

Chapter 1 : CRIME ANALYSIS (police)

What is Crime Analysis? Crime analysis is both a profession and a set of techniques. The professionals who perform crime analysis, and the techniques they use, are dedicated to helping a police department become more effective through better information.

Forensics and Crime Scene Analysis Crime Scene Analysis Forensics, or crime scene analysis, involves science applied to legal issues by assisting juries, attorneys and judges in understanding the physical evidence of a criminal case and is critical to identify and convict a criminal. Forensic scientists perform physical and chemical analyses on criminal evidence and report their findings to a court of law, where physical evidence can be found at the scene of the crime, on a victim or both. Forensic scientists employ mathematical principles, problem-solving methods, complex instruments, and microscopic examining techniques to analyze the evidence. Forensic scientists make connections based on the physical evidence to determine certain information and explain the results in court while describing the methods used to arrive at said conclusion. Some forensic scientists work in laboratories and some work at the crime scene. The evidence and data found by forensic scientists is based on scientific investigation rather than circumstantial evidence or testimonies of witnesses. The reliability of their findings often convince attorneys, judges or juries that certain cases do not require a court hearing, and this forensic science helps eliminate the overall amount of cases entering the court system. These findings also assist in proving the occurrence of a crime or makes connections to a crime. The forensic scientist must be able to describe complex chemical reactions and functioning of scientific instruments or medical conditions for everyone to understand rather than in scientific jargon as an expert witness. Forensic anthropology, a particular subset within forensics, specializes in human skeletal biology and often involves training in archaeological methods, skill in identifying skeletal materials, and identifying the dead. Forensic anthropology can include recovering human remains from various locations, such as deserts or locations, or in situations such as mass disasters including earthquakes or tsunamis. These specialists can also assist in recovering evidence at a crime scene due to their expertise in mapping techniques and excavation. Due to the wide range of duties given to a forensic anthropologist, a background in archaeology, physical and cultural anthropology, genetics, chemistry and anatomy would be most beneficial. Techniques to determine sex, age, race, health status, marks of trauma and occupational stress, and stature in life help forensic anthropology. Forensic anthropologists can also work alongside forensic pathologists to determine cause of death. Some forensic anthropologists are skilled in facial reproduction and can model how a face may have looked using only skeletal remains, while others can determine time elapsed since death by examining insect remains and states of body decompositions. Employment Forensic anthropologists working in the academic world work through universities or institutions teaching classes and performing individual research projects. In the applied field, forensic anthropologists can work with law enforcement, coroners, or medical examiners. In these locations, forensic anthropologists often work with forensic pathologists, odontologists, and homicide investigators in order to identify a deceased, trauma to the skeleton or the postmortem interval. Forensic scientists often work in laboratories, at crime scenes, in offices and in morgues. Forensic anthropologists work in similar areas, particularly in places where skeletons are examined. This is a misconception of the role that forensic psychologists play and leads to confusion about who is a forensic psychologist. Since forensic psychology is a relatively new field within psychology, it is still having growing pains. Thus, it would probably be best to start with a definition. Most forensic psychology textbook authors describe forensic psychology as having a broad definition and a narrow definition. Forensic psychology, as defined by the American Psychological Association, is the application of clinical specialties to the legal arena. This definition emphasizes the application of clinical psychology to the forensic setting. This is considered a narrow definition. The broad definition of forensic psychology emphasizes the application of research and experimentation in other areas of psychology e. This would include applying results from studies in areas such as cognitive psychology to legal questions. Therefore, although it is necessary to have training in law and forensic psychology, the most important skills a forensic psychologist must possess are solid clinical skills.

That is, skills like clinical assessment, interviewing, report writing, strong verbal communication skills especially if an expert witness in court and case presentation are all very important in setting the foundation of the practice of forensic psychology. With these skills forensic psychologists perform such tasks as threat assessment for schools, child custody evaluations, competency evaluations of criminal defendants and of the elderly, counseling services to victims of crime, death notification procedures, screening and selection of law enforcement applicants, the assessment of post-traumatic stress disorder and the delivery and evaluation of intervention and treatment programs for juvenile and adult offenders. The practice of forensic psychology involves investigations, research studies, assessments, consultation, the design and implementation of treatment programs and expert witness courtroom testimony. There are several conditions in which the law recognizes that a guilty mind is absent. The standard for insanity is determined by each state, and there is also a federal standard. They must also have the equivalent of two years of organized, sequential, supervised professional experience, one year of which is an APA- or CPA-accredited predoctoral internship. Often there are other requirements as well. The candidate can apply for licensure and sit for an oral or written exam depending on the state where the candidate will be practicing. Practitioners can also become board certified as diplomates by the American Board of Forensic Psychology. Forensic psychology has grown in the past 20 years. It is a broad applied field that offers numerous opportunities to the practitioner. Forensic psychologists work in many different legal environments, writing reports, giving testimony, doing direct treatment or working with therapeutic communities. Forensic psychology is definitely here to stay. The American Board of Forensic Anthropology provides the following list about forensic anthropology. The analysis of skeletal, badly decomposed, or otherwise unidentified human remains is important in both legal and humanitarian contexts. Forensic anthropologists apply standard scientific techniques developed in physical anthropology to analyze human remains, and to aid in the detection of crime. In addition to assisting in locating and recovering human skeletal remains, forensic anthropologists work to assess the age, sex, ancestry, stature, and unique features of a decedent from the skeleton. Forensic Science Students with a general interest in Forensic Science should obtain a pre-med concentration with a recommended minor in criminal justice.

