

Journal of Research Innovation and Management Science

PERFORMANCE MANAGEMENT MECHANASIMS IN LAW ENFORCEMENT AGENCIES; NEED & FEASIBILITY IN INDIAN CONTEXT-A CONCEPTUAL INSIGHT

Ms. Monica Kapuria a

Dr. Sunita Balanib b

^aAssociate Professor, Human Resource Management, School of Management, BBD University, Faizabad Road, Lucknow ^bAssistant Professor, Human Resource Management, Amity University, Malhaur Campus, Gomti Nagar,Lucknow-226028

ARTICLE INFO

Article History

Received on 16th November 2017 Received in revised form 27th Nov 2017 Accepted on 30th November 2017

DOI: 10.18231/2455-9342.2017.0016

Keywords

Performance management systems, Citizens Satisfaction, Efficiency, Performance Indicators, Balance Score Card.

Corresponding author.

E-mail: monicakapuria@gmail.com

ABSTRACT

Performance is one of the vital functions of every organization i.e. private or public both have to achieve targets and establish goals as decided. It decides the company's status in actual competitive world. Therefore it becomes mandatory to design an automated performance management mechanism which would not only monitor and regulate but also foster and urge for success among its human capital. But where the world is heading towards competition, our Indian law enforcement agencies are still entangled in old traditional working style and customs thereby lacking in effective performance monitoring mechanisms. This gap was identified and to analyse the need and vitality of performance management mechanisms was the major concern of the study. Since, the main responsibility of the law enforcement agencies is the crime prevention and to achieve stakeholder's satisfaction, therefore it becomes mandatory to have a well drafted and strategically designed performance deliverables and parameters of performance for huge workforce of Police organizations. The objective of this study was to analyse the need of PMS machinery and suggest various performance indicators for the department. The paper is conceptual in its approach and based on the existing literature survey. It utilizes exploratory design of research. The study analyses the need of PMS machinery in police organizations and also suggests the performance parameters and expected outcomes with respect to police performance in the country.

Introduction:

Performance management mechanism had been one of the frequent topics of discussion and research since its introduction in the management context. It has gained attention of management professionals, consultants, academicians and practitioners. As a vital function of HR department, Performance management system has strengthened its roots not only in the private sector but also in public sector. Such performance management mechanisms are used in municipal authorities, local government bodies, law enforcement agencies etc in different parts of the world. Various models are used by companies to measure the performance of employees. Lot of literature gives evidence to this stated fact and also speaks volumes that through performance management,

efficiency of the personnel's can be enhanced. Precisely focusing on law enforcement agencies i.e. police department, performance benchmarks are depended on the citizen's satisfaction level and their feedback with respect to crime situation, feeling of security, crime control etc. As a matter of fact, the citizens are the one who are affected the most by the services rendered by the police department; their satisfaction is essentially to be recorded for developing and implementing the effective performance management system. Therefore, PMS is not an ornamental function of an HR but a technical, rigorous, continuous and a forward thinking function. It requires lot of precision and objectivity to cultivate the right talent and build a strong environment of trust within the organization.

