be necessary. Infosys has an effective system and expertise regarding the knowledge management systems.

5. Summing-up

A very proactive approach is recommended for enhancing effectiveness of the police training interventions for creating value for the stakeholders especially for the people to be served by the Police. The better commitment of top leadership and igniting more political will for creating better police training seem to be necessary. Research, collaborative linkages and continuous trainer development will be the right steps for the improvement of training. Linking training with other HRD interventions and alignment of training with vision and mission of Police will be the right steps in the direction of improvement.

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Personality Characteristics of the Trainee Sub Inspectors of Police: An Eysenck's Personality Questionnaire Analysis

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Abstract

The objective of the study is to determine the personality among police personnel. In doing so, an attempt has been made to measure the personality traits of the trainee sub-inspectors of police at the Kerala Police Academy along with understanding the subclass variables of their personality traits and establishing a personality. The present study is based on explanatory quantitative study. Purposive sampling was used to select the respondents and the total numbers of respondents are 154 which were selected from trainee sub-inspectors of police at Kerala Police Academy, Thrissur, Kerala. The structured questionnaire had used for data collection. The data has been analysed statistically. The results of the study showed that among respondents 76.66% were extraverts, 73.33% were emotionally stable and 70% depending on situations had tough & tender minds. Based on results, the researcher has concluded that a significant portion of the trainee sub-inspectors of police was an extraversion, emotionally stable, tough and tender-minded.

Keywords: *Personality, Police Personnel and Eysenck Personality Questionnaire.*

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Introduction

Eysenck (1971) defined personality is “*the more or less stable and enduring organization of a person’s character, temperament, intellect and physique, which determine his unique adjustment to the environment*”. Eysenck Personality Theory (1947) primarily on physiology and genetics. Even though he is a behaviourist who thinks about educated propensities for extraordinary significance, he considers personality differences as growing out of our genetic inheritance. He is primarily interested in what is normally called temperament (George, 2006). Eysenck (1967) started with a theory of personality which leads to two super traits; *extraversion & introversion* and *neuroticism & stability* (Hewstone, Fincham and Foster, 2005). The personality to be described at a number of different levels; *Super factor level (super trait)*, *Trait level (traits)*, *Habitual response level (habits)* and *Specific response level (actions)*. Each super trait was made of a number of traits, which are in turn derived from habitual responses and specific responses-actions (Mangal, 2011).

Eysenck (1975) derived two major personality dimensions of *extraversion* and *neuroticism*. Those who are high in both neuroticism and extraversion be likely to exhibit quite different traits than someone who is low in both, or a combination of low and high. So those who are high on both extraversion and neuroticism be likely to be touchy and aggressive, whereas people who are high on extraversion and low on neuroticism be likely to be carefree and sociable. A further super trait identified by Eysenck (1982) was *psychoticism*. Those scoring high on psychoticism are described as: *egocentric, aggressive, impersonal, cold, lacking in empathy, impulsive, lacking in concern for others and generally unconcerned about the rights and welfare of the people* (Hewstone, Fincham and Foster, 2005).

Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975) is a globally outstanding personality assessment instrument, which has been utilized in numerous application contexts (e.g., *Forensic, Health, Educational, Clinical, Police, Military, Nursing and Organizational*). The EPQ is a self-report questionnaire to measure the three-dimensional personality taxonomy proposed by Eysenck in the P-E-N model: *Extraversion (E)*, *Neuroticism (N)* and *Psychoticism (P)*. In the Eysenck’s point of view, these are the three fundamental personality dimensions to describe the emotional and behavioural human characteristics (character and temperament) of the most important and they are assessed through the four scales of EPQ: P, E, N scales, and additionally the L scale to measure the Lie / Social Desirability construct, which constitutes a validity scale.

Extraversion

The E dimension measures extraversion and introversion. This dimension is divided into **High extraversion** are those who are certain characteristics of extraversion such as outgoing, talkative, high on positive affecting (outgoing), sociable, sensation-seeking,

expressive, dominating, lack of reflection, likes partying, gets easily irritated and active. **Extraversion** includes those who have certain characteristics of extraversion such as sociable, active, expressive and impulsivity. **Depending on situations** (midpoint) the extraversion and introversion are those who portray qualities of both an extraversion and introversion like the outgoing, expressive, need of peace and being quiet depending on the situation. **Introversion** is those who have certain characteristics of introversion such as in need of peace, quiet, reliable, always thinking and likes to be by them. **Low introversion** is those who are less sociable, likely to prefer a well-ordered life. Less score extraversion is the beginning of introversion. This division was based on the norm score (Schultz and Schultz, 2005).

Neuroticism Dimension

The N dimension measures the emotional stability of individuals. This dimension is divided into **High emotionally unstable** are those who are always anxious, depressed, have guilt feelings, tense, moody, obsessive and have low self-esteem. **Emotionally unstable** are those who are tensed, anxious and depressed. **Depending on situations** (midpoint) are those who may express emotionally unstable and emotionally stable characteristics. **Emotionally stable** are those who have good control over their emotions, passive, responsive, even-tempered, less likely to be tensed or rattled, low in negative emotion, very calm and collected under pressure. **High emotionally stable** are those who are even-tempered, less likely to be tensed or rattled and very calm. This division was based on the norm score (Schultz and Schultz, 2005).

Psychoticism Dimension

The P dimension measures aggression related to tough-mindedness and tender-mindedness. The dimension was further divided into **Tough-minded** are those who are forceful, egocentric, confident, unsympathetic, narrow minded, manipulative, accomplishment situated, manly, reckless, having feelings of hostility, impulsive and in consideration for others. **Tender-minded** are those who are very sympathetic, not very aggressive, soft and having consideration for others. **Depending on situations** (midpoint) are those who have both qualities of tough and tender-mindedness. This division was based on the norm score (Schultz and Schultz, 2005).

Lie Scale

There was no doubt that personality questionnaires are subject to faking and that in fact such faking good or faking bad (malingering) was relatively easy, whatever the questionnaire concerned. The studies are concerned with instructed faking i.e., conditions in which subjects are unequivocally approached to counterfeit positive or negative. The Lie scale measures the fake or dissimulates the tendency of the subjects. A **High score**

demonstrates that the individual has given socially desirable answers that are acceptable by society. On the other hand, a **Low score** demonstrates that the individual has given blunt and frank answers. This division was based on the norm score (Reference Manual for EPQ-R). If the raw score on the lie scale exceeds for female 8 and male 7 reject the scores. The raw scores convert into sten scores. The sten scores of 5-6 do note normal strength of the factor, scores over 6, i.e., from 7-10 express progressively the more noteworthy quality of the factor and score underneath 5, i.e., from 1-4 indicate a continuous decline of solidarity (Reference Manual for EPQ-R).

Objective

The objective of the study is to determine the personality among police personnel. In doing so, an attempt has been made to measure the personality traits of the trainee sub-inspectors of police at the Kerala Police Academy (KEPA) along with understanding the subclass variables of their personality traits and establishing a personality.

Methodology

The present research is based on explanatory quantitative study. The universe of the study was Kerala Police Academy in Thrissur falling in the state of Kerala. Purposive sampling technique was used to select the respondents and the total numbers of respondents are 154 which were selected from trainee sub-inspectors of police at Kerala Police Academy. Out of the 154 trainee sub-inspectors of police, who were part of the study initially, 124 respondents scored high in lie scale of EPQ and were excluded from the study. Thus, the total respondents of the study were 30. The structured questionnaire had used for data collection. The questionnaire had prepared related to socio-demographic variables and the standard EPQ questionnaire. The EPQ composed of 90 questions which were based on a quantitative method to be answered in yes or no. Every single one of the four dimensions has certain questions and each question takes a score one or zero; then the total score for each dimension was calculated. The four different types of personality are Extraversion (21), Neuroticism (23), Psychoticism (25) and Lie scale (21) items. The data were analysed statistically. The statistical analysis was conducted using SPSS version 20 software. Data were processed for descriptive statistics in the form of frequencies and percentages, mean, median, mode, correlation, one sample T-test and standard deviations. An official approval letter was obtained from the Additional Director General of Police & Director, Kerala Police Academy for conduct the study and confidentiality were maintained in the data collection. The limitations of the study were carried out in small sample and male trainee sub-inspectors of police only the result reflects only that population.

Results and Analysis

Socio-Demographic Variables

The data analysis of socio-demographic variables of the respondents (Table 1) shows that respondents were between 30 to 44 years. The majority of respondents 53.33% were aged 36 to less than 40 years old, 36.66% of the respondents were aged between 30 to 35 years and 10% of respondents were aged above 40 years respectively. The entire sample comprised of male respondents. Marital status reported the majority of respondents were married 90% remaining 10% were single. Most of the respondents were Hindus 83.33% followed by Christians 13.33% and finally Muslims 03.33%. Most of the respondents 90% were living with their families remaining 10% of respondents were living alone or away from family and there is no respondent as a single. Education qualification of the respondents was 56.66% graduate, 40% were postgraduate, 03.33% were doctorate of philosophy and there are no respondent masters of philosophy. The previous employment of respondents was 43.33% police forces of low-level rank, 36.66% other services, 10% fire services, 06.66% excise, 03.33% forest and there is no respondent ex-service and unemployment.

Table: 1. Socio-Demographic variables of the respondents.

Variables	Total number of samples = 30		
		n	%
Age/Years	Below<30	0	0
	30-35	11	36.66
	36-40	16	53.33
	Above>40	3	10
SEX	Male	30	100
	Female	0	0
Marital Status	Single	3	10
	Married	27	90
Religion	Hindu	25	83.33
	Christian	4	13.33
	Muslim	1	03.33
Living with	Single	0	0
	Family	27	90
	Alone or Away from family	3	10
Educational Qualification	Graduate	17	56.66
	Post Graduate	12	40.00
	M.Phil	0	0
	Ph.D	1	03.33
Previous Employment	Police	13	43.33

	Fire force	3	10
	Excise	2	06.66
	Forest	1	03.33
	Ex-service	0	0
	Others services	11	36.66
	None	0	0

Personality Measurement Analysis

The scores for each dimension of EPQ were interpreted. Each dimension was further divided based on the norm score. The following figures provide different personality characteristics of the respondents.

Figure: 1. the percentage of Extraversion variables of the respondents.

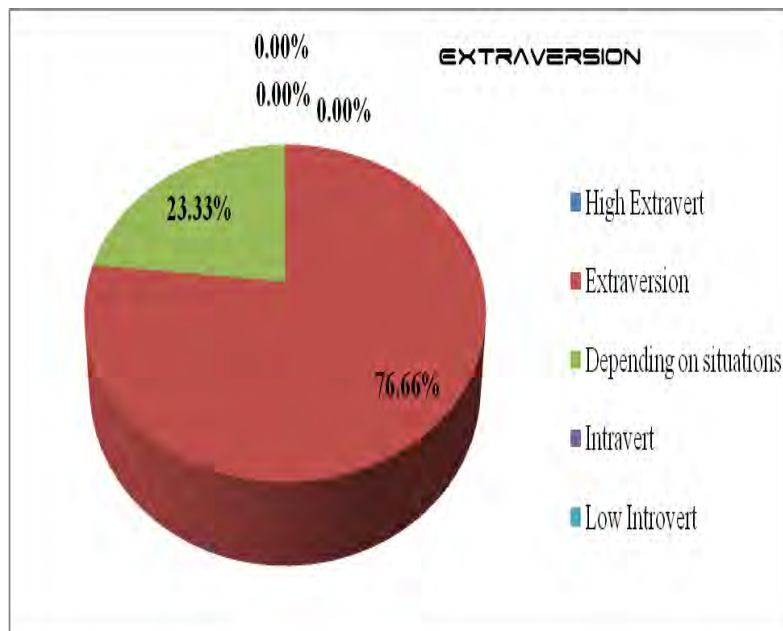


Figure 1 shows the extraversion variables of the respondents. Among the respondents there was no percentage of high extraversion, this implies there was no one with a high level of dominating, sensation-seeking, likes partying, gets easily irritated and active. 76.66% of the respondents were extraversion that means they are outgoing, sociable, active, expressive, impulsive, risk-taking and in need of external stimulation. 23.33% of the respondents were extraversion and introversion that implies there was a need for peace and being quiet depending on the situation. There was no percentage of introversion, this implies there was no one with quiet, reliable, always thinking and likes

to be by them. There was no percentage of low introversion; this implies there was no one with less sociable, likely to prefer a well-ordered life. Thus, in this dimension most of them are extraversion. So, they are sociable, active, expressive and impulsive.