Chapter 2 : National Center for the Analysis of Violent Crime - Wikipedia

Crime analysis is defined as a profession and process through which quantitative and qualitative procedures are used to analyze data that are important to police agencies and their communities.

We value your privacy Crime analysis is defined as a profession and process through which quantitative and qualitative procedures are used to analyze data that are important to police agencies and their communities. Types of Crime Analysis Crime intelligence analysis “ analysis of data about people involved in crimes, particularly repeat offenders, repeat crimes and criminal networks as well as criminal organizations Tactical Crime Analysis “ the analysis of data used in the short term development of investigative and patrol priorities and deployment of resources Strategic Crime Analysis “ the analysis of data directed towards development and evaluation of long-term strategies, policies and prevention techniques. This can help agencies to determine if the strategies they are employing are effective. If not, a different strategy can be employed to combat crime. Administrative Crime Analysis “ analysis directed towards the administrative needs of a police agency, its government and its people Statistics on Major Crime Areas A comparison of crime data statistics for the first six months of the years and showed that there was an increase in violent crimes. According to the crime statistics, murders had increased by 6. On the other hand, property crime statistics showed a decrease in property crimes in the first six months of compared to the same period in Larceny-theft cases had decreased by 3. However, there was an increase in motor vehicle theft cases during the same period by 6. They are also responsible for handling computer programs, such as databases, statistical analysis software and geographic information systems GIS , which are used to prepare maps for law enforcement officers. Crime analysts analyze statistics to identify trends and forecast future criminal activities. The ultimate goal of all this analysis is to help prevent crime. Crime analysts write and edit reports, bulletins and presentations. They are also tasked with developing programs to predict and prevent future criminal activity. Techniques Used In Crime Analysis Crime analysts normally use a variety of techniques in their line of work. They include; repeat offender and victim analysis, social media analysis, communication analysis, link analysis, commodity flow analysis, trend analysis, criminal history analysis and hot spot analysis. According to a survey conducted in by the U. The most common responsibility of crime analysts reported by agencies include: Common Uses of Crime Analysis Crime analysis is used for a wide range of issues. There is no use in having accurate crime analysis reports if law enforcement officers do not use them, so this is a major barrier to integration. Under staffed agencies run the risk of missing certain patterns or will not be able to fully analyze crimes. Proper staffing will ensure that each analyst spends only 40 hours per week on crime analysis, which is enough time for them to do their work much more efficiently as well as prepare reports and databases that will be useful in preventing crimes in a particular jurisdiction. The lack of sufficient funding can easily be dealt with if the government and law enforcement agencies allocate more funds to crime analysis. This can only be achieved if all the stakeholders are enlightened on the importance of crime analysis. Patrol officers should also be educated on the importance of using crime analysis reports, as they will make them more effective in preventing or stopping crime. This takes deliberate action by senior-level police officers. A great alternative for hiring in-house crime analysts is to hire part-time professionals. Crime analysts can work for more than one police department. Another great option is to outsource the service to firms that specialize in crime analysis. There are a number of firms, some of which are headed by retired law enforcement officials that have hired qualified crime analysts. This is not only an effective, but also an affordable option for most agencies.

Chapter 3 : The Mapping and Spatial Analysis of Crime - Criminology - Oxford Bibliographies

Crime analysis is a law enforcement function that involves systematic analysis for identifying and analyzing patterns and trends in crime and www.nxgvision.comation on patterns can help law enforcement agencies deploy resources in a more effective manner, and assist detectives in identifying and apprehending suspects.