Journal of Research Innovation and Management Science

In a nutshell, performance management can be understood as a process that enables the system to monitor and track the performance of an individual, group, departments and organization as a whole with respect to pre-established performance standards. These set of performance standards are established as a result of objectives of an organization, mission and vision. Organization has to perform and maintain its reputation in the competitive world and thus it becomes indispensable for its employees to cater to the needs of the organization. This theory goes well with the companies of the private sector where, predefined deliverables are quoted for the employees and based on that appraisals are done because main essence for the corporate world is the profit maximization i.e. performance of a company is evaluated based on the financial perspective mainly. But, in the case of public sector, government or non-profit organizations, performance can be best judged primarily in terms of the citizen satisfaction. Many private and public organizations worldwide have implemented sound performance measurement and management mechanisms aiming to withstand competition and bench marks itself in the highly dynamic environment. As stated earlier that performance management & measurement mechanism is a widely adapted and used concept in both private and public sectors, having different set of deliverables for its employees. Public sector organizations or departments keep the level of customer satisfaction/citizen satisfaction as one of the parameter to evaluate the performance of its employees. i.e. success or failure of an organization would also be judged in terms of customers feedback. Different organizations have different sets of performance measures or parameters to evaluate performance of its workforce depending on its mission and vision. Broadly, most of the organizations summarizes their measures into following categories:efficiency, effectiveness, quality, productivity, timeliness, accountability, budgetary success and profitability. Similarly their lies a need for the sound and effective performance management machinery for the law enforcement agencies precisely the Police department, to identify the right talent and create a performance driven workforce that would yield results in the form of decreased crime rate, satisfaction, safety feeling, among the citizens of the state. Because, lack of performance management initiatives or biased performance assessment retards the performance and motivation level of the officers resulting in low efficiency in handling

crime situation. This gap in service quality of the officers, due to lack of identification of performance deliverables and KRA's is one of the major problem and a concern for the study undertaken to highlight the significance of the need of effective PMS in law enforcement agencies.

Performance management system in other countries; A Literature Review

Need for a change in the system of law enforcement agencies is tough, but not impossible though. Change here implies their working style, deliverables, performance parameters, specified KRA's, job description, specification and desired skill set to carry out the job efficiently. But, this could only be accessed through a sound mechanism based on the various dimensions. i.e. Actual performance should be compared with the expected performance standards in order to judge the competencies and achievements of the officials. It is important to benchmark the performance of police with other parallel agencies so as to know the actual performance of the police. (Davis, Ortiz, Euler, Kuykendall, 2015). Unfortunately, Police organizations in India, are not having any such performance evaluation mechanism, for its staff and officials, due to various reasons not a subject to this study. Whereas, the law enforcement agencies or policing, in various parts of the globe has been redefined in terms of performance. Where world is changing in terms of technology, redefined HR policies, strategic planning and alike at one end, there at the other end our police department is still captivated in old traditions and obsolete working styles. Though, with changing times and government in power, level of policing is changed i.e. more technological advancement can be witnessed. Coming up of dial 100, 1090, Vikalpa portal, concept of power angels and now Anti Romeo squad are few initiatives taken by Police to somewhat reduce crime rate and keep a strict vigilance. One such initiative was taken by the police department of the state of Rajasthan in collaboration with the Indian universities and US researchers to design and implement four interventions namely:- a freeze on transfers of police staff, in service training to upgrade skills, placing community observers in police stations and lastly weekly duty rotation with guaranteed days off from work, to improve police performance and public perception of police. Out of the above mentioned four interventions first two-freeze on transfers and in service training were successful in improving police effectiveness and satisfaction of the public with respect to crime. Also decoy visit to police station was adopted as fruitful strategy to enhance police

Journal of Research Innovation and Management Science

performance. In one of the report given by Kerela police performance and accountability commission broad parameters for reviewing performance were identified but no specific formula or specific indicators were used. In a nutshell, the report of the commission was a mixed bag of "accusation and adulation". (Mandeep S. Tewana CHRI). It is required that efficiency of these measures and performance of the officers are required to be evaluated through a competent and effective machinery. Many countries around the globe had designed, and implemented such performance management machinery not only to monitor the performance but to also enhance the working competencies, efficiency, of the officials. Traditional performance indicators of police performance - crime reports, arrests, citations, clearance rate, response time though being important, still not suffice to measure the actual status of police performance. Also, the role and responsibilities of the police officers is not well defined and therefore making the officials perform various duties. (Walker and Katz, 2000). The problem of role conflict also arises among the Police officers as there are no standards of performance. (Verma & Gavirnani, 2006). With the inception of strategic human resources and as a tool for strategic performance management a BSC model was also applied in Dumfries and Galloway constabulary, Scotland, to judge the performance of its force and it was inferred that not only it provide the set of performance measures but also a strategic performance framework that can be applied for various police spectrum. This model was useful and evidently to some extent served the purpose. (Wisniewski and Dicknson, 2001). Swedish police too adopted Balance Score Card approach to measure the performance of its police officials using four perspectives- operational, staff, citizens, resource. This model gave the clear assessment of the public perception about the police and also assisted in identifying the strengths and weakness of Swedish police force. (Kjell Elefalk, 2001). Apart from scotland and Sweden other countries too implemented BSC- Cananda, United Kingdom, New Zealand, Portugal etc. (Gomes, Mendes, Carvalho, 2006). A study on Policing for people in America revealed six elements that American citizens want in their police officials to have- Attentiveness, Reliability, Responsive service, competence, proper manners and fairness. According to Americans these six elements are vital for measuring police performance. (Mastrofski, 1999). Police services in UK, adopted a modelling based approach to target police performance improvement and identified seven performance areas for

