

The Beginning Basics

3

What You Should Know!

For established researchers, knowing what to study and how to study is often simple. However, established researchers can also become stuck in a rut and need to expand beyond their typical areas of research. For most beginning student researchers a consistent issue is having difficulty in choosing what to research, and the number of possible research topics can be daunting. A major question one might ask is, where do I start? Choosing a topic is merely the first step. Other issues include developing the research question, a statement explaining what it is the research is supposed to accomplish. Forming the research question is a critical step. The research question should narrow the topic to a manageable focus and leads to the formation of hypotheses and the identification of variables. After completing this chapter, the reader should be able to:

1. Discuss the issues that should be considered in selecting a research topic.
2. Present and describe the three purposes of research.
3. Describe what a literature review is and what sources are available for such a review.
4. Compare and contrast the various writing styles used by criminologists.
5. Define what an article critique is and discuss its details.
6. Define what is meant by the research question. Give an example of a research question.
7. Define the term *hypothesis* and describe the types of hypotheses.

Getting Started

In the two previous chapters, we discussed why research is necessary and why research ethics are crucial. These are important topics that warrant serious consideration. When charged with the task of writing an empirical research paper, there is a great deal to know about "how" to complete such a project satisfactorily after determining the "why." This chapter presents and discusses a number of issues that must be considered when starting a research project and provides a guide on how to break down the extensive information available to manageable portions.

(One of the most difficult aspects of any endeavor is to begin, and research is no exception.) The beginning of the process is where procrastination has the biggest impact because students just don't know where to start. Of course, some students will argue that they work best under pressure, but just ask any of your professors and they can tell you which term papers were written the night before. By its very nature, the process by which a research problem is selected is a creative process. Keeping in mind that during the creative process there are not right or wrong answers can decrease the amount of stress students feel during this stage of the process. This process may require thinking about various ideas and issues, asking questions, and determining whether the question may actually have answers (Bryman, 2008; Creswell, 2008; Drake & Jonson-Reid, 2008).

Picking a Topic

Before beginning the research project, a researcher must first answer this: (what should I study?) Within the fields of criminology and criminal justice, numerous research topics are available. All one has to do is pick a topic; however, that is not as easy as it may seem.

The beginning of any research project must focus on what is to be studied. Defining the problem is viewed as the most important stage of the research (Fowler, 2009; Gavin, 2008; Hagan, 2006). Crime is a popular topic. It is the basis of television shows and movies and often leads the evening newscasts. However, the topic of crime is too broad to effectively study. Instead of focusing on crime in general, a researcher might narrow the topic to property crime. From this point, one can narrow the topic further by focusing on specific types of property crime, such as theft, vandalism, or destruction of property.

To start, the research project should be something of personal interest. If there is no interest in the topic from the start, one will be tired of it before it is completed. It must also comply with any topic restrictions imposed by the individuals or organization for which the research is being conducted. For example, professors frequently restrict the topics that their students may research to avoid emotional diatribes on controversial issues better left to

experienced researchers. In addition, before the topic is chosen, one should consider (1) the availability of current research on the topic, (2) any gaps in theory or in the literature available on the topic, (3) the feasibility of conducting the research, (4) the potential for policy implications, and (5) possible funding availability (Fowler, 2009; Gavin, 2008; Hagan, 2006; Maxfield & Babbie, 2009; McBurney & White, 2007; Vito, Kunselman, & Tewksbury, 2008).

There are a number of studies about community policing. Many of them suggest and support the effectiveness of community policing. What seems to be lacking are studies that explain why community policing may be successful in some places and a failure in other places. For example, does success of community policing strategies differ based on urban versus suburban locations? In this example, a gap in theory exists and needs to be filled. Finding such gaps in the literature can assist in choosing a topic.

Once an interesting and intriguing topic is found, the feasibility of conducting the research must be considered. Feasibility is primarily linked to logistics (e.g., Is a sample accessible? Does a data collection instrument exist or must one be designed?). Sometimes the topic may be a very good choice for research but is not feasible to attempt. Before finalizing the research topic, the prospective researcher needs to be sure that the study can actually be accomplished. Doctoral students working on their dissertation are often tripped up at this step.