Figure: 2. The percentage of Neuroticism variables of the respondents.

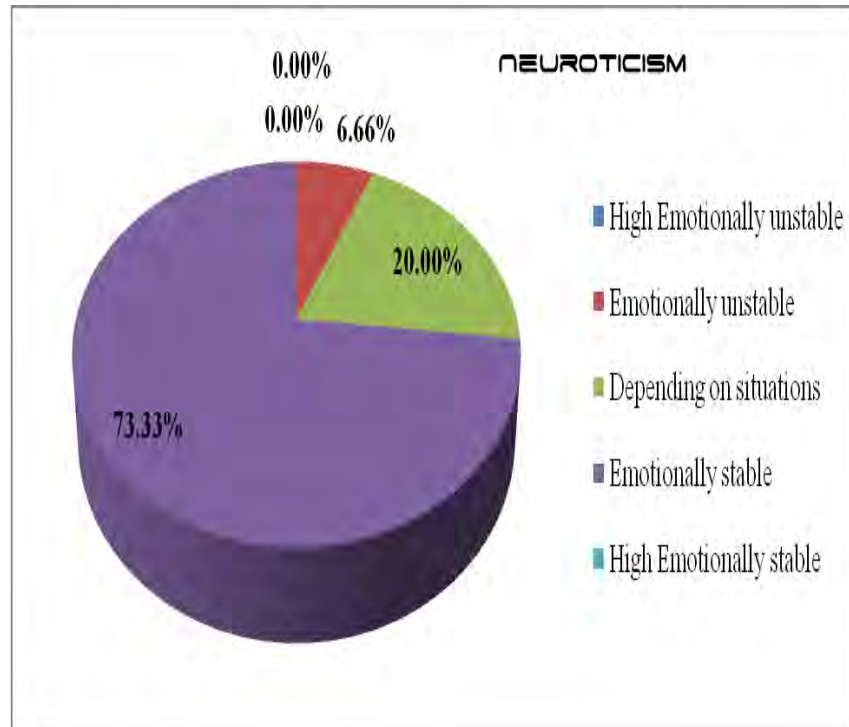


Figure 2 shows the neuroticism variables of the respondents. Among the respondents, there were no high emotionally unstable, this implies there was no one with a elevated level of negative impacts, for example, despondency, anxious and temperament upsets. 06.66% of the respondents were emotionally unstable that means they are moody, obsessive, and anxious and have low self-esteem. 20% of the respondents were emotionally unstable and emotional stable that implies their personality characteristics depend on situations. 73.33% of the respondents were emotionally stable that means they have good control vis-a-vis emotion, passive, responsive, even-tempered. None of the respondents were high emotionally stable which means they have control over their emotions; they are calm, peaceful and even-tempered. Thus, in this dimension most of them are emotionally stable. So, they are good to control emotions, passive, responsive even-tempered.

Figure: 3. The percentage of Psychoticism variables of the respondents.

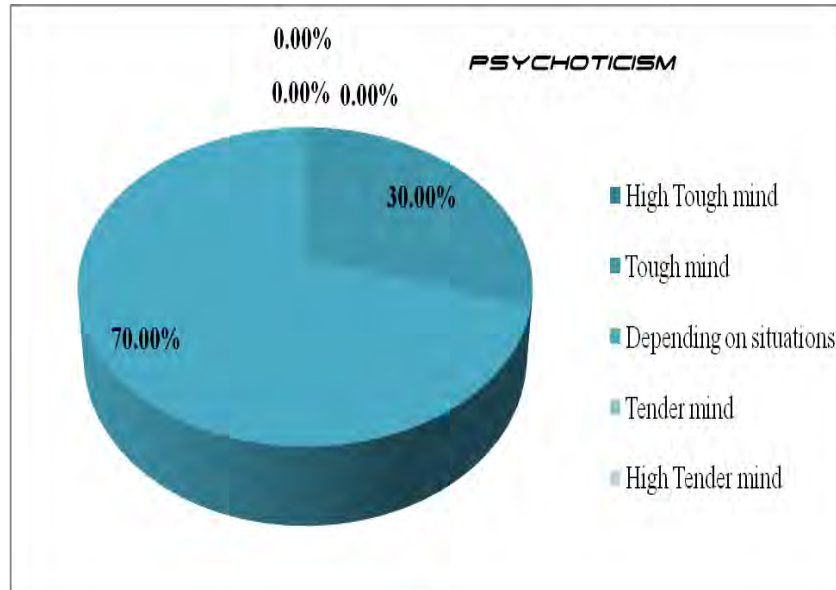


Figure 3 shows the psychoticism variables of the respondents. Among the respondents, there was no high tough mind; this implies there was no one forceful, egocentric, manipulative, masculine, narrow minded and accomplishment situated. 30% of the respondents were tough-minded that means they were confident, unsympathetic, impulsive and consideration for others. 70% of the respondents were tough and tender-minded depending on the situations they face. None of the respondents were tender minded and high tender-minded which means no one have very sympathetic, not very aggressive, soft and having consideration for others. Thus, in this dimension most of them are depending on situations tough and tender-minded. So, who have both qualities of tough and tender minded they are capable for law enforcement agencies.

Descriptive Statistical Analysis

The data collected were analyzed with the statistical software package SPSS version 20. Data were used to derive the mean, median and mode. Further analyses were correlation coefficient and significant value.

Table: 2. The Mean, Median and Mode value of the respondents.

EPQ	Mean	Median	Mode
Extraversion	17.36	17.5	18
Neuroticism	6.8	6	6
Psychoticism	4.96	5	5

Table 2 shows the mean, median and mode value of Extraversion, Neuroticism and Psychoticism scored by trainee Sub-Inspectors of police. The mean values are 17.36, 6.8 and 4.96 respectively, median values are 17.5, 6 and 5 respectively and mode values are 18, 6 and 5 respectively.

Based on the score norms, most of the respondents were an extravert, emotionally stable and depending on situations in mind setup. Extraverts meant those who are sociable, active, expressive and impulsive. Emotional stability is good as they have control over their emotions, passive, responsive, even-tempered. Depending on situations both qualities tough and tender-mindedness are achievement-oriented, unsympathetic, manipulative, not aggressive and having consideration for others.

Table: 3. The Correlation Co-efficient value of the respondents.

EPQ	Extraversion	Neuroticism	Psychoticism
“r” value	0.0732	0.0793	0.0514

Table 3 shows the correlation value of Age Vs Extraversion ($r = 0.0732$), Neuroticism ($r = 0.0793$) and Psychoticism ($r = 0.0514$). There is no significant relationship between the variables.

The age and personality are directly proportional; it means whenever age is increasing the personality profile will increase. Personality keeps changing throughout life. This may be due to physiological changes associated with development but also experiences that impact behaviour (Loehlin and Martin, 2001). The physiological premise has been proposed by Eysenck for psychoticism that of testosterone, with more significant levels of psychoticism is related with more elevated levels of testosterone. Adolescence women have an effect during adulthood and continue to decrease as age passes. In the present study, the respondents have shown trends for Extraversion (E), Neuroticism (N) Psychoticism (P), were generally downward with age and Lie (L) upward.

Table: 4. The Significance value of the respondents.

EPQ	N	Mean	Std. Deviation	Test Value	“P” Value
E	30	17.37	1.245	17	0.118
N	30	6.80	2.809	7	0.699
P	30	4.97	1.586	5	0.909

Table 4 shows the P value of Extraversion, Neuroticism and Psychoticism as 0.118, 0.699 and 0.909. The researchers accept the Null Hypothesis; there is no significant difference in the extraversion score will not have a low score in the extraversion trait, will not have a high score in neuroticism trait and will not have a high score in psychoticism trait at 5% significance level.

Findings

The majority of respondents were displaying the personality characteristics of extraversion 76.66%, emotionally stable 73.33% and tough & tender mindedness depending on situations 70%.

Another fall under the other dimensions as measured in EPQ. They are as follows:

- ✚ In extraversion, it was observed that 23.33% of the respondents are depending on situations showing both extraversion and introversion characteristics. There was no percentage of high extraversion, introversion and low introversion.
- ✚ In neuroticism, it was observed that 20% of the respondents are depending on situations showing both emotionally unstable and emotionally stable characteristics and 06.66% of the respondents are emotionally unstable. There was no percentage of high emotionally unstable and high emotionally stable.
- ✚ In psychoticism, it was observed that 30.00% of the respondents were tough-minded and there was no percentage of high tough-minded, tender-minded and high tender-mindedness.
- ✚ The correlation value of Extraversion ($r = 0.0732$), Neuroticism ($r = 0.0793$) and Psychoticism ($r = 0.0514$) reveals that there is no relationship between the variables. The P -value of neuroticism was 0.699, psychoticism was 0.909 and extraversion was 0.118 which are not significant.

Discussion

- ✚ Extraversion, emotionally stable and tough & tender-mindedness depending on situations individuals are fit for the policing job. Being an extravert or possessing qualities of extraverts helps them to be public friendly. Being an emotionally stable person helps them to bring about a balance between their professional and personal life; thus can avoid incidents that could happen due to high levels of stress and emotional instability. Further, they should be both tough & tender-minded depending on the situations they face. Being too tough-minded or too tender-minded is not fit for the police job.
- ✚ Law enforcement is a part of the Criminal Justice System (CJS) which safeguards the peace, harmony and stability in our society, if the system becomes weak due to unfit personnel then it may result in disharmony within the society. The Law enforcement system is closer in interaction with society. If the community does not have faith in the law enforcement system then it would lead to the lack of faith in the whole of CJS.
- ✚ The various personality tests with good reliability and validity may be conducted during the selection process itself. As per the results, trainee sub-inspectors of police are displaying the personality characteristics of

extraversion, emotionally stable and tough & tender-mindedness. So, they are capable of law enforcement agencies.

- ✚ The selection of persons with comfortable personality traits, fit with the policing will reduce the burden of shaping them fit for the job during their basic training period. Personality tests while undergoing the training will further help the Academy to reshape the training module. The analysis of the personality traits gives a chance to the trainers, to each trainee and to render support to any particular trainee, if necessary.

Conclusion

From this study, it very well may be presumed that two-thirds of the respondents have extraversion, emotionally stable and tough & tender-mindedness depending on situations. Further studies among the trainee sub-inspectors of police this batch may help Kerala Police Academy to re-schedule the training module to fill the gap between theoretical and practical policing.

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Disinformation: Spread, Impact and Interventions in Indian Context

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“Falsehood flies, and truth comes limping after it, so that when men come to be undeceived, it is too late; the jest is over, and the tale hath had its effect.”

- (Jonathan Swift, 1710)

Abstract

The spread of false and misleading content and the ways in which it spreads and influences people have increased with the rapid proliferation of online news content and social media. The increasing use and acceptance of social media platforms provide a fertile ground for the spread of false information that is dangerous for the community as a whole. The risks posed by disinformation include rumour mongering, propaganda, targeted attacks and incitement of riots and violence. The very nature of crimes instigated by disinformation point to the fact that the news has the capability to cater to the section of the population that believes them as genuine. Gartner Research predicts that by 2022, the majority of individuals in mature economies will consume more false information than accurate information. This is a very serious proposition, threatening the very fabric of the societies in which we live. The technology which once was considered as a saviour has come back to haunt humanity. In this context, the ways and means to control the spread of disinformation and misinformation need to be discussed. Various mechanisms to identify and detect disinformation are being used, artificial intelligence and machine learning being some of them. The challenges in identifying /tracing the source, classification and control of disinformation are mentioned. We discuss how different social media platforms deal with disinformation. However, technology alone would not be sufficient to control the menace of disinformation. India

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poses a considerable challenge with 22 official languages. Multiple combinations of transliterations are a linguistic challenge in terms of deciphering the content. Some legislative measures have been undertaken in certain countries to control disinformation. We discuss a case study of how awareness campaigns have helped the fight against disinformation in the state of Telangana. The collaborative efforts of the government and the service providers armed with unambiguous legislation seem to be a possible solution to control the menace of disinformation.