its police force- reducing crime, investigating crime, promoting safety, providing assistance, citizens focus, resource use and local police. (Barton & Beynon, 2011). Also, it was recommended that not only quantitative methods of evaluating and measuring performance should be used but also qualitative measures should be given due weightage because qualitative measures of evaluation are flawed and need to replaced.(Shilston, 2011). As it is quite evident that police services do not operate independently, rather they are dependent on various other bodies for example- prosecutors, NGO's, courts, etc therefore the contribution of other supporting agencies and authencity of the data provided by these agencies should also be given due consideration while designing performance indicators. Australian police organization performance management system is coupled with an effective Organization Performance Review (OPR's), where organization mission's statements are converted in tangible objectives which can be accordingly quantified and measured. They also initiated the concept of community policing whereby in indulging into public -police partnership to ensure better outcomes. (Fleming & Scott, 2008). Canadian police force too adopted the use of performance indicators to enhance the outcomes and to re-design their services to ensure maximum citizens satisfaction. The seven dimensions for their "balanced" performance framework were identified as- reduce criminal victimization, call adult and youth offenders to account in appropriate ways, reduce fear of crime and enhance personal security, increase safety in public spaces, use financial resources fairly, efficiently, and effectively, use of force and authority legitimately, fairly, and effectively; and to satisfy citizen demands for prompt, effective and fair service. (Kiedrowski, Petrunik, Macdonald, Melchers, 2013). Performance management in police department, though a difficult task to be carried on because of multidimensional aspects of policing, can be brought forth with the adequate governmental support. A political power also affects the working of the organization. Due to the such multidimensional aspects of the police performance, countries like UK, Canada, Switzerland has used balanced statistics or scorecard, but in France, performance indicators were the result of political interference rather than the rational choices. (Roche, 2008).

In reference to above mention studies, it can be inferred that performance appraisal or PMS should be designed and taken up for the police department in India so as to improve the efficiency and credibility of the

JR V Journal of Research Innovation and Management Science

officers towards their job. Even, the national police commission in its seventh reports recommends performance appraisal systems which should be broadly categorized into two-continuous and annual appraisal where former being developmental and correctional in approach and latter serving the organization needs for training, placement and promotions.(Umesh Sharaff, 2014). Since police organization is a public organization therefore it is accountable for all its success and failures to the public. It is the public which evaluates the performance of the police officers and their efficiency in controlling crime and maintain law and order in the city. Citizens evaluate the effectiveness of the organization in terms of their behaviour towards them, feeling of security, crime rate, and availability of officers in emergency, etc. Accordingly, they form the image and perception about the department, precisely the officers. Thus, the stakeholder's views and perception should be also be considered while formulating the appraisal mechanisms for the Indian police systems. It would be relevant to mention here that, our police services have somewhat biased approach when it comes to monitoring of the performance and promotion comes because, they have an appraisal mechanisms for gazetted profiles but do not have any such mechanisms for non-gazetted profiles within the department. Rather, their appraisal are only reference based i.e. feedback of their immediate boss. Therefore, in the light of the citizen's welfare, police image, justified appraisal mechanisms, enhancing the efficiency of the police, it becomes too important to have a rational PMS model for the Indian police services too so as to cater the needs of the department, citizens and society at large.