In Depth Tutorials and Information CRIME ANALYSIS police Definition Crime analysis is the collection and manipulation of crime-related information and data to discern patterns within that data with the goal of predicting, understanding, or empirically explaining crime and criminality, evaluating justice agency performance, or creating tactical and strategic deployment for criminal justice personnel. Although crime analysis has become more regularly used by police agencies, its development and utility can be found in other criminal justice agencies, as well as among the work of social scientists particularly in the field of criminology, who have used multiple crime analytic approaches to study crime and to assist police agencies. Each concept within this definition is explored next. Information and Data Collection Crime analysis begins with collecting information to analyze. While this first step to any type of analysis might seem obvious, accurate and useful crime analysis depends on the quality and sometimes the quantity of information that is gathered. Locating and collecting information to be analyzed is therefore an essential and often time-consuming starting point for crime analysis. Further, because crime analysis involves discerning patterns from large amounts of seemingly disparate pieces of information, computerized and automated forms of data can be a convenient and abundant source of data. The most commonly used forms of computerized information collected for the purposes of analyzing crime are police calls for service or calls, computerized records of written police reports, and computerized records of arrest. These three sources are most widely used by police analysts and criminologists when attempting to discern crime patterns, predict criminality, or develop crime prevention schemes. Calls for Service Computerized calls for service are generated each time a citizen calls the police for assistance or when the police proactively generate enforcement activity. Information is often collected by a computer-aided dispatch CAD system and can include the date, time, location, and type of call as the citizen or dispatcher interprets it. Calls-for-service information databases usually contain large amounts of records because they are generated each time an individual calls for police, fire, or ambulance service. For large cities, the number is often hundreds of thousands of records per year. Thus, calls-for-service information confounds analysis because these data can be repetitive, represent false calls, and include crimes that are misrepresented by citizens or are not crime related. In addition to these problems, calls-for-service information also contains systematic errors that are generated by emergency personnel who initially record the data. These include multiple data entrants who use different styles and abbreviations when entering data, spelling errors, or purposely created errors, which may be generated according to unwritten rules of the police service. For example, homicides are often not found in calls-for-service databases because dispatchers and responding officers are specifically ordered not to label or announce an incident a homicide until deemed so by a detective. However, given these limitations, calls for service are often a useful source of information when conducting crime analysis. For example, a number of crime-related incidents are found in calls for service that are not found in other data sources, which may provide police departments with a better understanding of crime in a particular neighborhood. These may include calls about disorder and quality-of-life incidents, ranging from noise complaints and public drunkenness to drug use and distribution, prostitution, street gambling, or fighting. Yet, these incidents provide analysts with a better understanding of crime and disorder in a city or neighborhood, and can help direct deployment efforts. Computerized Records of Written Reports Another widely used source of information for crime analysis is computerized databases of written reports. These computerized records usually begin as manually written, paper forms that police personnel fill out in the field. Recently, some police departments have adopted computerized systems in which reports are automatically entered into a computerized database. Manually written reports may later be entered into an automated information system by other personnel, and the entire population of crime incident reports over a particular time period may then be downloaded by crime analysts. Computerized records of written

reports have been viewed as useful to analysts and researchers alike because they represent a filter of incidents that may be recorded in the calls-for-service database that are not crime related, are duplicate calls, or have other systematic errors and misrepresentations. At the same time, police culture, departmental practices, and the personal styles of individual officers and detectives will also create systematic biases and errors as to the types of incidents in which a report is written. Usually, when police respond to more serious crimes, this increases the likelihood that an incident report will be written. Because of this, computerized records of written reports vastly underreport disorder and quality-of-life incidents or may only be generated if an arrest is made for example, a report related to drug dealing. However, computerized records of written reports are a rich data source for crime analysis because more information is often collected in these records compared to the information collected in calls-for-service databases. For example, not only are the date, time, and location of the incident collected and perhaps more accurately than the date, time, and location of when and where a call for service was generated, but more specific information about the crime incident may also be recorded. These specifics may include whether a weapon was used, what type of building the crime took place in, what relation, if any, was the suspect to the victim; in some cases, the entire narrative of the report may be entered into the computer database. All of this information might be used in crime analysis to gain a better understanding of crime patterns and to assist with future predictions about where, when, how, or why crime will occur. Computerized Records of Arrest Reports Crime analysis has also been commonly conducted on computerized records of arrest reports. In some cases, the arrest report and the incident report may be the same report, or the arrest information may be added to the incident database as additional information connected to a specific incident. Computerized records of arrest can be especially useful to analysts in ascertaining who the repeat offenders are in a particular community, evaluating officer productivity, or examining co-offending.