1. Introduction

The advent of Internet resulted in the proliferation of social media platforms, which were designed to bring people across the world on a common platform to share ideas. Facebook, WhatsApp and Twitter became a medium for a large section of the population to view and share news. WhatsApp has revolutionized the way people view and share the news. WhatsApp groups have now become a popular medium for people to consume news content.

In the earlier days, the spread of news was slow and mostly over word of mouth. The invention of the printing press speeded up the process of dissemination of news. Fake news riding on the wings of Internet media has this insidious ability to distort, disrupt and destabilize the societies in which we live, making people believe what they already want to believe. The algorithms used by social media platforms ensured that the people see the news that they want to see, the news which confirms their biases and prejudices. Thus, the people are drawn inside an echo chamber feeding on their confirmation biases. They are hardly presented with an alternate view of the opinion shown to them resulting in a fertile ground for the dissemination and consumption of false information. A Gartner study predicts that by 2022, the majority of individuals in mature economies will consume more false information than accurate information (Panetta, 2017).

Disinformation regarding child kidnapping gangs spread through Facebook and WhatsApp have incited violence in many parts of India. People believed the information came from ‘trusted sources’ – the family and friends groups, as real and a few unfortunate events ended up in mob fury, killing innocent people. While there is no question of the criminality of the people who indulged in horrific acts of violence, the role of the social media platforms in aiding the dissemination of false information and acting as the primary motivator cannot be discounted.

During the Arab Spring, the Internet and social media were hailed as the saviours of democracy and oppressed voices. The same Internet and social media now are helping disinformation to overrun the facts. Several companies have come forward with technological solutions to curb the spread of disinformation, using techniques ranging from the use of artificial intelligence to spot fake news to identifying automated bots which spread fake news. Many countries have taken the legislative route to deal with disinformation. While some countries have criminalised disinformation, some have put

the onus of taking down false and misleading content on the social media platforms, criminalising them if they fail to do so.

Disinformation is a multifaceted and evolving problem and therefore a single straightjacket one size fits all solution is both ineffective and impractical. Collaborative methods involving multiple stakeholders would give a much-needed fillip to the fight against disinformation. Uganda has led the way in imparting critical thinking skills to students in schools in helping them fight disinformation. People shall be equipped with the skills to understand the content on social media and to identify what is accurate and trustworthy, and what is not.

Nevertheless, these collaborative steps shall work effectively only with an active intervention from the government. The government shall ensure that the social media platforms work under a set of guidelines to ensure that the platforms are not abused to disseminate false information to deceive and incite people. This article attempts to identify the impact and challenges posed by disinformation in the Indian context and the interventions required to fight the spread of disinformation.

2. Defining disinformation

Merriam Webster dictionary defines disinformation as *false information deliberately and often covertly spread in order to influence public opinion or obscure the truth*. It is thus generally used to refer to deliberate attempts to confuse or manipulate people through delivering false information to them. It includes the fabricated stories masquerading as legitimate news reports produced either for profit or political ends.

The term ‘fake news’ caught attention after allegations that the discourse of 2016 US presidential elections was changed by fake news. These are news stories that are probably false, have enough traction in the society, and are easily consumed by millions of people. Fake news is a serious problem for the societies as many governments across the world have acknowledged.

The UK Government accepted the view of the ‘House of Commons Digital, Culture, Media and Sport Committee’, that the term ‘fake news’ is misleading, and instead sought to address the terms ‘disinformation’ and ‘misinformation’. The Committee defined disinformation as “*the deliberate creation and sharing of false or manipulated information that is intended to deceive and mislead audiences, either for causing harm or for political, personal or financial gain*”. European Commission (2018) has observed that the word ‘fake news’ is inadequate to capture the problem of disinformation. The term disinformation includes stories which are entirely fake, fabricated news with a blend of truth in it and all forms of false, inaccurate or misleading information designed presented or promoted to intentionally cause public harm or for profit. The ‘International Grand Committee’ on Disinformation and ‘Fake News’ had accepted that “the deliberate spreading of disinformation and division is a credible threat

to the continuation and growth of democracy and a civilising global dialogue” (House of Commons, 2018).

3. How disinformation spreads?

"Lies are the social equivalent of toxic waste: Everyone is potentially harmed by their spread."

- Sam Harris(Harris, 2013)

Access to the news has become cheaper and easier because of the increased mobile connectivity and smartphone use. Social media with its ability to amplify a message through endorsements and forwards gives one the tool to reach a potential audience without needing substantial resources or access to expensive media technology. One can become a broadcaster at virtually no cost. This new power structure enables individuals, to distribute large volumes of disinformation or fake news. Traditional news had quality assurance, and editorial controls before publication and most of the content was created by professionals. The Internet provides a vast array of services where content can be published and spread. Unlike the traditional process, there are no editorial controls or quality-assurances. There is a paradigm shift from the 20th-century ecosystem dominated by print and broadcast media to an increasingly digital, mobile and social media dominated ecosystem. Social media not only changed the methods of news distribution but also changed the age-old beliefs of how news should look. Now, a tweet, which at most is 140 characters long, is considered a piece of news and true particularly if it comes from a person in authority. Facebook, the most popular social media platform, claims to have more than 1.56 billion daily active users as on March 2019 (Facebook, 2019). Facebook has evolved into a platform where users produce and exchange different types of information, including news. Social media sites have a mass audience, and they facilitate speedy exchange and spread of information and along with it, disinformation.

The credibility of the information on social media platforms cannot be assessed easily due to the proliferation of sources. Further, people tend to follow like-minded people in forming an opinion. In the absence of any conflicting information to counter the falsehoods and with the presence of a consensus within the social groups, lies spread fast. Once embedded in the society, such ideas harden the prejudices and in extreme cases catalyse and justify violence (Greenhill and Oppenheim, 2017). Therefore, our attitudes to information and disinformation depend less on objective evaluation, and more on the group's collective thought. Swire *et al.*, (2017) have argued that source credibility profoundly affects the social interpretation of information. Individuals' trust information comes from well-known or familiar sources and from sources that align with their worldview. Further, humans prefer to receive information that reinforces their

existing views. Users on social media tend to form groups containing like-minded people where they then polarize their opinions, resulting in an echo chamber effect. The echo chamber effect facilitates the process by which people consume and believe in disinformation.

Users on social media typically receive messages from friends, family members or other trusted networks through WhatsApp groups or other social media platforms, making them less likely to second guess the veracity of the story, especially in the Indian context, where culturally the social ties are very strong. Due to these cognitive biases inherent in human nature, fake news can often be perceived as real by consumers. Moreover, once the misperception is formed, it is tough to correct it. Disinformation travels between peer-to-peer networks where trust tends to be high and social media is designed to take advantage of this inherent bias.

UK Government Online Harms White Paper mentions that a combination of personal data collection, AI-based algorithms and false or misleading information could be used to manipulate the public with unprecedented effectiveness (DCMS, 2019). European Commission (2018) has acknowledged that news is now increasingly easy to share due to the digital, end-to-end nature of the Internet and its 'platformisation' with the emergence of multi-sided business models. They have also mentioned that the social media platforms push the users into a state of intellectual isolation, wherein the individual interacts with a single news source, which only feeds them articles based on their perception of what they will be interested in, powered by an algorithm that only feeds users based on their perception of what they will like, or is interested in. The European Commission acknowledged that that "new technologies can be used, notably through social media, to disseminate disinformation on a scale and with speed and precision of targeting that is unprecedented, creating personalised information spheres and becoming powerful echo chambers for disinformation campaigns".

4. Impact of disinformation in Indian context

False information has flooded social media in recent years, inciting violence across the globe – from Mexico to India. The growing use of social media and messaging applications in India has been followed by a series of serious incidents of violence incited by messages shared on WhatsApp and Facebook. A BBC article from August 2018 suggests that at least 25 people have been lynched by mobs after consuming false news spread on WhatsApp (Biswas, 2018). Five such incidents which resulted in serious law and order problems across India are discussed here, along with the disinformation that triggered the acts. Disinformation having serious consequences on the health of the people is also discussed. The disinformation messages have preyed on the universal fear of harm coming to a child. Millions of poorly educated Indians coming online for the first time were quick to believe what is on their phones. The underlying fact is that people believed the false information, spread it and acted upon it, giving scant regard to

the veracity of the claims. It is pertinent to note that the concerned social media platforms did not do much to debunk the false information or to control its spread. The incidents, be it in Karbi Anglong, Athimoor, Dhule, Mendrakala or Bangalore share a pattern. The populace used social media shares as their first access point to news and blindly believed the news forwarded by their trusted friends and family circles to be true and never bothered to check the veracity of the news items. These incidents show how messages or images meant to incite violence spreads through the social media to hundreds of people and can have a cascading effect.

5. Scale of the Problem in India

A Cisco report (Cisco, 2018) estimates that India will have 840 mn Internet users by 2022. Smartphone and Internet usage in India is set to massively swell in the next four years according to the report. Over 200 million Indians regularly use social media (Government of India, 2019). Although Internet penetration is only 13.5%, the country still has the second-largest number of Internet users worldwide.

India will add another 300 mn users in the next three years, mostly non-English speakers and maximum of them lower down in the socioeconomic pyramid and in literacy rates. The people communicate over the social media platforms in the vernacular languages as well.

Modern day social media platforms and ICT applications are highly rich in non-textual interactive links thereby gaining massive popularity among the non-literate section too. This innovation has enticed the low-literate section with various ICT applications and social media platforms too and bridged the digital/ social divide between them and the literate section. This target group mostly settled in rural or semi-urban areas is easily carried away by their emotions and become party to the crowd to satisfy their anguish and hatred as mentioned in section 4 above.

In India, with the launch of 4G, social media has emerged as a favoured medium of communication for the people. WhatsApp became one of the most common ways to connect with friends, family and broader community. With over 350 million active users, WhatsApp is one of the most widely used messaging apps in India. The recent explosion of cheap data plans meant that many people got access to Internet technology whilst having minimal digital literacy to separate real stories from the false ones. The penetration of Fact Checking applications is very poor in the semi-urban and rural areas of the country making it very difficult to debunk false information.

6. Addressing the challenge

“The world is a dangerous place. Not because of the people who are evil; but because of the people who don't do anything about it.”

Albert Einstein

The stakes of accurately identifying and controlling the spread of disinformation are very high as disinformation often affects the core of a democratic society and the idea of free speech and information and may cause genuine voices to be unheard. The challenge would be to identify the disinformation from a stack of data, do a fact check on the same and to disseminate the fact that the information was false. The challenge is accentuated multifold because of the fact that by the time the false information is identified and debunked, it must have reached millions of people.

Use of technology to combat disinformation

Algorithms are partly responsible for the spread of disinformation as sensational information can be curated for grabbing eyeballs by the social media platforms. However, technology also enables the fight against disinformation. Artificial Intelligence methods, capable of analysing gargantuan amounts of data and identify the connecting relationships, have the power to identify and thereby, fight disinformation. The social media platforms can use techniques to control the spread of disinformation by bots.

Role of technology platforms

The key to any intervention by the social media platforms involves identifying disinformation and to control its spread. The efforts include steps to identify and remove illegitimate bot accounts, taking steps to integrate credibility and trustworthiness using ranking algorithms, including suggestions for alternative credible content and steps to collaborate with independent fact-checking organizations.

Facebook

In a press release (Mosseri, 2017), Facebook has accepted that “one of the most effective approaches against fake news is removing the economic incentives for traffickers of misinformation”. The steps that Facebook promised to take include - applying machine learning to assist the response teams in detecting fraud, detection of fake accounts on Facebook, which makes spamming at scale much harder and to identify false news through community and third-party fact-checking organizations to limit its spread. Facebook Journalism Project collaborates with news organizations for helping people get better information so they can make smart choices about what they read. They also launched the News Integrity Initiative, to increase trust in journalism and to help the public to make better judgments regarding the news.