Research Gap:-

According to 2011 census, 162783 police personnel are deployed in the state to deal with every type of crime. This means that to control and evaluate such big manpower force, we should have efficient mechanisms and systems in place so that they can perform at par with the standards. Unfortunately, the number of incidences and crime situation in the state strongly proves some gap in the systems and operations of the police department. Despite of such huge workforce, crime situations is worsening day by day. This does not implies that police force is inefficient or incompetent rather it paves the way for devising methodologies and systems that would enhance their performance and efficiency in controlling crime in the state. Lot of literature is available on the police department and its working style, performance mechanisms etc but not much work is done in the area of identifying the need of PMS and the process for the same in the organization. Identification of core competencies and KRA's are not yet identified or discussed anywhere. This paper aims to discuss the need of the performance management system and its feasibility in the police department thereby assisting in designing a PMS for the department and expected deliverables for the cops in the state which would add to some extent in the contentment level of the stakeholders.

Research Objectives:

- 1.To study the need of effective PMS machinery for Police.
- 2. To study the various performance parameters used for designing the effective PMS.
- 3.To anticipate the expected performance outcomes with respect to Police

Research Methodology:

The present study was taken as a part of a broader research based on designing a performance management system for Police using BSC framework. Various researches based on performance management and performance measurement of police were studied. The literature searches mainly considered were from the period 1999 to 2016. Multiple search methodologies were applied. Secondary data available on the websites were the major source used for data collection. Key terms used for searching were the combinations of performance, policing, performance indicators, police efficiency, BSC and performance, performance measurement etc. Exploratory design was used as method of study.

Managerial Discussion

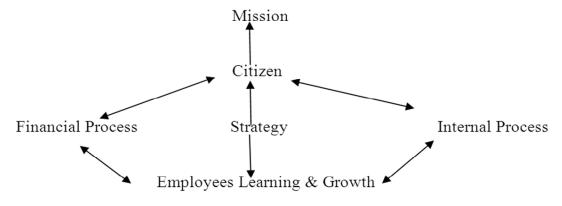
Performance Management System is one of the crucial functions of HR and requires lot of precision and expertise. Every company, whether private or public, should have a well defined system and objectives for the same. This PMS serves two way purposes, firstly it helps to identify the competent workforce and secondly, it provides a scope for internal learning, growth and development which is one of the perspectives of strategic performance management's tool introduced by Norton and Kaplan "Balance Score Card". The literature reviewed states the utility of BSC model as in the case of its successful implementation in Scotland, Canada, Portugal, United Kingdom, New Zealand and Swedish policing. It can also be applied to the Indian policing to

Journal of Research Innovation and Management Science

aim for an efficient PMS. In order to achieve this it is primarily required that expected performance standards are identified so that actual standards can be compared and rated accordingly. Expected KRA's and deliverables should be communicated to all employees. Most of the private companies have adopted PMS as one of the major function but unfortunately not all public sector companies are still well versed in floating the PMS within the organization. They follow their own system based on government regulations and norms. To some extent, performance based appraisals are yet not in their HR polices Besides, there are some of the Indian public sector organizations started applying BSC viz-NTPC, SAIL, IOC, BPCL, HPCL. Just like above mentioned few companies adopting performance management system via BSC, one such huge public organization is the Police department where the PMS system is more biased and conditional and thus becomes a mandate to implement PMS through one such strategic performance method i.e. BSC. Among the four perspectives of BSC namely- Financial Perspective, Internal business process, learning and growth, lastly, customer perspectives, the first perspective is considered as the ultimate outcome to measure company's success whereas for the public sector ordering of the perspectives varies ranking customer/citizens perspectives as the most important. According to the model given by Niven(2003), organizational mission takes the top position followed by citizens perspective. Other perspectives are aligned with mission and strategy to maximize citizens' satisfaction because for a public sector profit maximization is not the priority.