Other Information Sources The sources of information collected and used for crime analysis, however, are not limited to computerized records of calls for service, written reports, or arrest. In addition to these three primary sources of information, crime analysis is conducted on a wide variety of data sources depending on the goals of the analyses. For example, information may be garnered for crime analysis from these sources: The term manipulation is used here to connote a wide variety of approaches in which data can be aggregated, combined, reshaped, related, reordered, or transformed in order to ascertain patterns within the data. Raw intelligence may need to be coded and entered into a computerized system in order to systematically analyze it. Or, as already mentioned, data entrants of computerized crime information may make a number of systematic and nonsystematic errors that need to be fixed in order for analysis to continue. Often, data entrants are not entering crime data with the goal that such information will be analyzed in the future, which further confounds the standardization of the data. For example, in geographic crime analysis, computerized records of the locations of crimes are digitally mapped to determine clusters of crime for deployment purposes. If addresses are misspelled or include more information for example, an apartment number than a geographic information system can interpret, the crime cannot be digitally mapped. Examples of data manipulations that have been conducted include the following: The only constraining factors that might determine what type of analysis is conducted is the availability of data, the purpose for which it was collected, or the analytic abilities of the crime analyst. For example, qualitative ethnographic observation data might require triangulation analysis or the use of software developed specifically to determine patterns in narratives. One might use logistic regression to determine what factors contribute to whether or not an individual is likely to be rearrested after his or her first domestic violence assault for use by repeat offender units. Spatial statistical software might be utilized to determine whether drug events in a particular neighborhood exhibit any statistically significant clustering. Geographic information systems might be used to map the locations of robberies in a city. Analysis can also incorporate noncrime data as well, to determine correlates to crime patterns or crime problems or to explore alternative answers to initial questions and hypotheses. Thus, crime analysis is not limited to a certain set of tools, data, or perspectives. Like any police investigation, crime analysis requires the exploration of multiple sources, views, and manipulations of data in order to reach a particular goal or purpose. Although crime analysis may have a number of goals, these can be generalized under the following four categories: To understand and predict. One of the primary, if not central purposes of

crime analysis is to ascertain patterns from information with the goal of understanding crime phenomena or to make predictions about crime patterns. Spatial, temporal, behavioral, and correlational patterns provide analysts with a better understanding of what types of crime might occur in the future, as well as when, how, where, and why they might occur. Common questions in crime analysis might include these: Which offenders are responsible for committing a large proportion of crimes? Where are crimes occurring? Why are these crimes occurring? What environmental factors are influencing crime occurrence? How are these crimes related? Which officers are at higher risk for health problems or corruption? Which areas of a city are most prone to terrorist or drug activity? To strategize and deploy. Police are concerned with predicting and understanding crime patterns, often with the explicit goal of determining how to prevent crime in the future through strategic and tactical deployment schemes. Crime analysis may be conducted to create cluster maps of the locations of crimes to direct general preventive patrol efforts. Information from arrest or incident records can be analyzed to determine where an individual might be hiding or how best to apprehend someone. Or officer run sheets may be analyzed to detect corruption or laziness so that internal investigations might be generated. Tactical crime analysis is conducted on short time periods, perhaps examining crime incidents in a specific location over a week or month. Additionally, this type of analysis is conducted to obtain an up-to-date understanding of specific types of crime patterns in order to better inform a current police operation. While the use of crime analysis for tactical deployment may seem logical, this is a new and recent development for police agencies. Law enforcement agencies have evolved into reactive, calls-for-service-driven organizations in which officers and detectives respond to requests on an individual, case-by-case basis. Tactical crime analysis uses information and intelligence to inform decision making, and groups past crimes together to discern patterns in order to take a proactive and preventive approach to dealing with a current crime problem. Strategic crime analysis is conducted for the purposes of long-run police planning perhaps to create a yearly plan of action. Although strategic and tactical analyses have a number of overlapping goals and applications, strategic crime analysis may examine long-run crime trends in a particular city, or can be used to allocate personnel or finances for an upcoming year. At its most basic level, strategic crime analysis is the collection of crime information for the purposes of collecting descriptive statistics on yearly crime data for example, for the Uniformed Crime Reports collected by the Federal Bureau of Investigation. However, strategic crime analysis can also include time series analysis of the effects of major changes in general policing strategies for example, patrol or investigations strategies across multiple months or understanding crime displacement and geographic shifts across a city after a change in the physical or social environment of that city. To evaluate the effectiveness of police deployment schemes. Crime analysis is also used in policing to evaluate the effects of police tactics and strategies. Crime statistics, experiments, and maps can provide useful ways for police to see whether their efforts are having any discernible effect on crime, criminality, disorder, or quality of life. This type of analysis is a subset of evaluation research, often conducted by social scientists to examine the effects of social programs on a particular problem. A wide variety of evaluation techniques are available to crime analysts conducting evaluations including randomized controlled experiments, quasi-experiments, time series analysis, statistical regression analysis, or the examination of satisfaction interviews. As with any type of analysis, evaluation methods are not created equal; some analytic methods are considered more accurate than others and thus are more reliable when making decisions about what police deployment schemes work. To evaluate the performance of police personnel. Along similar lines of evaluating the effectiveness of police deployment is evaluating the performance of police personnel. Monthly crime statistics and changes from previous months are presented by supervising commanders in front of senior command staff and other supervising commanders in monthly administrative meetings. COMPSTAT has been replicated in a variety of forms across numerous police agencies who utilize crime analysis and statistics to keep track of police productivity. Is Crime Analysis Useful and Effective? In general, crime analysis is believed to be a positive policing development because its central function is to facilitate a proactive policing style in both administrative and deployment matters. Traditionally, police have focused on crime as well as disciplinary issues on a case-by-case basis, reacting to crime after its occurrence with the goal of arresting the offender. This reactive approach has been increasingly discounted in terms of being useful in reducing crime rates in