WhatsApp

WhatsApp claims that its platform is end to end encrypted and hence the contents of the message cannot be seen by them. This end to end encryption facility, as explained

above, is one of the reasons why disinformation spreads very fast. WhatsApp disinformation and rumours led to incidents of mob violence in India, as mentioned in the previous section. Consequently, WhatsApp put up a limit on the forwarding of messages marked the forwarded messages. It published advertisements in the print media warning users not to trust every news on WhatsApp, and also started a radio campaign encouraging users to verify content before forwarding it. WhatsApp has also introduced a group privacy setting and invite system to enable users to decide who can add them to groups, whereby prevents people from being added to unwanted groups. During the ongoing general elections in India, WhatsApp introduced a Checkpoint tip line to get the suspicious messages verified, in collaboration with Proto, based out of New Delhi. However, Proto in their FAQ mentions that *‘the Checkpoint tip line is primarily used to gather data for research, and is not a helpline’* (Proto, 2019). WhatsApp has also committed to work with government and civil society and has mentioned various steps in their FAQ, including growing a local team, collaboration with Election Commission of India for elections, law enforcement training, trainings for political parties as part of the ‘Swaniti’ initiative and digital literacy training (WhatsApp, 2019b).

Limitations in use of technology to curb disinformation

India has 22 official languages, and majority of the users transact in the vernacular languages, in multiple permutations and combinations of transliterations. So, it becomes difficult, if not impossible to identify the false content from the original content.

Even with sophisticated feature extraction of deep learning methods, fake news detection remains to be a challenge, primarily because the content is crafted to resemble the truth in order to deceive readers; and without fact-checking or additional information, it is often hard to determine veracity by text analysis alone. AI can be beneficial in the automatic detection of content or automatically fact-checking articles. However, developments in AI also make it possible to generate fake content (text, audio and video) which is difficult to detect by humans and algorithms – known as ‘deep fakes’.

A healthy blend of rational human interventions and artificial intelligence could be a better way out. Machines give us speed and scalability, while humans bring understanding to the table and with it, the ability to consider context and nuances when evaluating the veracity of a text.

Legislation

Germany passed a law titled “Netzwerkdurchsetzungsgesetz” (NetzDG), which forces online platforms to remove “obviously illegal” posts within 24 hours or face fines of up to €50 million. It mandates a legal obligation for social networks to report their processes that counteract illegal content online and to establish a mechanism to ensure

the compliance. Certain offences amount to the definition of unlawful content (related to fake news) according to the German Criminal Code. They include intentional defamation, treasonous forgery and forgery of data (Claussen, no date). Anti-botnet legislation was proposed by Justice Ministers in three German states (Hessen, Saxony-Anhalt and Bavaria) to deal with automated social media accounts that spread fake news.

The law in France, allows judges to order the immediate removal of online articles that they decide constitute disinformation, during election campaigns. The law allows the French national broadcasting agency to have the power to suspend television channels controlled by or under the influence of a foreign state if they “deliberately disseminate false information likely to affect the sincerity of the ballot”. Sanctions imposed in violation of the law includes one year in prison and a fine of €75,000 (France, 2018).

The Italian Interior Ministry enacted the Operating Protocol for the Fight Against the Diffusion of Fake News through the Web on the Occasion of the Election Campaign for the 2018 Political Elections. Users can provide their email address, a link to the misinformation they want to report and any social networks they found it on. The requests are dealt with by the authorities at the Polizia Postale, a unit of the state police that investigates cybercrime, who fact-checks them and pursue legal action if the news is false and laws were broken (Funke, 2018) (Italy, 2018).

Singapore has proposed the Protection from Online Falsehoods and Manipulation Bill which makes spreading false statements that compromise security, public tranquility, public safety and the country’s relations with other nations, illegal. The bill proposes punishment to people who post false information with fines of up to \$740,000 and jail sentences of up to 10 years. It would also allow the government to publish corrections alongside allegedly false claims (Tang, no date) (Singapore, 2019).

Criticisms

The aforesaid laws and proposed legislation have been criticized across the globe for being too harsh on freedom of press and free speech. Criminalising information per se would amount to curbing the freedom of speech and hence against the tenets of UN Charter on Human Rights and will violate the spirit of Constitution of India, in the Indian context. Filtering out opinions would impoverish our democracy. Further, Honourable Supreme Court of India had held section 66 A of Information Technology Act, 2000 which criminalised false or offensive information through communication channels as unconstitutional.

Collaborative Efforts

Verificado

Verificado was an initiative started in 2018 during the Mexican elections to counter false information (Verificado, 2018). It was a collaborative election reporting and fact-

checking initiative and included media houses in Mexico. Verificado encouraged WhatsApp users to share information that they receive from sources and social networks. The team would manually verify the information and responded to every single user individually, confirming or correcting the information that they had sent.

Digital Literacy Initiatives:

Disinformation thrives on the tendency of people to believe what is being circulated to them through social media platforms. They hardly question the veracity and reliability of the information being fed to them. Children and adults need to be equipped with the necessary information and critical analysis to understand content on social media, to work out what is accurate and trustworthy, and what is not.

Primary school children of Uganda were taught to make informed choices regarding health-related information they come across in the Internet and news. Comic stories were designed to teach Ugandan schoolchildren how to identify bogus health claims. Research conducted by (Nsangi et al., 2017) has shown that the intervention had a positive effect on the intended behaviour of the children.

Roozenbeek and van der Linden (2018) had developed a game to educate university students against disinformation. They argued that fake news game reduced the perceived reliability and persuasiveness of fake news articles. They suggest that such educational games can be a promising method to inoculate the public against fake news.

In Ukraine, the nongovernmental organization IREX trained 15,000 people on a program called Learn to Discern. The program was designed to teach citizens how to separate fact from fiction and recognize manipulation and hate speech. There was a 24% increase in participants' ability to distinguish trustworthy news from false news, a 22% increase in those who cross-check the information in the news they consume, and a 26% increase in participants' confidence in analysing news (Susman-Pena and Vogt, 2017).

Telangana – Police Initiative

Telangana Police activated proactive policing measures to prevent disinformation fuelled mob violence in Jogulamba Gadwal and Wanaparthy districts. As part of the community outreach programme, the police officers got to know about the villagers who were receiving and forwarding videos and images regarding the presence of interstate child lifting gangs in the village and certain warnings against outsiders. The police then took up the initiative to educate the villagers about disinformation in social media. The village *sarpanches* (village head) were informed to identify morphed images, and they started a door to door campaign to teach them spot fake videos. The police also roped in town criers – locally known as '*dappu artists*' and trained them to convey the messages against disinformation to the villagers.

UP Police - Twitter

Uttar Pradesh is the most populous state in India with a population of 220 million. The Uttar Pradesh Police started twitter handles in every police district to connect with the public with the dual objective of connecting with the public and to propagate the police version of the incidents. The UP Police twitter handle as of today has more than 6 million followers. The police use the twitter handle in their fight against disinformation. The debunking of disinformation can be done using the very platforms through which it propagates.

7.A discussion of existing legal framework in India to combat

Disinformation

The criminal acts in this respect are governed by the Indian Penal Code and the Information Technology Act. The section 153 A of the Indian Penal code deals with communication intended to promote disharmony or to disturb public tranquility. Though it does not criminalise disinformation per se, the law does cover communication intended to promote disharmony or to disturb public tranquility.

The section 505 of the Indian Penal Code criminalises communication with the intent to cause fear or alarm to the public or to incite or likely to incite persons to commit offences. However, if any person makes or disseminates any communication believing it to be true is exempted from punishment. As mentioned in section 2 above, most people forward or circulate disinformation believing it to be true. The section can only be invoked in a case to case basis to prosecute the persons intentionally circulating disinformation.

Section 69 of IT Act empowers the Central government or a State Government with the power to issue directions for interception or monitoring or decryption of any information through any computer resource. The intermediary is expected to provide assistance, inter-alia to decrypt the information if need be. The intermediary which fails to assist the agencies shall face punishment along with fine as mentioned in the Act.

Section 69A IT Act provides The Central Government the power to issue directions for blocking of public access of any information to intermediaries. This essentially means that the government can issue directions to intermediaries to remove content if it has the potential to affect public order or to incite the commission of an offence. The intermediary who fails to comply with the directions shall be liable for punishment up to seven years of imprisonment and a fine.

Section 79 of IT act provides immunity for intermediaries for third party content, provided that they meet the conditions mentioned in the act. The intermediaries are thus exempted from liability for information transiently passing through their networks. However, intermediaries may be held responsible if they modify the information contained in the transmission.

The Government of India had come up with a draft the Information Technology Intermediaries Guidelines (Amendment) Rules 2018. The guidelines expect the social media platforms to inform the users to refrain from posting grossly harmful or deceiving information. Rule (5) requires the intermediaries to provide information to the government agency for matters concerning cybersecurity or investigation or prevention of offences. Further, there is an expectation from the intermediaries to enable traceability of originators of information on its platforms. The same is under consideration by Ministry of Electronics and Information Technology (MeitY).

8. Conclusion and way forward

Disinformation is a multifaceted and evolving problem and does not have a single root cause, and therefore a single straightjacket one size fits all solution is not available. Technology is a big enabler in the fight against the spread of disinformation. However, technology alone will not be sufficient for identifying the genuineness of the content at all times. The technology companies are expected to make algorithmic changes to fight the menace of disinformation. The recent incidents, however, paint a grim picture and do not show the social media platforms in an encouraging and responsible way. Bakir and McStay (2018) have explained that digital advertising enables fake news sites to make profit. The technology platforms thrive on advertising revenue. As mentioned above, even after a story is debunked, the technology platforms make no effort to inform the users that the story was false. Keeping in view of the aforesaid facts and the success of the collaborative approaches as mentioned above, formulation of guidelines backed by law to ensure the technology platforms to comply with certain minimum standards is the need of the hour. Legal provisions do exist to criminalise acts done with an intention to abet or incite offences. However, as discussed, more often than not, disinformation is spread by users considering it to be genuine. Most social media platforms like WhatsApp provide end to end encryption of data and claim that it is not possible to provide traceability, impairing the attempts of law enforcement agencies to trace the actual initiator of the false content. Transparency obligations by the intermediaries may include traceability of the identity of the content initiator and the amplifiers, especially in articles containing sensitive content. However, the platforms are as of now, being non-committal on ensuring traceability. Simple transparency obligations on the side of digital platforms may be compatible with freedom of expression, but insufficient to tackle the phenomenon in the absence of additional commitments. However, rigid policing and regulation of the platforms can be ineffective and disproportionate.

No traditional form of law-making can succeed without cooperation with platforms, and thus either self- or co-regulation schemes. Companies should ensure that algorithms selecting content do not skew towards extreme and unreliable material in the pursuit of sustained user engagement.

The following recommendations could be a way ahead in fighting the spread of disinformation.

1. Guidelines by the Government to all social media platforms to conspicuously display the debunked story as well, when it is clear that a particular article was false. For this, it would be expedient to define the ambit of disinformation very clearly and unambiguously in law.
2. The social media platforms must augment the technology and human interventions to ensure that the disinformation is identified and taken down off its platforms expeditiously. They must ensure that the algorithms should not propagate disinformation in its pursuit of engaging the users. They shall put across an option to users to enrol in a fact checking mechanism when they join any of the social media platforms.
3. Guidelines by the Government to ensure that the social media platforms invest in educating the children in schools and join the efforts of the government regarding imparting digital literacy. As mentioned in section 6.4.2 above, the children must be made aware how to navigate the cyber world.
4. Digital Literacy campaigns to be activated and to be made compulsory as part of the curriculum in schools. Adult education campaigns to teach citizens how to separate fact from fiction and recognize disinformation shall be initiated, both at the government level and also by the social media platforms.
5. Enforcement of section 69 A of Information Technology Act. However, considering the fact that law enforcement is a State Subject and hence under the purview of the individual states, the power of 69A may be delegated to states as well. Considering the size of the country and the amount of data being generated and circulated, it would be expedient to create a subcommittee at the state level for issuing takedown requests. However, an appellate mechanism to the platforms shall be provided so that they may represent themselves in case of penal action on them.
6. Proper enforcement of section 69 of IT Act shall be done. The platforms must ideally provide traceability for investigation and prosecution in cases of serious offences. A study of the successful and unsuccessful prosecutions regarding the spread of illegal or malicious content on communication media may be done to analyse the challenges.
7. The fact-checking mechanisms must be universalised. More and more people should know about the fact-checking mechanisms. Verificado initiative taken by Mexico is an example. The social media platforms can also play a major role in reaching out to the public.
8. The best practices across the world shall be evaluated and adapted to in the Indian context on a regular basis.
9. India may consider including the menace of disinformation in its cybersecurity framework. Legislation shall be considered as one among the multipronged strategies to combat disinformation.