Since these agencies have constraints like budget and face pressures to enhance efficiency and quality of service delivery, citizens satisfaction, preventing crime rates and also ensuring public security and well being, therefore BSC can be applied as a useful strategic performance management tool. Nevertheless, a basic PMS model can be proposed for them comprising of various dimensions and steps. Firstly, the goals of the PMS should be identified keeping in view organizations mission and visions. Secondly, Strategic planning should be done as to what to measure and how to measure. Expected deliverables should be filtered for different hierarchical levels. Thirdly, a model or process of measurement against the pre-established benchmarks should be developed. In between, the information of the same should be communicated to the staff within the stipulated time frame so that they are aware of the benchmarks and expectations. Fourthly, performance should be measured in terms of expected standards. Fifthly, output analysis in terms of gaps in performance, rating against the parameters is done and lastly, a feedback so as to address the gaps and scope of improvement should be triggered.

With the huge workforce including both gazetted and non-gazetted officers, it becomes vital that the law enforcement agencies should have strong, atomized, strategic and effective performance management machinery. Rationally, need of well drafted PMS is mandatory when a large taskforce is involved in any organization, precisely, law enforcement agencies. With long working hours and tedious nature of job demanding quick response, alertness, precision, anticipative approach, and targeting persistent offenders, it becomes



Source: Adapted of Niven (2003:32)

JR V Journal of Research Innovation and Management Science

indispensable to take performance perspectives at priority. Since, these crime fighters have loads of responsibilities to cater, therefore, it becomes mandatory to have set performance standards, based on which they can be upgraded to higher posts and become eligible for better incentives and perks. Mostly, government organizations account seniority as one of the criteria for the promotions and other benefits, to somewhat neglecting the potential and performance of the people. Due to this, many employees retire without getting much up gradation in their designation and facilities. However, salary keeps on upgrading with the annual increments in the organization as a benefit of government sector. On the flip side, employees, though getting monetary hike still are de motivated, laid back, discontented and perform bare minimum to survive. As their jobs are secured, irrespective of their performance, they develop shirking attitude and abscond from their duties. This applies to the law enforcement agencies as well. Being on the duty for 24*7, do not qualify them as a performer. Unaware of the deliverables, performance expectations, they get accustomed to such life style. Also try to indulge in malpractices like bribery, delayed inquiries, rude behaviour, and like. Quite often, it is marked that police officers don't behave properly with the victims, are not cooperative towards the mass. Therefore, in the light of above discussions, it becomes vital that some supervision is required to check such malpractices within the department. Like private companies these cops should also be trained in public dealing and should be aware of their deliverables and expected KRA's. PMS would assist not only in assessing or rating their performance but also in identifying the various performance standards and expected deliverables for the particular level of hierarchy. Starting with the, junior most in a hierarchy i.e. constable to I.P.S rank D.G.P, everybody is an employee and required to exhibit behaviour related to his profile and designation. Therefore, well drafted performance parameters become crucial to ensure smooth functioning of the department and satisfaction of the stakeholders. Above all, drafting these performance standards is not a lay man's job. Before designing, an efficient performance management system, it becomes important to have a clear understanding of hierarchy in the system, job profile, core competencies required, nature of the job, stakeholders expectations, government norms, precision, feasibility and practical expects involved in the same. Since, the job is related to address crime and maintain law & order in the city; therefore, it becomes necessary to be extra

cautious while formulating the strategies within the department. The performance parameters opted should be job specific and result oriented, also, realistic in approach having proper mechanism for rating the same. However, certain key points should be kept in mind before designing the performance parameters. They are:-

- 1. The performance parameters should be directly related or linked with the expected outcomes from the employees.
- 2.In order to attain success, there should be no divergence from the ultimate goal i.e. crime prevention. Rather, these parameters should be so designed so as to focus on the ultimate outcome.
- 3. Parameters should considerably be quantitative and measurable to provide accuracy.
- 4. They should be well communicated and understood by the staff so as to avoid ambiguity.
- 5.Indicators designed should keep stakeholders interest and welfare at the priority.

