

EVALUATIVE ANALYSIS FOR THE RECONCEPTUALIZATION OF
URBAN LAW ENFORCEMENT

Jeanie K. Meyer, Ph.D
Operations Analyst
Operations Resource Unit
Kansas City, Missouri Police Department
306 East 12th Street, Suite 830
Kansas City, Missouri 64106

53766

EVALUATIVE ANALYSIS FOR THE RECONCEPTUALIZATION OF
URBAN LAW ENFORCEMENT

There is abundant evidence to suggest that public service delivery systems are not merely inefficient in providing health, education, law enforcement, welfare, mail, etc., but that, in fact, vast numbers of citizens are not receiving service that approaches even minimally acceptable levels. The creation of delivery systems for services such as health, education and welfare has been taken on in all urban industrialized countries and these systems are funded and operated by varying combinations of federal, state, local and voluntary funds. The origin and growth of such public service institutions has followed on the development and/or recognition of human problems. The pattern has been the identification of a biosocial problem (such as poverty, housing, illness), followed by public and professional concern and concluding with the development of a categorical delivery system. (Demone and Harshbarger, 1973:144-6).

In most cases, public services are operated out of organizational models in which the basic form was usually designed prior to the turn of the century. Whatever the political and social values that have maintained these organizations, the operationalization of these values in such a way that the impact of an organization can be reliably and validly assessed is a major continuing problem for virtually all services. (Drucker, 1973).

In the midst of this disarray of needs and services, prescriptions for the application of a general systems framework (one that "attempts to define, integrate, and interdigitate available resources, target populations, present delivery systems and capabilities, felt consumer needs, and organizational needs") have abounded. (Demone and Harshbarger, 1973:160). Research technologies

such as, result-oriented budget systems, operational research, simulation, social and economic planning; the linkage of function to structure, new forms of organizational analysis and games theory have all been applied to large scale social experimentation.

Unfortunately, just as intentions to manipulate well-specified public service policy or treatment variables sometimes fell short, the evaluations designed to contribute to the effectiveness of such action programs were not automatically accepted, and in many cases, were ignored or rejected by program administrators (Rossi, 1967:227; Rein and Weiss, 1969:287). The combined failures of so many planned attempts at major social change and the non-use of evaluations which attempted to document those attempts have been dissected at great length elsewhere (Caro, 1971). The upshot of such autopsies is that social reforms can no longer be expected to produce massive results.

Explanations for the failure of social programs vary between administrator and evaluator. The evaluative researcher is often more likely to underestimate political constraints, organizational obstacles, budgetary problems and limitations of personnel and facilities. Administrators are more likely to explain program failure in implementation rather than a failure of the underlying concept.

From an administrative point of view, evaluation's benefits are greatest if evaluation is an ongoing process for feeding information back to the administrator at each stage of a program to give him guidance on when and how to proceed. In this sense, the need for evaluation is not solely the provision of an experimental model employing randomization, control groups, and pre/post experimental data. Evaluative analysis of organizational activity

is a much broader and a much less well-defined activity. The application of experimental design to proposals for changing internal organizational features may be inappropriate at the initial stages of the evolution of a program or program component. What is needed is, to borrow from E. F. Schumacher (1973), an "intermediate technology" of research analysis appropriate to the daily decision-making needs of public service agencies which may never receive a federal grant to initiate a massive coordinated attack on whatever the funding agency currently calls the "enemy." A public service institution is rather under pressure to improve its operation and presumably its service through incremental stages of data gathering, analysis and feedback. This means that urban public services must be regularly reconceptualized if public agencies are to function effectively and efficiently in providing the services they were created to deliver. Public agencies need to break out of the remedial, reactive orientation toward social problems.

Reconceptualizing the thrust of a service agency is seen as a means toward altering the pattern of service system dysfunction. Evaluative analysis, using the ongoing data collection common to public agencies as well as generating new data is seen as a necessary support element to the task of reconceptualization.