cities or neighborhoods. Crime analysis may also be useful in evaluating the effectiveness of policing strategies and the performance of police officers, thus serving as a way to more directly and strongly supervise officers and motivate them to be diligent. Although little research is available that directly evaluates whether crime analysis is effective in reducing crime, there is evidence that preventive, proactive policing approaches that rely on crime analysis work better in reducing crime than those that are reactive and address crime incidents on a case-by-case basis. Often, crime analysis is not evaluated because it is seen as a technical aspect of a prevention program rather than the program itself. Yet, the intelligence that is generated by manipulating seemingly separate pieces of information might make deployment more effective, efficient, logical, feasible, or politically acceptable. An excellent example of where crime analysis has been central to the reduction of crime is in one of the most common uses of crime analysis—hot-spot patrol.

Chapter 4 : Contextual Analysis of Crime - Criminology - Oxford Bibliographies

analysis as a general concept as well as definitions of five types of crime analysis. These definitions are used in the Police Foundation's "Introduction to Crime Analysis Mapping and Problem Solving" course and have been created to synthesize current.

In its most basic form, crime mapping is the use of Geographic Information System GIS to visualize and organize spatial data for more formal statistical analysis. Spatial analysis can be employed in both an exploratory and well as a more confirmatory manner with the primary purpose of identifying how certain community or ecological factors such as population characteristics or the built environment influence the spatial patterns of crime. Two topics of particular interest include examining for evidence of the diffusion of crime and in evaluating the effectiveness of geographically targeted crime reduction strategies. Crime mapping can also be used to visualize and analyze the movement or target selection patterns of criminals. Mapping software allows for the creation of electronic pin-maps and by spatially organizing the data, GIS increases the analytical value of these maps. Crime mapping allows researchers and practitioners to explore crime patterns, offender mobility, and serial offenses over time and space. Within the context of local policing, crime mapping provides the visualization of crime clusters by types of crimes, thereby validating the street knowledge of patrol officers. Crime mapping can be used for allocating resources patrol, specialized enforcement and also to inform how the concerns of local citizens are being addressed. The citations listed below highlight the interdisciplinary nature of both the study of crime and the development of the methods used in spatial analysis. They exemplify the growing prominence that spatial analysis has in understanding where crime occurs.

General Overviews There are many texts that present the techniques and methods needed to map and analyze spatial data. Though we have avoided texts on the statistical and mathematical theory underlying methods of analysis, the texts listed below vary in terms of the subject matter crime specific versus general methods and the level of methodological rigor ranging from introductory texts with plenty of empirical examples to texts that assume general familiarity with common methods. Anselin and Rey provides an overview of the methodological issues encountered when performing spatial analysis of both point patterns as well as more aggregate-level studies. This work is presented at a fairly sophisticated level, but it includes many applications and examples that make it much more accessible to a general audience. Chainey and Ratcliffe offers a comprehensive overview of data processing, theoretical foundations, and basic and advanced spatial analysis. This book is also supplemented with numerous case studies to demonstrate the application of GIS and crime mapping. Golledge and Stimson shows how behavior theory and models are being utilized by geographers to examine a wide array of human behaviors within a spatial framework. Haining provides a detailed look at the mechanics of the many statistical techniques used in the analysis of spatial data. Haining focuses on the analysis of areal units at the expense of covering spatial point processes and the intended audience ranges from beginning students of spatial analysis through the graduate though not expert level. Many of the examples are drawn from the field of environmental criminology. Lersch provides an introductory text to the theory, concepts, and methods related to the spatiotemporal analysis of crime. Though only the basic methods of mapping and analyzing crime are presented, the strength of the collection is tying the methods back to criminological schools of thoughts on the types of individuals that commit crime and where crime occurs. They argue that crime mapping and analysis of crime within the criminal justice system should be used primarily to explore crime patterns and generate hypotheses rather than to conduct statistical tests. They demonstrate how crime mapping can be used to allocate policing resources and share information with local residents. They also provide a number of important ways in which crime mapping, as a tool, can be improved. Paulson and Robinson is designed as a classroom textbook that provides both theoretical aspects of spatial dynamics of crime and empirical examples. Anselin, Luc, and S. Perspectives on spatial data analysis. Combines previously published classic articles with current writings by the foremost experts on the use of spatial data analysis in the social sciences. Chainey, Spencer, and J. GIS and crime mapping. Serves as a reference for either practitioners or researchers by providing information and reference material to support the