In the light of above mention mandates, it can be relevantly interpreted that performance parameters should cater to the needs of not only organization but also drafted keeping in mind growth of personnel and well being of society at large. Based on various studies on police organization across the world, some of the performance parameters worth consideration are listed as follows:- Response time, community opinion of police effectiveness, officer discourtesy, feeling of safety among people, officers ethics, dealing with citizens, citizens satisfaction, leadership, job satisfaction, behaviour with peers & subordinates, absenteeism, knowledge related to job profile, number of arrests per officer, clearance rate, disciplinary actions taken against officers, Superiors feedback, team spirit, protocols. Apart from them, many other parameters can be included based on the expected outcomes from the officers and the organization itself. Logically, if an officer is aware of his key deliverables for the job, he will perform accordingly to match his competencies with the benchmarks because his performance will only stamp his growth in the organisation.

Success of any organization depends on the quality and competency of its workforce. Also, mere competent workforce would not fetch desired result, but their optimum utilization upto the level of pre-established standards would decide the growth of the organization. It has been apparently seen that police officers are

Journal of Research Innovation and Management Science

working under tough and stringent conditions with limited resources. Quite often, these officers suffer from work overload, monotony, boredom, stress, illness, fatigue and lastly poor performance. As a result, their main role i.e. crime prevention gets hampered. Therefore, it is required that attempts and policies should be designed so as to boost their morale, motivate them towards their duties, through better incentives, perks and benefits, promotions or other rewards. Performance mapping should be done from the ground level and accordingly fair recognition should be given to them. Unfortunately, our Indian police organization does not have any systematic and effective PMS machinery thereby leading to high amount of dissatisfaction among the personnel's. Time to time various studies have been conducted to review the performance machinery of the organization and contributed to bring police reforms. On 22nd September, 2006 Hon'ble Supreme Court in its judgement directed state and central government to implement seven directives. These directives were proposed to curb the malpractices within the system. The aims of these directives were:-

1.Ensuring functional responsibility of a police being under the supervision of conditioned political within its legitimate boundaries.

2. Ensuring internal management to be fair and transparent in all its required operations.

3.Efficiency of police should be increased with respect tom its core functions, importantly addressing public complaints and enhanced accountability.

Out of the seven directives, precisely 1,4,5 &6 are meant for the enhanced efficiency of the officers in terms of the evaluating performance of police, separating investigation, law& order function of police, setting up of Police Establishment Board (PEB) to regulate issues related to postings, transfer, promotions, Setting up Police Complaints Authority (PCA)address and monitor public complaints against police officers. (Commonwealth human rights initiative (CHRI), seven steps to police reform, September 2010)

It is evidently proven fact that Indian Police Organization needs improvement in its approach and working styles. Whatever approach it may adopt, it should at first instance cater to the needs of the its huge workforce that would in turn cater to the needs of the society. It has to recognize and accept the HR functions that are globally implemented and had established there worth in terms of capacity building, enhanced efficiency, effectiveness, customer satisfaction, maintaining and developing competent workforce. Even Police organizations across the world are adopting latest strategic HR trends so as to facilitate its manpower in the dynamic environment.

Conclusions:

To pace up with this transitional environment and to cater the expectations of the citizens,

it becomes vital for police organization to undergo a transformation thereby discarding obsolete procedures and systems. This transformation would be expected to yield desired results if planned cautiously with accuracy. It would be unfair to comment upon the efficiency of the department but there is always a scope for improvement in terms of performance and efficiency of the officers who are always on board for duties. Since they are the one facing the heat from their seniors, it becomes quite mandatory that they should be rewarded and upgraded as per their performance and contribution in the department. Also, every level in the organization has different deliverables to achieve unanimously driven towards mission, vision, and goals of the organization. With the increasing instances of crime, need for more efficient, motivated, self driven, trained personnel's arises. It is required that organization should go under change for the betterment and government should create conducive environment for the same realizing the fact that they are a saviour first and has a duty towards the citizens primarily. Police organization in some countries across the world had tested and adopted various performance management mechanisms so as to improve the efficiency of its force. Similarly, our Indian Police Organization should adopt a fair practice of appraisals thereby identifying the KPI's and KRA's thus creating an environment of performance, competition and positive outcomes at the end.