The purpose of this paper is to describe several illustrations of ways in which such reconceptualization and evaluative analysis can be done with respect to the criminal justice system. The first example traces the historical origins of police patrol and the effect of those origins on practice. The second example cites data from an analysis of juvenile first offenders in the Kansas City, Missouri Police Department which was used as a means of improving decision-making. The final example illustrates the integration of

reconceptualization and analysis relevant to improving police interventions in domestic disturbances.

One way the process of reconceptualizing a particular urban public service can be initiated is through examination of the assumptions on which current operation is based. Police patrol is a good example for illustrating this process as, until quite recently, two century-old practices were widely accepted as standard operational procedure.

Assumptions that good police patrol is omnipresent, random and rapid-responding have their source in the historical origins of American police. The model for American policing came from the English preventive police, the New Police, as the Metropolitan Police of London established in 1829 were called. "Between 1830 and the Civil War, every important American town adopted the territorial organization and strategy of the preventive police." (Rubenstein, 1973:12). The adoption of this approach then has been an unquestioned assumption of many of the developments which followed. For example, introduction of the patrol car and the development of the wireless radio were heralded as a way of allowing the police officer to cover his territory more evenly and respond more rapidly. (Bordua, 1967:48). Similarly, the more recent adoption of radar-operated car-locator systems and computer-aided dispatch systems are technological refinements which advocates believe will increase the efficiency of police response in terms of omnipresence, random and rapid-responding patrol. Thus, assumptions about the relationship of police response and crime control made two hundred years ago are still guiding the form of patrol today.

It is only recently that these assumptions have been questioned by empirical research. For example, the controversial South Preventive Patrol Study suggests that changes in the amount of random preventive patrol in marked cars does not, by itself, seem to affect, over one year's time in Kansas City, how much crime occurs or how safe citizens feel. (Kelling, 1974) In another study, also in Kansas City, the effects or response-time of crime are being examined. Analysis here is incomplete, but early data may suggest that response-time by itself does not necessarily constitute "good" service.

This body of patrol research has important implications for defining what police service functions should be doing and how they can be best deployed. If quality police service can no longer assume to be characterized by omnipresent, random and rapid-responding patrol, then a re-examination of police service is called for. The current direction in informed police circles toward reformulating standard deployment policy is a natural outgrowth of such re-examination. If officers no longer need to be deployed to optimize response time and to maximize preventive patrol, then their time can be used in other activities deemed more productively related to crime-control functions. The benefit of examining the assumptions of patrol is identification of practices which can be improved.

Historically, the juvenile court movement has been under attack since the first juvenile court was formally established by the Illinois State legislature in 1899. In addition to the criticisms that juvenile court statutes deprive children of basic criminal law rights, there has also been a shift away from the governmental agency of last resort in dealing with children. (National Institute of Mental Health, 1971:1-12). The new emphasis now is toward maximum diversion of cases. This trend toward diversion was encouraged

and given form by the recommendation of the President's Commission on Law Enforcement and the Administration of Justice for the establishment of a Youth Service Bureau outside the criminal justice system. Such a bureau is intended to coordinate youth services by other community agencies.

Parallel to the changes in prevention strategy has come a procedural revolution in juvenile court law which has had its effects on the pre-judicial process at the police point of intake. While the practical effects of the requirements of due process with regard to juvenile offenders is uncertain, the importance of the intake process becomes more apparent. Under the new rulings of Gault and Miranda, now considered binding on police in dealing with juveniles, the intake process is to serve as a screening and filtering device. (NIMH, 1971:13). Exercise of police discretion in the individualized handling of youths based on the principle that diversion from the criminal justice system is desirable when no recidivism results, puts the officer in the very vulnerable position of making decisions without firm legal grounds and few empirical guidelines to inform his own judgments.

Such use of police discretion not to invoke the criminal process has been characterized as resulting in low-visibility decisions in the administration of justice. (Goldstein, 1960:544). The term "low-visibility decision" has been used to refer to decisions like those made by police officers at the juvenile's initial intake into the system; the characterization has been made because so little information is readily available to the public for consideration and criticism.

Within the context of the above situational pressures, the Kansas City, Missouri Police Department Youth Unit undertook an examination of the Youth

Units role within the juvenile justice system. One aspect of this examination was an analysis of the youth officer's disposition decisions on juvenile intake after arrest. There are essentially two options open to the Youth Unit officer: he can "warn-and-release," essentially a decision to send the youth home with his parents, or he can refer the youth to juvenile court for services and adjudication.