development and implementation of crime mapping. Examines human geography and the decision-making processes of humans within their spatial context at both the micro and macro level. Provides a contextual and statistical background for the analysis of spatial data in the social sciences from both a scientific and policy perspective. Space, time, and crime. Mapping crime in its community setting: Crime mapping and spatial aspects of crime. Upper Saddle River, NJ:

Chapter 5 : Crime analysis - Wikipedia

1 Overview As crime analysis continues to expand in police agencies around the globe, it is important for its practitioners to adopt a common set of definitions and terms for what constitutes the practice of the profession.

Functions[edit] Crime analysis can occur at various levels, including tactical, operational, and strategic. Crime analysts study crime reports, arrests reports, and police calls for service to identify emerging patterns, series, and trends as quickly as possible. They analyze these phenomena for all relevant factors, sometimes predict or forecast future occurrences, and issue bulletins, reports, and alerts to their agencies. They then work with their police agencies to develop effective strategies and tactics to address crime and disorder. To see if a crime fits a certain known pattern or a new pattern is often tedious work of crime analysts, detectives or in small departments, police officers or deputies themselves. They must manually sift through piles of paperwork and evidence to predict, anticipate and hopefully prevent crime. However this work to detect specific patterns of crime committed by an individual or group crime series , remains a manual task. Series Finder grows a pattern of crime, starting from a seed of two or more crimes. The Cambridge Police Department has one of the oldest crime analysis units in the world and their historical data was used to train Series Finder to detect housebreak patterns. The algorithm tries to construct a modus operandi MO. The data of the burglaries include means of entry front door, window, etc. Using nine known crime series of burglaries, Series Finder recovered most of the crimes within these patterns and also identified nine additional crimes. If patterns are identified the police can immediately try to stop them. Without such tools it can take weeks and even years of shifting through databases to discover a pattern. Series Finder provides an important data-driven approach to a very difficult problem in predictive policing. In this sense, a crime analyst serves as a combination of an information systems specialist, a statistician, a researcher, a criminologist, a journalist, and a planner for a local police department. Profession[edit] Crime analysts are employed at all levels of law enforcement, often as civilian professionals while other agencies appoint sworn police officers to a crime analysis position. In the United States , most crime analysts are employed by municipal or county police departments. In countries other than the United States, crime analysis is often called "intelligence analysis" or "criminal intelligence analysis," but in the U. Many medium and large local law enforcement agencies have dedicated crime analysis units, while many smaller jurisdictions e. As a profession, crime analysis has existed since at least the s though some of its most essential functions were probably performed even in ancient times. The earliest known reference is in O. At first only present in very large municipal agencies, the profession got a boost in the s under funding supplied by the Law Enforcement Assistance Administration LEAA. It was during this decade that the first standardized "manuals" of the profession began to appear. After suffering a dearth of funding in the s, the crime analysis scene changed dramatically in the s with the computer revolution, the existence of new funding under the U. This has particularly been the case since the Crime and Disorder Act CDA Review and the subsequent Crime and Disorder Formulation and Implementation of Strategy Regulations , which included a requirement for the annual provision of a partnership Strategic Assessment, including analysis in relation to problems of crime and disorder and substance misuse. The key skills of an analyst within UK law enforcement must to be identify patterns and trends, make inferences in relation to these patterns, provide recommendations to support action and provide products and briefings that deliver this information and interpretation clearly and in an appropriate format for the audience. Crime analysis Software[edit].

Chapter 6 : Forensics and Crime Scene Analysis

Content analysis is considered both a quantitative and a qualitative research method. The overarching goal of much of the research using this method is to demonstrate and understand how crime, deviance, and social control are represented in the media and popular culture.