The aforementioned interventions shall help to make people aware of the existence of the problem of disinformation and equip them to take rational decisions regarding news articles in the internet. Further, the interventions by the government shall ensure that the social media platforms act responsibly and help government fight disinformation. The collaborative mechanisms is expected to create an ecosystem where people make informed decisions and social media platforms have more responsibility to ensure that the platforms are not used to incite violence and malice.

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Changing Contours of Cyber-Security-Challenges, Response & Preparedness (Prime Minister's Silver Cup Essay Competition, 2019)

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The cyber world is a euphemism for a completely different universe where the rules of the real world are transcended. Neither gravity, viscosity nor friction hold down or hold back, a set of events, once in motion. Algorithms which had long left Newtonian laws behind are today pushing the boundaries of quantum physics, reinventing, mutating and leapfrogging into new avatars which are leaving its very creators perplexed. Navigating this realm requires a unique blend of omniscience, comfort in ambiguity, vision for future and grit to pursue it based on a radical reinvention of capabilities.

Even as the expanse of the topic defies boxing or structural analysis of any kind, this essay will attempt to contextualise cyber security of India within its evolving national security and law enforcement apparatus on the global canvas.

Challenges

As a net information exporter, nearly 500 million innocuous internet users from India, find their data migrating to servers globally on a daily basis, relying on varied levels of encryption, consent forms and legalese in fine print. Regulators and security agencies meanwhile are scrambling to keep these users and their systems protected.

According to the office of the National Cyber Security Coordinator, attacks in Indian cyberspace are adding upto 200 million malware related and 190,000 'unique' intrusions in a week, with threats likely to move from 'disruptive' to destructive in about a year¹. Other reports point to 48,000 Indian computers affected in 2017 Wanna cry ransomware attacks, 10,000 computers by Stuxnet in India including critical

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¹ Foundation, Vivekananda International. "Credible Cyber Deterrence in Armed Forces of India." VIF Task Force Report, March 27, 2019, 47. https://www.vifindia.org/sites/default/files/Credible-Cyber-Deterrence-in-Armed-Forces-of-India_0.pdf.

infrastructure facilities like Nuclear Power Corporation of India blocking ten targeted cyber attacks a day.²

Merely in the last two years we have seen events like the US\$171 Million Union Bank of India heist (recovered with quick response), Hitachi payment systems debit card breach, 17 million user data stolen from Zomato, the ubiquitous eating out guide, ransomware attacks on the Jawaharlal Nehru Port Trust and breaches in UID and Canara Bank.³ Global Risk Report 2019 (World Economic Forum) places data fraud and cyber attacks at fourth and fifth position in likelihood of happening and along with critical infrastructure breakdown in the top ten of impact events.⁴

Attacks have endured, beginning with the US where the National Security Agency (NSA) had many of its sophisticated tools leaked to open access in the internet.⁵ Later digital footprints of some of these tools were found in Ransomware attacks, implying they were employed successfully by unauthorised persons. The Stuxnet saw several zero day vulnerabilities being exploited and Supervisory Control and Data Acquisition (SCADA) systems from Iranian nuclear centrifuges being laid bare and disrupted. Meltdown and Spectre attacks demonstrate that long standing hardware vulnerabilities may also be harnessed for malafide purposes.⁶

Closer to home, China's Shanghai based PLA Unit 61398⁷, has for years been deployed for corporate espionage aimed at strategic sectors like space. Industrial economic espionage of foreign targets and propaganda is part of its draft cyber policy.⁸ Even as no asian country has declared capabilities or a doctrine in place, it is evident that they are already formidable and improving drastically.⁹

Crowd Strike and Centre for Strategic and International Studies, in comparative reports¹⁰, show the considerable improvement required in India's offensive cyber capabilities demonstrating poor 'breakout time' which is the time taken to enter deeper

² *Ibid.*

³ KPMG. "Re-imaging India in the Context of Cyber Security Threats." KPMG Report, February 2019, 10. Accessed May 30, 2019. <https://home.kpmg/in/en/home/insights/2019/01/kpmgcyber-cybersecurity-cyberattack-cybercriminals-artificial-intelligence.html>.

⁴ Forum, World Economic. "The Global Risks Report 2019." WEF Insight Report, January 15, 2019. Accessed May 30, 2019. <https://www.weforum.org/reports/the-global-risks-report-2019>.

⁵ Economist. "Computer Security Is Broken from Top to Bottom." Economist Print Edition, no. Science and Technology (April 8, 2017). <https://www.economist.com/science-and-technology/2017/04/08/computer-security-is-broken-from-top-to-bottom>.

⁶ Forum, World Economic. "The Global Risks Report 2019." WEF Insight Report, January 15, 2019. Accessed May 30, 2019. <https://www.weforum.org/reports/the-global-risks-report-2019>.

⁷ Sukumar, Arun Mohan, and Col R. K. Sharma. "The Cyber Command: Upgrading India's National Security Architecture." ORF Special Report, March 2016, 5. Accessed May 30, 2019.

⁸ *Ibid.*

⁹ Gurmeet Kanwal. "Cyber Security: Avoiding a 2020 Pearl Harbour." CLAWS Journal, Summer 2015. https://www.claws.in/images/journals_doc/421666589_GurmeetKanwal.pdf.

¹⁰ CrowdStrike. "Adversary Tradecraft and Importance of Speed." CrowdStrike Global Threat Report, 2019. Accessed May 30, 2019. <https://www.crowdstrike.com/resources/reports/2019-crowdstrike-global-threat-report/>.

into a network after gaining access. Combined with the global trend of widening gap between the average time for quarantine and information exfiltration, this is a cause of concern for Indian agencies. Equally worrying is the cyber crime spectre.

As per National Crime Record Bureau (NCRB) 2016 data, the national cyber crime figure was at 12317, with have an increase of 20.47 % and 6.2 % and which increases year on year from 2014, 2015 to 2016 respectively¹¹, which after factoring in the trend of minimal reporting of cyber crime, is clearly only the tip of the iceberg. Another source estimates the occurrence of about 430,000 cyber crimes in India from January to June 2018 alone, from countries including China, Russia and the United States and nearly 73,000 originating in the country.¹² Centre for Strategic and International Studies (CSIS), a think-tank, puts the annual global cost of digital crime and intellectual-property theft at \$445 billion¹³. Clearly the government and third party figures are at complete odds and need to be looked into closely. It is also clear that major proportion of cyber cases reported at local police level are filed undetected in court.

Challenges to investigation are abound including issues with chain of custody, preservation and value of digital evidence, interception and collection of traffic data in real time. Attribution and establishing physical identity of perpetrators both in detection and prosecution purposes are going to be crucial in an interconnected global environment. This needs reaffirmation of the ethos espoused in the Budapest Convention.¹⁴

Platforms for reporting (for instance CERT-IN) and follow up legal processes remain fuzzy, in the case of high end cyber crimes like DDoS or ransomware. Unless any matter of intrusion, unauthorised access or information exfiltration, is brought into the reporting process of legal follow up, any remedial action, may not have a strong legal basis. Yet, given the classified nature of government information and similarly competition and liability issues on private sector side, free flow of information has not transpired. It would also be pertinent to check for availability of cross reference platforms for traditional investigative agencies vis-a-vis CERT-IN.

Cyberspace use is based on platforms like undersea cables, fibre optic cables, routers and mobile infrastructure other than data servers and the cloud therefore platform security is an equally important aspect. There are clear and demonstrated examples of

¹¹ National Crime Record Bureau. "Crime in India 2016." *Crime in India*, October 10, 2017, 447. Accessed May 30, 2019. http://ncrb.gov.in/StatPublications/CII/CII2016/pdfs/Crime_Statistics_-_2016.pdf.

¹² KPMG. "Re-imaging India in the Context of Cyber Security Threats." *KPMG Report*, February 2019, 10. Accessed May 30, 2019. <https://home.kpmg/in/en/home/insights/2019/01/kpmgcyber-cybersecurity-cyberattack-cybercriminals-artificial-intelligence.html>.

¹³ Lewis, James Andrew. "Economic Impact of Cyber Crime." *Centre for Strategic and International Studies Report*, February 21, 2018. Accessed May 30, 2019. <https://www.csis.org/analysis/economic-impact-cybercrime>.

¹⁴ Europe, Council Of. "Convention on Cybercrime." *European Treaty Series- No 185*, November 23, 2001. Accessed May 30, 2019. <https://www.coe.int/en/web/cybercrime/the-budapest-convention>.

how each of telecom, banking, airline, energy utilities have been targeted through cyber operations, globally. Artificial intelligence is another forte which appears interminably linked to the future of cyber security initiative, and given how seriously the corporate world is viewing it, sovereign entities will need to consider its implications seriously.¹⁵ Indigenous capability in these verticals is highly dependent on the cyber ecosystem, which is moulded by the economy global markets.

Global cyber security markets have grown from \$3.5 Bn in 2004 to \$120 Bn in 2017 and likely to increase at a annual rate at 12-15%¹⁶ in the next three years. DSCI estimates global market growth to \$200 billion by 2025, out of which India could build a product and service industry of US \$35-40 Bn.

Given the critical nature of the security challenge and the military heavyweights who have previously occupied this space, it is likely that vying for the market will reach Indian shores. Limited entry barrier on low end technology opens up the space for new, small and innovative companies, whereas a large part of the market that could possibly be linked to military installations and weapons, by the very nature, could be more suited to global arms majors.

On this subject, relevant concerns have been raised with respect to the vulnerabilities in supplychains, especially in a situation where we do not have robust chip manufacturing and operating systems of our own. Global tenders are being employed in consultancy and sourcing critical parts in critical infrastructure projects. Even if India were to attempt to develop indigenous industry through say an offset clause¹⁶, it would require considerable indigenous expertise to absorb and employ such technology¹⁷. This would involve some level of integration with Make In India and Digital India initiatives.

On the cybersecurity services front however there is a clear opportunity for India to enter the global market riding the cost advantage given our high skill level and experience in Information technology services.¹⁸

Response

There have been persistent clarion calls for the setting up of a unified cyber command, and a well defined strategic doctrine for cyber warfare. It has been proposed to have two

¹⁵ V. Kamakoti. "Artificial Intelligence Task Force." *Report of Artificial Intelligence Task Force-Ministry of Commerce and Industry*. Accessed May 30, 2019. <https://dipp.gov.in/whats-new/report-task-force-artificial-intelligence>.

¹⁶ World Summit On the Information Society. "Tunis Agenda for the Information Society." WSIS-05/TUNIS/DOC/6(Rev. 1)-E (November 18, 2005). Accessed May 30, 2019. <https://www.itu.int/net/wsis/docs2/tunis/off/6rev1.html>.

¹⁷ Ministry of Electronics and Information Technology. "National Policy on Electronics 2019." Notification, February 25, 2019. Accessed May 30, 2019. <https://www.meity.gov.in/esdm/policies>.

¹⁸ McKinsey and Co. "Digital and Risk A New Posture for Cyberrisk in a Networked World." March 2018. https://www.mckinsey.com/de/~media/mckinsey/locations/europe_and_middle_east/Deutschland/publikationen/2018/compendium/a_new_posture_for_cybersecurity_in_a_networked_world/kompendium_03_cyberrisk-2.ashx

planks of capability build up within armed forces and integration with cybersecurity architecture at the macro level. Both these aspects are going to be challenging areas in the cyber world, as sovereign barriers and those of security-privacy are blurred and easily transgressed. An “Integrated National Cyber Doctrine” combining civil aspects dealing with cyber security and military aspects by armed forces has been proposed.