The officer's referral decision is a critical one both in terms of use of organizational resources and the broader issue of which course of action is a more appropriate recidivism prevention strategy. In a city where referral to the juvenile court is the principle resource for counseling and other social services, the officer's dilemma is compounded. Advocates of a diversion strategy stress diverting the early, minor offender from the criminal justice system before he or she is involved with the juvenile court probation and rehabilitation institutions. On the other hand, youth crime diagnosed as symptomatic of chronic multi-problem family environments may well demand attention from the only resource available, the juvenile court.

In this setting, the officer is faced with a classification problem: which juvenile first offender can be safely warned-and-released without future rearrests and which offenders are likely to recidivate, i.e., be arrested a second or even third time. It would be useful for police youth officers if they knew which offender characteristics or combination of characteristics were more likely to be associated with future recidivism.

In an effort to analyze and improve current decision-making, youth officers were interviewed to find out what criteria they currently used to assign a youth to a warn-and-release category (essentially a prediction of non-recidivism)

versus a referral to juvenile court (a prediction of recidivism). Criteria used by officers were found to be neither standard nor consistent. Criteria most often cited were demeanor or attitude of the youth, the nature or seriousness of the offense and parental attitudes and/or family background.

The relative weights assigned by officers to each factor is unknown as is any reliable definition of "attitude," "offense seriousness" or "family background." However, if we assume that youths referred to juvenile court are predicted recidivists by youth officers and youths "warned-and-released" are predicted non-recidivists, then we can compare the predictions of youth officers to the actual recidivism rate.

In 1973, the Youth Unit processed 1753 juvenile first offenders (age 17 years and under). Examination of the two columns on the left of Table 1 shows the comparison of just how accurately youth officers in 1973 were predicting first offender recidivism. The table shows that 39.2 percent of the first offenders were re-arrested at least a second time. Youth officers were able to correctly predict which youths would be re-arrested in 50.5 percent of the cases. Sixty-one percent of juvenile first offenders were not re-arrested; youth officers correctly predicted these non-recidivists in 48.2 percent of the cases. Essentially, Table 1 shows that youth officers are correct in predicting first offender recidivism about half of the time. Table 2 shows that they do somewhat better in predicting the recidivism of youth who already have two offenses. They correctly predicted 31 percent of the recidivists and 73 percent of the non-recidivists.

At this point, consideration was given to what kind of data analysis might help improve officer performance. Presumably, the more accurately a

Table 1

ACTUAL VERSUS PREDICTED

FIRST OFFENDER YOUTH RECIDIVISM (N = 1753)

| | % Actual | % Correctly Predicted by Youth Officers | % Correctly Predicted by Discriminate Function Analysis |
|-------------------------------------|----------|---|---|
| Recidivists after First Offense | 39.2 | 53.5 | 61.7 |
| Non-recidivists after First Offense | 60.8 | 43.2 | 94.5 |

Table 2

ACTUAL VERSUS PREDICTED

SECOND OFFENDER YOUTH RECIDIVISM (N = 1753)

| | % Actual | % Correctly Predicted by Youth Officers | % Correctly Predicted by Discriminate Function Analysis |
|--------------------------------------|----------|---|---|
| Recidivists after Second Offense | 22.6 | 31.3 | 98.5 |
| Non-recidivists after Second Offense | 77.4 | 72.9 | 79.8 |

youth officer can predict youth recidivism the better service decision he can make. Unfortunately, the only variables of the juvenile arrest which are computerized are: age, race, sex, charge (or offense), census tract of juvenile's home address, previous record and previous disposition (warn-and-release versus juvenile court). If we know these variables for each first offender, the problem is how to assign individual first offenders to recidivist and non-recidivist groups. Discriminant analysis is a way of maximizing a prediction between these two groups.

The results of applying discriminant analysis to the 1753 juvenile first offenders in 1973 are shown in the right column of Tables 1 and 2. Table 1 shows that the seven variables of (and their interactions) successfully predict future recidivism of first offenders in 62 percent of the cases. Ninety-five percent of the youths who do not recidivate after the first offense can be correctly predicted.