Personal use only; commercial use is strictly prohibited for details see Privacy Policy and Legal Notice. The overarching goal of much of the research using this method is to demonstrate and understand how crime, deviance, and social control are represented in the media and popular culture. In content analysis, media and popular culture portrayals of crime issues are the primary sources of data. These portrayals include a range of sources, such as newspapers, movies, television programs, advertisements, comic books, novels, video games, and Internet content. Depending on their research questions, researchers draw samples from their selected sources, usually with additional selection boundaries, such as timeframe, genre, and topic e. There are two primary approaches to conducting content analysis. In quantitative forms of content analysis, researchers code and count the occurrence of elements designated by the researcher prior to the study e. In qualitative forms of content analysis, the researchers focus on the narrative, using an open-ended protocol to record information. The approaches are complementary, as each reveals unique yet overlapping concepts crucial to understanding how the media and popular culture produce and reproduce ideas about crime. In the study of crime in the media, research ranges from studies that count or otherwise quantify texts for the purpose of statistical analysis to studies that explore presentation and representation of crime-related issues. Even in those quantitatively oriented studies, results are given qualitative consideration. Increasingly, in the criminological study of media and popular culture, content analysis is typically viewed as a qualitative methodology. Content analysis is more than watching TV or movies, or reading newspapers or comics, and then reporting what is presented in the medium. How the story is told and how characters are portrayed are often more telling than are specific plot points. Content analysis requires systematically watching or reading with an analytical and critical eye, going beyond what is presented and looking for deeper meanings and messages to which media consumers are exposed. The media captures and frames the broader cultural story about criminal justice. The primary purpose of content analysis in the study of crime and justice has evolved from identifying the prevalence of the topic or terms under study into revealing the cultural frames. The results from content analysis, then, offer evidence that allows for a more critical appraisal of how crime and justice are socially constructed. Indeed, one of the earliest studies to employ the method, the Payne Fund Studies, coded for violence and other content in films in the s. This project has influenced media research since the s, including the National Television Violence Study of the later s Smith et al. As research has progressed, however, scholars called for greater attention to the context in which the content is presented, arguing that an act or an incident could not be fully understood without referring to the circumstances of its presentation in media or the broader socio-cultural context. Such work, coupled with expanding opportunities for consumers to encounter crime-related content across a variety of media sources, also stimulated analyses that placed more emphasis on the latent content itself. That is, some research looks beyond the action to the less obvious, but still critical, message and meaning being produced and reproduced in the media and popular culture. The advent of academic journals such as *Crime, Media, Culture* , *Journal of Criminal Justice and Popular Culture* , and the recent *Journal of Qualitative Criminal Justice and Criminology* also speak to the emergence of content analysis and other qualitative techniques in the study of crime and social control. Sampling the Media Universe For those studying crime issues presented in media and popular culture, there is a wide array of text-based sources, including novels, textbooks, newspapers, magazines, and comic books and graphic novels. There is also a wide array of audio-visual sources, including movies, television, and video games, each with a myriad of genres and formats. Music, in lyrics, video, and performance, is yet another source. Finally, the rise of electronic and social media further broadens the range of sources, from traditional news sources to Twitter conversations to YouTube content to user-generated forums like Reddit. The type and genre of media to be studied are often identified as research questions are developed. As with most social research, it is often not feasible to examine an entire population

of media texts or sources. For example, even if one could access every copy of comic books featuring Batman, it is likely impractical, due to constraints on time or resources, to read and code hundreds, if not thousands, of books. On the other hand, one could watch and code every cinematic release featuring Batman Bosch. Thus, the decision between reviewing an entire population or a sample of the population is driven by both research questions and practical considerations. With research questions and practical considerations in mind, sampling entails additional decision points. For example, suppose one is interested in news presentations of crime in editorials or commentaries. First, one needs to decide among newspapers, news magazines, television news, or Internet news. Will papers be randomly selected from the universe of U. Will there be a degree of stratification, such as random samples from designated geographic units? Or, will newspapers be selectively chosen based on other research interests, such as tracking a specific event in a specific location? If, however, one wants to compare across media types, then similar decisions need to be made that can be applied to each type. Within each source, there may be several stories, editorials, or commentaries, so researchers need to decide whether to review all of them, or more practically, decide how to sample among them, necessitating another round of sampling decisions. In sum, as this brief example illustrates, sampling for the purpose of content analysis entails a good deal of complexity. Regardless of design, samples should be selected so that they reasonably represent the population and yield sufficient numbers for analysis. Researchers should also take care to record all decision points, so that the sample can be replicated by others.