Currently the National Security Council Secretariat calibrates cyber response involving multitude of agencies and committees. The setting up of a Defence Cyber Agency (DCyA) ostensibly seeks to combine the cyber capabilities under a single command, seen as the first stage of setting up of a full fledged cyber command over the next three years to combat “multidimensional, multi-stage, multi-vector and polymorphic” fifth generation cybersecurity threats¹⁹.

There is focus on multi-platform intelligence integration and the need for a robust legal component to ensure compliance with the requisite laws of engagement. Security Information sharing and analysis centres have been identified as private sector equivalents of CERT-In which can act as information collation and sharing centres. Security standards, frameworks and certification have been dwelt upon at length.²⁰

Integration across geographies, establishments and how newly proposed architecture will weave into existing structures at multiple levels is an important dimension. A top down approach is obvious in a thematic security scenario with limited geographical linkages, however, such an approach is prone to get blindsided by the staggering volume of digital activity, activity, networks and nodes in the country.

Stretching capabilities of specialised agencies and functions too wide risks spreading our capabilities too thin. Focus on critical assets could be diluted in an attempt to ensure a wide spread. Categorisation of potential targets and the degree of security standards minimally required will have to be assessed to deploy resources optimally. There will have to be a system of categorisation and escalation based on spread and intensity of the threat.

Absorption of technology, manpower and processes will need to be presented through suitably modified but familiar structures accounting for the regional and socio-psychological diversity. Representation and participation would bring in the much needed broadening of the architecture, which would naturally add to the cyber conditioning and awareness nationally leading to improved cyber hygiene. Also, for instance India could take advantage of its language and script diversity in encryption, which would help add permutations to the otherwise predominantly alphanumeric world.

It could be prudent to ensure comprehensive legislative backing with strong legal filters while proceeding with resource allocation and capacity scaling up as discarding

¹⁹ Foundation, Vivekananda International. “Credible Cyber Deterrence in Armed Forces of India.” VIF Task Force Report, March 27, 2019, 47. https://www.vifindia.org/sites/default/files/Credible-Cyber-Deterrence-in-Armed-Forces-of-India_0.pdf.

²⁰ “NASSCOM -DSCI Cyber Security Task Force.” <https://www.dsci.in/content/cyber-security/cyber-security-task-force>.

processes altogether may invite litigation and legal complications. If a clear demarcation on cyber warfare, espionage, crime and terrorism is achieved there would still be a few challenges to the way ahead.

First, the grey area and intermingling of crime-internal security dimensions imply that it will be difficult to achieve clear segregation, and threat or response levels may need to be calibrated or transferred depending on the analysis. Clearly this would imply that some level of advanced capabilities to recognise if not rectify the issue would need to be built into first responder law enforcement agencies.

Second, there is a treasure trove of data available at the ground level, which would need to be stored, and maintained systematically, with active channels of retrieval, this data base is going to be crucial for putting together the pieces in various situations. In such a scenario, there needs to be uniformity and quality in the data process which so far is reliant on a near one stop solution of the Crime and Criminal tracking Network System, which probably needs diversification and some level of advancement. The NAT GRID which combines data across 21 platforms is a good start, but the progress and utility of the platform is not clearly evident, from a policing viewpoint. Privacy²¹ and data protection²² are important factors deciding national consensus and global legal guidelines which will affect security architectures as well.

There is clearly a long way to go to catch up, for instance the Department of Defence Project Maven, uses AI to visually analyse and extract tactically useful data from drone imagery which would otherwise have taken analysts many hours, we are only at the nascent stage of such kind of technology. Our anticipation seems on point though, as Asians expect High Level Machine Intelligence (HLMI) to occur nearly half century before estimates offered by North Americans.²³ Now we just need to act on our anticipation.

Preparedness

Globally multi stakeholder platforms have been integrated with sovereign functioning at many levels smoothly. India is at a nascent stage in this aspect, with a linear, modular and limited integration approach to sovereign functions.

²¹ *Judgement of the Court(Grand Chamber). "European Union Law Judgement." EUR-Lex, Document 62012CJ0131 (May 13, 2014). Accessed May 30, 2019. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62012CJ0131>*

²² *N, Justice B., Srikrishna. "A Free and Fair Digital Economy; Protecting Privacy , Empowering Indians." Committee Report. Accessed May 30, 2019. https://meity.gov.in/writereaddata/files/Data_Protection_Committee_Report.pdf.*

²³ *Katja Grace, John Salvatier, Allan Dafoe, Baobao Zhang, and Owain Evans. "When Will AI Exceed Human Performance? Evidence from AI Experts." Journal of Artificial Intelligence Research 62 (2018) 729-754, July 2018. Accessed May 30, 2019. <https://arxiv.org/abs/1705.08807>.*

Government functioning, especially at the implementation stage is not multi stakeholder nor is it inherently easily adaptable to that approach. Given the magnitude of the challenge, this would need to be the first to change.

Existing security apparatus, can be divided into three levels, at the national, state and district levels, with thematic arrays criss crossing under a broad coordination umbrella. However the resource allocation, command and control and monitoring apparatus primarily and rigidly adhere to the division based on geography.

The Central Paramilitary forces which in various spheres, specialise and at some level integrate functioning with the state forces, in a thematic role. The Central Reserve Police Force, which prior to 2005 nearly was predominantly a law and order reserve, now has core skills and bears the brunt of India's counter insurgency campaign in LWE areas. The Central Industrial Security Force specialises in institutional and industrial security, most visible at airport security, the Border Security Force specialising on the Pakistan border, Indo- Tibetan Border Police, specialising the China border and the SSB (Seema Suraksha Bal) as the Nepal frontier coverage.

Each of these had unique stories of formation or that of modification of their roles. These continue to be the only agencies, having thematic roles, being present in national as well as the state apparatus in various capacities, allowing a certain thread of union-state connectivity. This is where the first intervention is proposed.

The creation of a dedicated paramilitary force in the name of the Central Cyber Security Force (CCSF), which will recruit as per existing paramilitary norms, with special focus only on information technology and computer science related subjects. This intervention can ensure a steady and incremental creation of a strong and tested cadre which is appropriately educated and harbours the capacity to absorb the skill set as it advances through the cyber world.

Clearly as the education and skillset required is substantially more than physical security and combat duty, this fact will need to be recognised in recruitment conditions and remuneration. Focus should be made on acquiring and retaining the best talent available and the service conditions will need to be designed with these aspects in mind. Just as battalions and company locations are being created similarly, cyber centres will have to be created adequately resourced and staffed with defined areas of responsibility. For instance, one company could have a list of websites to prevent DDoS (Distributed Denial of Service) attacks.

Prior training and field experience in insurgency and combat areas would be a pre requisite to tune into the challenges manifested by internal security disruptions. Familiarization and acclimatization of combat related terminology, functions and structures is also crucial. It would also be important to absorb the mindset in this regard. The gains will need to be seen from a decadal viewpoint, as by then there will be a good cadre of battle inoculated and by now experienced in the decade of cyber development, this cadre will be a national asset. Like a policy adopted in insurgency hit districts, the officers from the CCSF, could move on to deputations to the State police or different

ministries based on competency and requirement. The financial deficit can be met by equivalently downsizing other recruitment and resources.

Second, at all State Police Headquarters level, there is an urgent need to create an apex level post on Cyber Security and Digitisation, with dedicated wings which will play an expansive, supervisory and coordinating role in the State Police. Two very crucial aspects to ensure seamless coordination would be focus on software rather than only material capability and standardisation of data storage, processing and retrieval.

Recruitment in all ranks at the District Police level, will have to evolve, primarily to create a core cadre of technical officers, recruited as such, taking up investigative roles primarily from a technical viewpoint, secondly to have basic knowledge understanding of cyber functions which would form an important part of the training as well. Expanding or creating systematic state police programs of research and internships of student with similar backgrounds working on basic cyber security issues like bank fraud and phishing, over a period of time, will add considerably to the response capability of LEA.

Third the integration, with the civil departments as they will be critical stakeholders especially on matters related to critical infrastructure. At State and District levels, supplementing and strengthening existing set up of the National Informatics Commission with the office of the state and district cyber security coordinators.

The NIC has by now a near 44 year experience as is an excellent platform for district and state level integration. As an institution it understands cutting edge governance functioning and is closely associated with scheme and service delivery at grassroot level. Cyber security coordinator, working directly with the Chief Secretary and District Collector office respectively, will add the authority, priority and resources to the initiative. Most importantly it will help to create a culture of building in cyber resilience to the various schemes and projects being undertaken.

A major challenge would be collaborating with non sovereign entities that today harbour the mass of the cyber related talent in our country. This is mainly in two realms, the Information Technology/Computer science professionals in the service sector and the student community in colleges and in exceptional cases, high schools. This would integrate well with the discussion on building a surge capacity based on enlisted TA battalions and cyber patriots in schools and educational institutions.

Furthermore, there is a need to create an objective system of access level and security clearance for non government entities. Considering the information or processes in terms of concentric rings, with sensitivity reducing outwards. Analysing and securing the inner rings could require exposure and access of cutting edge professionals to the entire network. Credibility will need to be established to mitigate the insider threat. Only then can we graduate to issues like the British Telecom - Huawei debate where after a

decade of scrutiny²⁴, an in principle decision has been taken by Britain to allow Huawei in the 'non core' network areas.

Given the fundamental and far reaching nature of the cyber security challenge, change in material reality will have to be supplemented by doctrinal clarity, personnel capability and integration with existing structures. As a response system, architecturally, it would be best to envisage constantly evolving spherical structures encompassing governance frameworks reserving capabilities to deal with a wide array of challenges rather than rigid, pyramidal opaque entities.

Currently, with respect to the virtual world, we seem to be in a 'pre time' era, where we observe the changes of daylight and seasons, with broad logic buttressed with magico-realism. With the clock in place we now have a clear perspective, specific reference points and everybody is on the same page. Securing our cyber spaces will help to create much needed accurate and secure reference points and platforms in the virtual world from where everyone can evolve their own perspectives of the cyberspace.

²⁴ *Economist*. "Cyber-security Britain Lets Huawei into Part of Its 5G Networks." *Economist*, April 24, 2019. Accessed May 30, 2019. <https://www.economist.com/britain/2019/04/24/britain-lets-huawei-into-part-of-its-5g-networks>.



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Policing a Pandemic – with Velvet Gloves

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Abstract

It all started with the Hon'ble Prime Minister declaring a citizen's curfew on March 22. Our Chief Minister followed it through by declaring that the curfew would continue for another 2 days. At that time we had no inkling that it would continue for more than a Month. We as police officers were conditioned to keep people indoors against visible happenings such as riots, insurgency or terrorism but had no idea that we may have to guard people against an invisible enemy against whom no bullet, lathi or tear gas shell would be effective. Moreover, we all were also vulnerable to it. So as against established practice, instead of lathi, tear gas gun or body protector, we wore masks, gloves and applied sanitiser on our hands to fight the invisible enemy.

Our avowed task was to keep people indoors and when permitting them outdoors, to enforce and advise them to observe social distancing.

Since it was going to be a long drawn battle, we decided to adopt persuasive policing by using the existing skills of Goan Police officers in the field of art, culture and Music. They were motivated to write, compose and sing songs with Corona preventive messages embedded in them.

We also designed appropriate infographics with Covid-19 specific preventive steps.

We approached religious leaders to record their appeal urging people to stay indoors. The Archbishop of Goa and Daman was kind enough to accept our request to record a message.

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On the whole it was a great challenge keeping people indoors for months together and at the same time keeping our flock motivated.

This article is a brief summary of how we went about this unconventional task. We hope the future generations of policemen would benefit from it.