The predictions are even more accurate for the assignment of two-time offenders to recidivist/non-recidivist categories. Table 2 shows that discriminate analysis correctly predicts youths who recidivate after the second offense in 99 percent of the cases in 1973; eighty percent of youths who recidivate after two offenses can be correctly predicted.

This example of a method for improving youth-officer decision-making illustrates the kind of intermediate evaluative analysis advocated here as a way of improving the quality of public services. In this case, the organization, having identified the need to improve decision-making, utilized data collected on an ongoing basis. Application of appropriate analysis techniques produced information which can now inform and improve officer's decision-making in this delicate area. By using the weights derived from analysis, he can

predict recidivism more accurately than before and he can do so on the basis of a relatively few objective variables. It follows, of course, that subsequent implementation of the analysis-derived decision criteria should also be subject to evaluative analysis and the feedback loop of information maintained.

The final example of reconceptualization supported by data analysis is again drawn from the experience of the police. The connection between family disturbances and homicides has been well-documented (Wolfgang, 1958), but such homicides and aggravated assaults, particularly those of a domestic nature, have traditionally been held to be non-preventable by police action. Repeatedly, the FBI in its Uniform Crime Report notes:

. . . police are powerless to prevent a large number of these crimes, which is made readily apparent from the circumstances or motives which surround criminal homicides. The significant fact emerges that most murders are committed by relatives of the victim or persons acquainted with the victim. It follows, therefore, that criminal homicide is, to a major extent, a national social problem beyond police prevention. (1971:9).

This viewpoint is accepted because it is believed that these crimes are crimes of passion, occurring spontaneously, usually out of the view of the police. The police are usually called to the scene of a homicide or assault only after the fact. Thus, the attitude prevails that traditional police patrol offers no means of preventing these crimes. When the scope of patrol is, however, broadened beyond tradition, non-preventability conclusions can be questioned. In considering any crime, including an act of violence, two factors must be considered: 1) the opportunity (environment, situation) for the act to occur, and 2) the willingness (desire, motivation) of the individual to act. The traditional police preventive approach has been to remove the opportunity. With this approach, it is indeed most difficult to have an effect

upon crimes such as homicide or assault, where the opportunity for the crime exists in domains inaccessible to police control. To be able to have an effect upon the willingness factor, necessitates some form of police contact with homicide and assault participants before the act.

In mid-1972, personnel of the Kansas City Police Department began a preliminary research to examine this long standing axiom about non-preventability. By December 1972, using arrest records of homicide and assault participants, they established evidence of prior police involvement with these individuals in domestic dispute situations. The initial research was then expanded to focus on two critical questions:

1. Was there a distinct relationship between domestic related homicides and prior police disturbance interventions?
2. If so, were the disturbance situations that resulted in violent crimes discernable from the large mass of domestic conflicts the police were required to address?

Subsequent research answered both questions affirmatively. Its findings have significant implications for crime specific planning and the manner in which police agencies approach family crises. The findings of major significance for programming are:

1. 33.6% of Kansas City's homicides and 31.6% of its aggravated assaults occur in domestic disturbance situations.
2. In 26.5% of the homicides and 37.02% of the aggravated assaults, one of the participants had been arrested for disturbance or assault in the preceding two years.
3. In the two years prior to the domestic assault or homicide, the police had been at the address of the incident for disturbance calls in 85.4% of the cases at least once and in 53.9%, five or more times.

4. In the two years prior to the domestic assault or homicide, the police had been at the residences of the victims and suspects for disturbance calls, at least once in 85% of the cases and five or more times in 49.7%.
5. Discriminant analysis indicated that the presence of a gun, the prior disturbance history of the individual and the use of alcohol were the strongest single factors accounting for the variance between disturbances in which physical force and no physical force occurred. In layman terms, knowledge of the presence of a gun could improve the forecasting of violence by 11%. Knowledge of the individual's prior disturbance history or an awareness of the use of alcohol improves forecasting of violence by 6%.
6. Multivariate analysis of disturbance data identified patterns of situational interactions and the frequency with which physical force was employed in each.
7. In addressing disturbances, patrol officers normally seek temporary defusion of the situation through two means. The first, informal disposition, includes the separation or warning of the disputants and the possible reference of the parties to an attorney to resolve civil disagreements. The second disposition is arrest of one or both parties. Arrest usually occurs when certain single variables (i.e., the presence of a gun, the use of alcohol or a dispute concerning a third party) are present.