Quantitative Content Analysis Definition Originally developed for use with written texts, quantitative content analysis QCA aims to distill the many words presented in a text into meaningful categories. These categories can then be treated as variables, allowing for a descriptive interpretation of the texts, or functioning as variables in statistical analyses. QCA has expanded beyond the written word to many other types of media, but the basic principal of classifying larger content into smaller categories remains at the core of the method. Through analysis of how these categories inter-relate with each other and intersect with the broader cultural context, the goal is to discover how materials communicate meaning and what meaning is communicated. Weber outlines several basic steps in the coding process. The first step is to define recording units, that is, whether coders should attend to certain words, phrases, images, or overarching themes of a passage or piece. Depending on research questions, recording units often are some combination of these or other units. For example, in a television show, researchers may want to know what words were in the dialogue and also the overarching theme of the conversation between characters. The second step in developing a coding schema is to define categories. One may think of these as boxes to be marked on a rubric, even if computer software is aiding in the coding process. The categories may be defined narrowly or broadly. The categories may be mutually exclusive, or an incident may be coded into multiple categories. This decision may be influenced by the analytic intent; basic statistical assumptions are violated when categories are not exclusive. Once a preliminary rubric is established, the third step is a pre-test, in which a subsample is coded. The pre-test process should reveal where categories may need further refinement or where coding rules require additional clarity. The pre-test also produces information regarding the accuracy or correctness with which human coders or computerized coding programs are classifying the text. If accuracy is low, the coding rules should be revised. Step four, then, is revising the coding schema. The fifth step is to pre-test again. This process should continue until the coding process, whether human- or computer-coded, yields an adequate level of accuracy. The sixth step is to code the full sample using the established schema. Following data collection, the final step of the coding process is checking the achieved accuracy of the human coders or the computer program. Individual human coders may fatigue over time, thus making more mistakes, or their interpretation of categories may shift slightly over time, resulting in misclassification. Computerized output should be reviewed to confirm whether code rules were applied correctly. During the process, for example, the program may encounter text combinations not anticipated by the programmers or not present in the pre-test, resulting in misclassification. As with other forms of measurement, issues of reliability and validity may emerge in QCA Neuendorf. Particularly with several human coders, a primary issue is inter-rater reliability. In brief, inter-rater reliability is the extent to which different people code the same text in the same way. Differences, for example, may occur when coding rules or categories are not clear, or when there are cognitive differences across coders. The pre-test process

and adequate coder training may reduce these differences, but inter-rater reliability should also be assessed at the end of coding. Various statistical tests exist to assess inter-rater reliability. Validity can broadly be divided into internal and external. Internal validity refers to the match between concepts and their operationalized definitions in variables. There is no parallel statistical metric to assess internal validity, but there are several dimensions that researchers may consider. External validity, in contrast, refers to the generalizability and replicability of the results generated by a measure. Breadth and representativeness of the sample improve generalizability, while a full accounting of the procedures of the coding and variable creation improve replicability. Analysis and Interpretation in QCA Analyzing data generated by the coding process can take many forms. Again, the analysis of the data is driven by existing theory and the established research questions. Once data are collected, however, researchers fully quantify the data by creating variables from the coded data that are most meaningful for the hypotheses they want to explore and the analyses they want to conduct. These analyses may range from completely descriptive in nature to mean-difference or correlational tests to multivariate regression models. In interpreting the analytical results, researchers bring the accumulated evidence to bear on the research questions, determining what story their results tell about the texts and their content. Regardless of the analytical technique used in QCA, any interpretation of quantified content must be corroborated by reference to the original texts. That is, researchers should compare their interpretation of the data to a subsample of their source documents. If the story of the data analysis reasonably represents the story within the documents, the interpretations of analytical results are not just products of classification schemes or statistical techniques. If the stories do not match, then reconsideration of the analysis or interpretation is necessary. In short, although QCA aims to quantify what could be considered qualitative information, it nonetheless retains a portion of qualitative art in the final interpretation of the data. Britto and Dabney were interested in crime content on these programs and, in particular, how the content was politicized. They selected the central primetime talk show across each of the three major cable news networks. Over the course of six months, they randomly selected one day per week to record the shows. They chose this approach for two reasons: Coding was performed at two levels of analysis. These categories became variables in the analyses. Coders received four hours of training, which included a discussion of how concepts were operationalized, a practice coding session, and the follow-up discussion. During data collection, coders were instructed to watch their assigned episodes at least twice in order to code at each analytic level separately. The analysis continued with a description of the amount of justice-related content on each show, then compared shows to each other.

Chapter 7 : Literary Analysis of Crime and Punishment by greatest ever on Prezi

The Vera Institute of Justice developed guidance so law enforcement executives may understand how an investment in crime analysis contributes to the goals and mission of policing via the execution of a cost-benefit analysis.

Chapter 8 : InSight Crime - Investigation and Analysis of Organized Crime

InSight Crime is a foundation dedicated to the study of the principal threat to national and citizen security in Latin America and the Caribbean.

Chapter 9 : The Future of Crime Analysis | University of Cincinnati | University of Cincinnati

Arrest Data Analysis Tool This dynamic data analysis tool allows you to generate trend tables and figures of arrest data since , including national arrest estimates and agency-level counts by offense, age, sex, and race. The underlying data are from the FBI's Uniform Crime Reporting (UCR) Program.