Keywords

COVID 19, Pandemic, Goa Police, Lockdown, Junta Curfew, Prohibitory Orders, Tiatr, Velvet gloves, World Health Organization (WHO), CAPF, Shelter homes, Migrant, Cop of the day, Essentials, Supply Chain Management, Innovative, Tactical, Area dominance, Tourists, Economy, Law and Order, Crime, Unprecedented, Emergency response support system (ERSS), Bollywood, Kashmiri, Indoors, Police Control Room (PCR), IAS, IPS, GCS, GPS, Patrolling, Infographics, Twitter, Brain storming, Religion, Senior citizens, Foreigners, Social distancing, Persuasive, Human tragedy, E- tailers.

Objective

The Police is always expected to be one step ahead of the unseen criminals and their devious plans. Unfortunately, the police itself, according to general perception, is not viewed very admirably and is often accused of being apathetic and insensitive. Needless to say, when disaster strikes, violence erupts and law and order breaks loose – it is the police that is the frontline warrior.

The scope of work for the police goes beyond what is written in black and white manuals. On call 24 into 7, the police is there wherever, whenever and however it is needed. It is this very police that races to help and support, prevent and act to ensure not only the safety but also the wellbeing of the citizens. The current covid-19 pandemic was one such challenge that the Goa Police team faced with relentless dedication and commitment.

Faced with the unknown enemy during the COVID-19 pandemic, with limited knowledge and resources, the Goa Police force found itself in a catch 22 situation. The task was to stop the spread of the pandemic and save lives amidst the first of its kind total national lockdown.

The entire team rose to the challenge and used innovative methods to control the panic. It was the human touch displayed by the police that helped take care of the state residents as well as stranded guests amidst the world's largest lockdown, crippling economy and endless restrictions. Goa became COVID free soon and all the outstation guests safely headed back to their destinations. This article describes the approach used by the Police team and able guidance and support of seniors and government officials.

Summary

Policemen are trained to manage law and order and also to prevent, investigate and prosecute crime. Hon'ble Prime Minister's call and Hon'ble Chief Minister's guidance during the citizen's curfew, nationwide lockdown 1, 2.0, 3.0 and 4.0 inspired us to take extraordinary steps to handle this unprecedented challenge by doing policing with a velvet glove and not a rod or pistol. Tactical change of strategy by adopting a collaborative and persuasive approach to ensure that public stays indoors and the police force spends 24 hrs on the street doing its duty for protecting citizens.

Constant supply of food and essentials averted a magnanimous human tragedy. Supply chain management, Emergency Response Support System, messages from Bollywood celebrities and spiritual gurus, special care of elderly, kids and poor, facilities and return travel arrangements for international and inter-state tourists and several other initiatives were taken during the lockdown tenure which were appreciated by citizens and senior state officials. Proud to say that Goa police team worked tirelessly round the clock and made Goa and country proud of our human touch using velvet gloves during the pandemic.

Policing a Pandemic – With Velvet Gloves

There could not have been a better endorsement of role of policemen and policewomen during the ongoing covid-19 crisis than the image of a little Kashmiri girl (7) handing over her piggybank savings to a police officer at Railway Station Margao, Goa just before boarding a special train to Kashmir. I am sure, all Police officers in India would have felt proud at that moment. Well, the image of the beaming little girl tells the tale of the velvet glove approach to policing that Goa police adopted during the unprecedented health crisis (Covid-19) in scale and nature, posing existential threat to human race. Apart from the little girl's thanksgiving, there are innumerable stories of valiant men and women of Goa Police who continue to toil hard and improvise in their assistive role in daily fight against COVID-19.

We as policemen are trained to prevent, investigate and prosecute crime and also in management of Law and Order. However, post the Hon'ble Prime Minister's call of citizen's curfew we were called upon to do a hitherto unknown duty of preventing people from the deadly virus by keeping them home. By then we had no idea about this virus except sketchy details gathered from newspaper reports that on January 12, 2020, the World Health Organization (WHO) confirmed that a novel coronavirus was the cause of a respiratory illness in a cluster of people in Wuhan City, Hubei Province, China, which was reported to the WHO on 31 December 2019.

Then, on January 30, India reported its first case of COVID-19 in Kerala. In Goa, on March 15, as a **proactive measure** the Hon'ble Chief Minister Dr Pramod

Sawant declared that all educational institutions and public places including bars, restaurants, malls, cinema halls and Casinos would remain closed until March 31. We considered these steps as precautionary at that time. However, the magnitude of its seriousness dawned on us when on March 22 the Hon'ble Prime Minister declared a citizen's curfew. Hon'ble Chief Minister of Goa followed it by declaring that the curfew would continue for another 2 days. At that time, we had no inkling that it would continue for months together.

The real challenge for Goa Police began on March 24, when the Hon'ble Prime Minister declared a nationwide Lockdown for 21 days which has since been extended from time to time (now till May 31).

The first step taken to ensure lockdown was to seal the inter - state borders. It was not an easy task as Goa is surrounded by Maharashtra and Karnataka. The border with both the states is porous and mountainous at several places. There was every possibility of stranded people sneaking in thru the porous points. Therefore, in addition to regular Border Check Posts (BCP), the *Kachha* passages were also plugged through round the clock deployment of pickets. The most significant part of our first line of defence - the BCPs was that every BCP was manned by an executive Magistrate and staff from Health Department. It was a unique arrangement not done anywhere in the country as far as our information goes. Whoever would enter Goa during lockdown would be checked by Police, screened by medical staff and verified by a magistrate. In hindsight, we can see the success of this unique arrangement in containing the spread of the disease. Resultantly, Goa was the first State to turn green.

The lockdown restricted people from stepping out of their homes. All transport services by road, air and rail were suspended, with exceptions for transportation of essential goods, fire, police and emergency services. Educational institutions, industrial establishments and hospitality services were also suspended. Services such as food shops, banks and ATMs, petrol pumps, other essentials and their manufacturing were exempted. The Disaster Management Act 2005 and the Epidemic Diseases Act 1897 were invoked which mandated that anyone who fails to follow the restrictions could face jail up to two years. These were extraordinary steps to handle an extraordinary challenge.

We were puzzled! How to enforce lockdown against the entire population? Undoubtedly, no police force had faced such an unenviable task anywhere in the world. In the past, we had enforced curfew during riots - a situation of hostile communities fighting each other. But keeping people indoors for no fault of theirs and without having committed a crime was indeed a challenging task as there was no past precedent. Moreover, people of Goa had never faced a curfew like situation for almost since three decades. The younger generation of Goans had no idea of what a curfew is - having lived in a relatively peaceful society.

The lockdown was indeed a Curfew where nobody could move out without a valid reason of a medical cause or to buy essential commodities, and that's it. Initially it felt as if the whole world wanted to move out, children thought they had some unexpected holidays, working couples hoped they now had the chance to enjoy that elusive break for which they always longed. There was this palpable sense of enjoying the free time and the first hunch was to go out! And this was the underlying cause for our worries.

We were up against a problem that almost seemed infinite, incomprehensible and vague.

Having spent a number of years in Indian Police Service (IPS) we always knew somewhere in our hearts what needed to be done. We both had the fortunate or unfortunate exposure to vagaries of nature while serving in Tsunami affected Nicobar District, of A & N Islands. Sight of extensive damages showing fury of nature and heaps of dead bodies scattered here and there had hardened at least one of us from inside. Iron had indeed entered the soul! That seasoning of handling a massive human tragedy came in handy and we decided that our policing is going to be similar with a velvet glove and without a lathi!

Cracking the whip does not work in such situations when everyone is worried about his or her survival. Moreover, a small incident of a CAPF soldier using mild force on some youth had raised a hue and cry. This incident, though insignificant, made it to social media and led to a barrage of allegations of Police indulging in high-handedness and resorting to harsh methods. Coupled with the initial teething problems in achieving a seamless supplies of essentials, the situation soon started getting tough for Police. Damned if we did, damned if we didn't!

Keeping in mind the magnitude and peculiarity of the problem and pursuant to some rigorous brain storming sessions, the Goa police decided to make a tactical change to its strategy and adopt a persuasive approach towards public – with velvet gloves!

The Lockdown posed a major challenge of ensuring constant supply of food and other essential items to people. We were witnessing a great human tragedy unfolding right in front of our eyes. No law in this world can impose any restriction which would hamper essential supplies – directly or indirectly. Somebody said, "No, you cannot allow shops to open as it could lead to Virus spreading fast!" Well, agreed but then could it mean compromising with the essential supplies. The answer was obviously a big 'No' from all the quarters. No fear of Virus spread could convince people to tolerate disruption in their supply chains of food, milk, vegetables, groceries and other essential articles. Problems became apparent immediately as soon as the Lockdown started. People not following the required social distancing norms, desperate calls at the Police Control Room (PCR) to report non availability of food, people coming on road and waiting for long hours hoping to get their share of scarce food items or vegetables were a few appalling examples

which engaged us right from the day one. Quickly we approached E-tailers for a brainstorming session to ascertain how to reach people in far flung areas. Director, Information Technology - a Young Lady IAS Officer and Secretary civil Supplies - another Young Lady IAS Officer were instrumental in helping us in this matter.

So, we immediately adapted ourselves and briefed our staff about the essential nature of supply chain management. The problem was not the non-availability of the food or other articles but it was the unavailability of information on how to get food if the shops were closed. The Police Control Room (PCR) under its SP (One of the writers) came to the immediate rescue. He flashed his personal mobile number on Twitter requesting the people to contact him directly for “any” help during the COVID crisis. The newly set up Emergency Response Support System (ERSS) -112 was geared up to guide people in distress and connect them to the nearest PCR van and the Police Inspector of the area. Soon, the Police was reaching out to people and providing them essential items.

It would be pertinent to quote an example here. One Col (Retd) Bala along with his wife enjoys a retired life in Porvorim. A diabetic, he was extremely distressed not finding his essential supplies and medicines. His Son Captain Himmat who lives in Ludhiana contacted SP PCR through Twitter. Wasting no time, the SP swung into action and through local Police delivered medicines and food articles at the doorstep of Col Bala. A thankful Col Bala posted a video on Twitter appreciating the efforts of the SP and the Goa Police.

While patrolling the streets all the Police Vehicles made good use of their megaphones and loudhailers. Area dominance was also resorted to involving patrolling by all senior officers in a cavalcade. Coupled with the extensive media coverage the announcements started paying dividends as instances of people coming on the streets started to decline. Catchy infographics were published via print & social media highlighting Social Distancing. The Social media cell worked round the clock to popularize these Infographics through various social media platforms of Twitter, Facebook and Instagram.

We organised a daily brain storming session in the headquarters with all senior officers welcoming any out of the box suggestions.

Knowing that people of Goa love Music and Tiatr (One of the author earlier worked as SP in Goa) it was decided to give it a chance. The Police Officers were motivated to write, compose and sing Innovative Lyrics on Social Distancing. It really caught their imagination. They dropped their Lathis and picked up Mikes instead. Capitalizing on the rich art and cultural heritage of Goa, Goa Police officers unleashed their creativity and conveyed the message in forms of melodious Tiatrs and songs. DySP Sammy Tavares and PSI Diego Gracias were the first to start the trend. Later other officers also joined in when LPC Bhakti Devidas from Vasco Railway PS and LPSI Sapna Gawas from Colva PS pelted out a few popular tunes.

This was widely appreciated in electronic, print and social media. The message of taking safety precautions got really sunk in with these songs.

Accepting the request of Goa Police, Bollywood celebrities reached out to public in Goa through informative videos recorded by them at their respective places. It was heartening to see Anil Kapoor, Suniel Shetty, Bhumiika Chawla urging people to remain inside and cooperate with Goa Police.

Do you remember any time in your lifetime when all the iconic temples, mosques, churches, gurudwaras were shut down! All the sacred holy places in world - Church at Rome, Grand Mosque at Mecca, Vaishno Devi Mandir, Tirumala Tirupati etc were all closed to public! At least we don't recall any such event taking place in recent human history. Religion is part and parcel of our daily lives. Keeping people off religious places was also a grave challenge. At least in India it is unthinkable to tell people in India not to visit their religious places. And, here we were asking people not to visit their religious places! But it had to be done to survive the scare of virus.