The translation of these preliminary findings into operational revision of police domestic disturbance intervention procedures has been formulated to include: 1) training the officer in the recognition of high violence potential disturbance situations; 2) getting information to the officer so he can be forewarned when dispatched to disturbances where participants have a history of such involvements and possibly a history of violence; 3) organizing social service resources which can be supplied to domestic disturbance situations whose participants' needs go beyond the momentary defusion process; and 4) evaluating the way in which the above components of training, information and social services can be integrated into a coordinated effort to reduce future violence by the use of police disturbance calls as case-finding. Once again, these examples illustrate the way in which preliminary evaluative

- 14 -
data analysis can guide the reconceptualization of service and so improve their delivery.

Conclusion

This paper has endeavored to present some mini-case studies from the experience of an in-house research unit of the Kansas City, Missouri Police Department in which the interaction of evaluation and analytic reconceptualization of services takes place. When applied to particular operational aspects of a department, it is seen that this approach appears to result in improved service delivery such as patrol, juvenile referral and domestic disturbance intervention. More than just operational modifications, these mini-cases illustrate ways in which examination of assumptions about the way in which services are handled, when supported by evaluative analyses of the service, lead to reformulation of their delivery.

REFERENCES

- BIDERMAN, A. D. et al. (1967) Report on a Pilot Study in the District of Columbia on Victimization and Attitudes Toward Law Enforcement. Washington, D. C.: U. S. Government Printing Office.
- BORDUA, D. J. (ed) (1967) The Police: Sociological Essays. New York: John Wiley and Sons, Inc.
- BRIGHT, J. A. (1969) Foot Patrol Experiment. London: Police Research and Development Branch-Home Office.
- CARO, F. G. (1971) Readings in Evaluation Research. New York: Russell Sage Foundation.
- DEMONE, H. W. AND D. HARSHBARGER (1973) The Planning and Administration of Human Services. New York: Behavioral Publications.
- DRUCKER, P. F. (1973) "Managing the Public Service Institution" Public Interest 33 (Fall): 43-60.
- Federal Bureau of Investigation (1971) Uniform Crime Report. Washington, D. C.: Government Printing Office.
- GOLDBSTEIN, H. (1960) "Police Discretion Not to Invoke the Criminal Process: Low Visibility Decisions in the Administration of Justice" Yale Law Journal 69:544.
- JEFFREY, C. R. (1971) Crime Prevention Through Environmental Design. Beverly Hills: Sage Publications.
- KELLING, G. L. (1974) The Kansas City Preventive Patrol Experiment. Washington, D. C.: Police Foundation.
- KNUDSEN, R. D. (1970) Crime in a Complex Society. Homewood, Illinois: The Dorsey Press.
- National Institute of Mental Health (1971) The Juvenile Court: A Status Report. Washington, D. C.: Government Printing Office.
- PERESS, S. J. (1971) Some Effects of an Increase in Police Manpower in the 20th Precinct of New York City. New York: Rand Institute.
- REIN, M. and R. S. WEISS (1969) "The Evaluation of Broad-Aim Programs: A Cautionary Case and a Moral" The Annals of the American Academy of Political and Social Science (September): 133-142.
- ROSSI, P. H. (1967) "Evaluating Social Action Programs" Trans-action (June): 76-86.

RUBENSTEIN, J. (1973) City Police. New York: Ballantine Press.

SCHUMACHER, E. F. (1973) Small is Beautiful: Economics as if People Mattered. New York: Harper and Row.

WILSON, J. Q. (1975) Thinking About Crime. New York: Basic Books.

WOLFGANG, M. E. (1958) Patterns in Criminal Homicide. Philadelphia: University of Pennsylvania Press.

END