Journal of Research Innovation and Management Science

References:

Book:-

- R. Niven, Paul. (2003). Balanced Scorecard Stepby-Step for Government and Nonprofit Agencies, Wiley
- Walker, S. and Katz, C.M. (2000), The Police in America: An Introduction, 4th ed., McGraw-Hill, Boston,MA
- Davis, Report on Striving for excellence-guide book 2-3-11/16 April).

Journals:-

- Abhijit Banerjee, Raghabendra Chattopadhyay, Esther Duflo, Daniel Keniston, Nina Singh, Can Institutions be Reformed from Within? Evidence from a Randomized Experiment with the Rajasthan Police,
- Arvind Verma Srinagesh Gavirneni, (2006), "Measuring police efficiency in India: an application of Data Envelopment Analysis", Policing: An International Journal of Police Strategies & Management, Vol. 29(1) PP.. 125 – 145
- CHRI,(2010), Seven steps to police reform.
- Davis, Ortiz, Euler and kuykendall,(2015)
 "Revisiting " Measuring What
 Matters:"Developing a Suite of Standardized
 Performance Measures for Policing; Police
 Quarterly 0(0) 1-27
- Gomes P.S, Mendes S.M, Carvalho J.B, (2006)
 "Performance measurement of the portugese police
 force using the Balance Scorecard", Paper
 presented at the 4th International conference on
 Auditing, Accounting and management in Public
 Sector Reforms, Siena, Italy.
- Harry Barton & Malcolm J. Beynon, (2011), Targeted criteria performance improvement, An investigation of a most similar UK police force,, International Journal of Public Sector Management, Vol. 24(4), PP. 356-367

- Jenny Fleming, Ann Scott (2008), Beyond Performance Measurement in Australian Police Organizations, Policing, Volume 2(3), PP. 322–330
- Kejell, Elefalk (2001), The Balanced Scorecard of the Swedish Police Service: 7000 officers in total quality management project, The Total Quality Management, Vol 12, (7&8), PP.958-966
- Kiedrowski, Petrunik, Macdonald, Melchers, (2013), Canadian Police Board Views on the Use of Police Performance Metrics, 2013, ISBN No.: 978-1-100-21885-4,
- Mastrofski,S.D. (1999). Policing for People. Ideas in American policing. Washington, DC: U.S. Department of Justice, Police Foundation
- M. Wisniewski and A. Dickson Source, (2001), Measuring Performance in Dumfries and Galloway Constabulary with the Balanced Scorecard;The Journal of the Operational Research Society, Vol. 52,(10) PP. 1057-1066
- Mandeep S. Tewana, (2005), A summary-critique of kerela police performance and accountability commission report CHRI.
- Robert.C.Davis, Christopher W.Ortiz, Samantha Euler, Lorrianne K, (2015), Revisiting "Measuring What Matters: Developing a suite of Standardized Performance Measures for Policing., Police Quaterly, Vol 18(4), ,PP-469-495
- Sebastian Roche, (2008), Performance Management in France: A police Electoral Issue, Policing, Vol 2(3), PP-331-339.
- Shilston,(2011), Policing: A Journal of Policy and Practice, Volume 5(4), PP. 372–373,
- Umesh Sharaff(2014), Improving Indian Police Image - Views from the field, ASCI Journal of Management 43 (2),PP. 79-86,
- Verma & Gavirnani (2006), Measuring police efficiency in India: An Application of data envelopment analysis, "Policing, An International Journal of Police strategies & management, Vol. 29 (1) PP. 125-145.