So, we approached religious leaders to record their appeal urging people to stay indoors as people are more inclined to listen to them. The Archbishop of Goa and Daman was kind enough to accept our request to record a message. Other religious leaders also came forward and appealed to people to remain inside their houses. The Holy month of Ramzan also came in the months of April-May. How do people pray? Our massive outreach to the community paid dividends and the community volunteered to offer daily Namaaz within four walls of their homes!

The Lockdown had really hit hard the most vulnerable sections - Old, Infirm, destitute and the senior citizens. But the brave officers and men of Goa Police reached out to them and visited various Old Age homes and orphanages. The Police officers struck a chord with the senior citizens when they shared their anxiety and apprehensions and calmed their nerves. The visits were always accompanied with sharing of food items and other essentials and medicines.

Special emphasis was laid on reaching out to all senior citizens especially in the remote areas. Police officers made it a part of their daily routine to check on the senior citizens in their areas and asked their wellbeing. All their special needs of food, essential items and medicines were specially taken care of.

And Goa is an iconic tourist destination. A large number of tourists of different nationalities were stranded in Goa. With restaurants and eating houses closed, their food was an issue. Local Police Officers in Coastal areas with the help of local administration started community kitchens for the foreigners. Their return to their native countries was a huge challenge. A special cell was constituted under SP FRRO (Foreigners Regional Registration Officer) to facilitate movement of stranded tourists and foreigners. Liaisoning with various agencies of Ministry of Home Affairs (MHA), Ministry of External Affairs (MEA), consulates of various countries, the SP FRRO and his team did a commendable job in facilitating

departure of more than six thousand (6000) foreigners to their respective countries. The Consulates general of several countries appreciated our efforts.

There were problems galore. With everything locked down, the labour was left to fend for themselves. The State quickly came to their rescue. As the lockdown guidelines did not permit any movement across borders, all the labourers were to be managed by the state. With tempers rising and no work to do, these migrant labourers posed a serious law and order problem if not handled properly. Goa Police reached out to them at all the thirteen (13) shelter homes set up by the state Government. Senior officers engaged them in meaningful dialogues and encouraged them to participate in sports, singing, Yoga and other recreational activities. Some Police Officers entertained them by singing Songs.

For how long can you be on charity! With their families away with no news as to how their families are contending with lockdown, many migrants started walking home. They were intercepted and persuaded to return home. These migrant workers faced difficulties regarding daily expenses as there was no work and they earned no wages. Faced with the prospect of a long Lockdown, more than 88,000 migrants with their families registered online for travelling back home. With delay in trains they were really on edge.

The Govt. of Goa made elaborate arrangements to transport the migrant workers with state owned buses and special trains to different places after consultation with the Nodal officers of the respective states. Goa Police rose to occasion and actively assisted district administration in managing the migrants' return to their home states. It was indeed a logistical nightmare to collect, organise and screen the migrants. Nevertheless, they were medically screened and sent to their respective states by maintaining social distancing in buses and trains. As we write, about 70000 people have returned to their home states and many more are waiting for their turn. The district Magistrate and SPs personally supervised the arrangements at the Railway Stations.

Due to long and arduous nature of duties, the motivation of the staff was the next challenge. The staff was indeed working under difficult circumstances and it was important to keep up their motivation and morale. Acknowledging their sincere efforts, a scheme titled 'Cop of the day' for North, South, Traffic and PCR was started wherein one Police personnel who did commendable job would be picked up daily and duly rewarded. This proved to be a great morale booster for the staff when their friends and families saw their photos shared across social media. Besides publishing their photographs in the Social Media, they were also felicitated with a cash reward. This initiative was widely appreciated by the civil society and the police community.

Everything was not hunky dory. There were goof ups and lapses too. As they say - too err is human! Sending back migrants is a logistical nightmare. Their registration. Collection, limiting them to the capacity of the train, their medical

screening, district wise segregation, social distancing, their food and issue of messages to the migrants were indeed an uphill task. Both the district administration and the district police rose to the occasion and at the time of writing of these lines several trains full of migrants have left to different states taking loads of migrants. Young IAS and IPS Officers with the rich experience of Local GCS and GPS officers took up this gargantuan challenge and delivered under the gritty and determined Chief Secretary and dynamic and young Chief Minister.

During one such journey, just before boarding the train, a little girl came and handed over her savings to Goa Police as a tribute to their hard work. We knew that we had earned our prize!

We continue on our path of serving Goa and its people.
Jai Hind!



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Book Review:

Public Leadership Ethics – A Management Approach

Prof. A.K. Saxena*

Author	:	J. Patrick Dobel
Publisher:	:	Routledge, New York and London
Year of Publication	:	2018
Pages	:	123
Price	:	Not mentioned.

The contents of this book may be useful for Police leaders in general and trainers of police Academies in our country. It throws concepts beautifully on leadership ethics.

In the 'Introduction' the author articulated, "Ethics and Values cover the standards of right and wrong and the personal qualities that support a person's ability to judge and act upon ethical norms. Ethical standards guide decisions and focus behaviour for right or wrong acts on... Ethics and value are also embedded in qualities of character. There character virtues such as courage, prudence and fidelity provide the emotional and cognitive dispositions and the psychological foundation to focus attention, motivate and sustain good judgment and actions..."

In the book 6 roles of ethics in an organization have been described as anchoring, integrity, focusing discretion, identifying and addressing high stakes, guarding institutional legitimacy, carrying organizational culture, and guarding diversity and respect. Ethics matters for persons and organizations because it anchors and expresses authority.

It also focuses on discretion as it pervades organizational life. Within the space of discretion lie the bias formula self-interested, self-protective, or convenient actions.

The book recommends that senior leaders must make value-driven decisions about priorities and. Public organizations carry high responsibility for public safety, education,

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medical and other supports to the society. Their negligence has severe consequences. Organizational legitimacy and trust are fundamental attributes of any successful public organization and ethics are central for maintaining legitimacy in the eyes of the public. Ethical actions build the cultural structure of an organization, Leader's commitment, and ethical actions will ensure it better.

A few unethical or illegal actions can infect others and spoil the organization's fabric of the culture. Good leaders possess clear responsibility and challenge to integrate diverse people into cohesive teams.

The book is designed in the following 7 Chapters:

- The purpose of ethics in an organization.
- Managers lead.
- Acting with integrity.
- Building on an ethical organization.
- Leadership values
- Unethical behaviour and ethical slippage.

Operationally, leaders often express integrity through an ideal self thereby setting up a powerful internal model to guide and assess their own behaviour. The integrity approach to judgment resembles a process of weaving the patterns of one's self into the whole self. In situations of stress and temptation, it requires individuals to pause and deliberate carefully, decide, and act when self-interest, temptation or unbridled temptation, or emotion moves them in a different direction. Leaders unite these three domains together when they make decisions. These are three different lenses clarifying a part of moral terrain. Personal integrity reinforces and makes a possible organizational commitment to public purposes. Integrity enables a person to possess a disciplined perception and judgment.

In the book, the below-cited roles of leaders are depicted with proper explanations. Develops and motivates a shared purpose among people to achieve tasks.

Define goals, communicates with personnel, listens and adapts to daily conditions in achieving the results.

Performs daily tasks direction and improvisation as they adapt to fluctuations in the organizational environment.

- Takes the initiative to identify and address challenges to the task performance and culture as well as manages relations among group members.
- Help identify talent and develop skills and potential among staff.
- Continuously monitors the boundary of group performance and guides relationships across cooperating and competing groups inside and outside the agency.
- Exercises vigilance about slippages in performance and integrity at individual, group, and organizational levels.

- Remains responsible for assessing results and initiates accountability to improve implementation in light of organizational mission.
- Build a store of power and resources to sustain organizational capacity and performance.

Vision, mission, and goals embody the deeper leadership task for cultivating an abiding sense of purpose of the organization's values and commitment manifested in purpose. To enhance the equality of human dignity and performance in an organization, the leaders can help their teams imbue daily tasks with intention, meaning, and directions. All aspects of integrity depend on leaders enforcing law and code of rules to guide the officers towards the culture of excellence, levels of consistency of performance, accountability, use of scientific aids, ensuring safety and welfare of people and high levels of professional expertise, are required to be enhanced. Respect and trust lead naturally to open and mutual communications. Fairness and impartiality in public service are a must for a leader.

They are to be the role models.

Making a conscious pledge when taking the ethical position entails possession of conscientiousness, fidelity and courage to understand and live up to the standard of a position. The leaders need the self-mastery to overcome internal temptations for careerist or self-interested actions. Personal responsibility and integrity are ensured when leaders accept personal integrity. The process of managerial and leadership ethics relies on personal responsibility and making promises and not keeping them.

The domains of judgment, keeping in focus the public integrity in action, are personal commitments and capacity, obligations of office, prudence, and effectiveness. Following attributes of integrity-based action are described very well viz., accepting responsibility, acting with self-control, reflecting on actions and seeking help and support.

Leaders carry public trust to pursue the organization's purpose. Competence is the building block of organizational ethics. Internally, incompetence snowballs into a hidden distortion of information and cumulative poor decisions. Unethical actions in an organization involve the abuse of power and position. Lying, withholding information, favoritism, disrespect and discrimination are to be handled with a heavy hand.

In the chapter on 'Building on Ethical Organizations', the author enlightens readers on the focal points of ethical management viz., Cultivate organizational purpose, Know the purpose of the Rules and Laws, Build trust, respect and communication, Embrace discretion, Protect the core, Engage the whole context, Model and educate, Exercise courage and endurance & Seek help and support.

Similarly in the chapter on 'Leadership Values' below-cited key leading values are described - integrity, responsibility, fidelity and courage, competence, respect, truthfulness and honesty, accountability and transparency, inclusiveness, stewardship.

'Violations of' Trust', 'Self-dealing' and 'Conflict of interest' have been described as unethical behaviours in the text.

The author describes and recommends 'Value-Driven Leading'. Focal points of leading encompass-'Maintain Self-awareness'; 'Engage the meaning of incidents and challenges'; 'Build for long terms policy direction or organizational norms and culture'; 'Attend to necessary power and resources for resilient outcomes. A preliminary checklist has been articulated by the author, to guide managerial leading about resources and power as follows:

- Build one's authority and credibility.
- Know the relevant political actors and stakeholders.
- Attend to timing and windows of opportunity.
- Connect actions to people's beliefs and interests
- Practice reciprocity for the long term.
- Contribute to the legitimacy of oneself and the organization.
- Create networks of supporters aligned by belief and interest.
- Align networks and critical relationships to sustain monetary support.
- Build relationships for protracted politics.
- Foster a culture of performance and commitment as a resource.
- Invest in constant listening, communication and media planning.

In the end, the author has enlisted the 'Skills and Behaviours' for value drivers leading in 7 dimensions enlisted below

- Develop self-awareness of one's values and character.
- Use of self-awareness as a source of leading and managing.
- Articulate the values and virtues of the organization.
- Ensure that leaders and managers embody the norms of the organization.
- Create strong support and accountability for ethics.
- Anticipate predictable points of vulnerability and ethical slippage.
- Address points of vulnerability and slippage.

Following are my reflections on the book-

The concept of 'Public Leadership Ethics' has been covered. Elaborations on various points in each chapter are authentic and punctuated with comprehensible language. But every point should have been substantiated with the case-studies on leadership ethics. Therefore, the readers and the trainers will be required to identify incidents, examples and cases related to the points covered in the text.

Secondly, identify skills and values for 'Value-driven leading' have a lot of overlapping. Research-based identification and classification should have been presented

in the book. That will require the description of the tool in terms of psychometric characteristics viz., Reliability, Validity, Norm establishment and Standardization. Police trainers and researchers should use the questionnaire after the standardization of the Indian sample. This book is recommended strongly as a reference book for police leaders and trainers. In the IPS-OTs training, under the subject of 'Police Ethics' it should be used for providing theoretical concepts of 'Police Leadership ethics.' The book is available for reference in the SVP National Police Academy Library.

Cover design and printing are attractive. Bibliography at the end of each Chapter enhances the authenticity of the subject covered. A well-crafted Index at the end of the chapters ensures its usability.