Because of the popularity of some topics, such as job stress, capital punishment, sentencing disparity, and community policing, there is usually a wealth of information available to help build a research base. However, there may be times when the topic is legitimate, but little information exists in the literature to support the research question. This should not stop one from going forward with the research. If the findings can be validated (i.e., shown to meet scientific rigor and supported by ensuing research), it may become a new and significant contribution to the literature, the discipline, and subsequently the practice of criminal justice or criminology.

Choosing a research topic that could have policy implications can be very useful. For example, the results of a study on examining job satisfaction or examining the effect education has on promotion could have an effect on policy and procedure.

Finally, although funding may not be applicable to many students' research efforts, it should be taken into consideration. One of the most popular means of funding research is through internal and external grants. Many universities offer both students and faculty opportunities to apply for internal grants that at least allow the person to start the research project and may help offset personal costs. Ultimately, many researchers seek external grants. However, these are usually not sought by undergraduate students. You may have the greatest idea in the world, but if it requires extensive funding that you do not have, then this situation can create an obstacle to successfully completing the study.

Regardless of where the funding may come from, it is important to establish whether any monies are needed and from where they may be sought.

The Purpose of the Research

Once consideration is given to the previously mentioned issues, the research itself can begin. To address these issues, one must have an idea of what the research will cover. Perhaps the best place to start is to decide what the research should accomplish. There are three possible expectations or accomplishments: (1) exploring, (2) describing, and (3) explaining (Gavin, 2008; Hagan, 2004; Maxfield & Babbie, 2009).

Exploring

Most of us are explorers by nature. Our curiosity about things begins at an early age and persists throughout our lives. What we explore and how we explore something changes with age and time. If you have spent time around children, you know that at a certain age they explore the world by putting items in their mouths. However, as we mature, so do the ways we explore our world. An older child may ask a parent how electricity works. Exploration occurs either accidentally or intentionally. Intentional exploration may well be considered to be a form of research. Thus, when one wants to know more about something, the tendency is to explore the topic.

For example, before buying a new sports utility vehicle, a consumer might read what trade magazines say about them, check out prices through various dealers, and talk with current owners of such vehicles. When finished, one should have enough information to make an informed decision based on the research.

FROM THE REAL WORLD

The attitudes of college students can provide interesting insight as to how young adults tend to think of various topics. In addition to the school-related interest such as classes, grades, parking, and graduation, sexuality is an area of particular interest among college students. Because criminal justice students are perceived as a more conservative group, Dantzker and Eisenman (2007) speculated that the attitudes regarding sexuality would differ based on major and that criminal justice students would have conservative attitudes toward sexuality. To study the issue, they conducted a study among criminal justice students examining their attitudes toward homosexuality, pornography, and other sexual matters. The study findings did tend to support the perception that these students possess a conservative attitude.

that has been conducted. With respect to criminal justice and criminology, exploration of one's interests is often formal, intentional, and accomplished through some form of research.

Exploratory research provides information on a topic on which little is known. Therefore the basis for other types of research such as explanatory research does not yet exist. Exploratory research seeks out information about something that is known to exist, but as to why or how, that has not yet been discovered. The goal of exploratory research is that it will offer additional insights about something for which there is awareness but limited knowledge.

Describing

The purpose of descriptive research is to describe specific aspects or elements of the topic. What is the phenomenon? What are its characteristics? How often is the phenomenon occurring? These are just some of the types of questions answered when conducting research for the purpose of describing. For example, the Bureau of Justice Statistics releases the Correctional Populations in the United States report annually. Information within this descriptive study includes the number of individuals supervised by the adult correctional systems, incarcerated (prison or jail), or supervised in the community (probation or parole), as well as changes in these numbers over the years.

A descriptive study specifically on prisons could offer information about the inmates, correctional staff, programs, violent acts, and so forth, which would further enhance what is already known about prisons. This descriptive information often provides the basis for an explanatory study because a researcher first needs to know if there is a phenomenon to study. For this reason many explanatory studies will include a descriptive section. Descriptive studies are probably among the easier studies to do because the researcher simply needs to explain what he or she sees, hears, or reads with respect to the various elements of the topic.

Explaining

Undoubtedly the most in-depth and difficult purpose for conducting research is to provide an explanation. Explanatory research attempts to analyze and fully understand why a phenomenon occurs as it applies to policies, procedures, objects, attitudes, opinions, and so forth. From a criminological perspective, researchers may attempt to understand better why certain males commit sexual assaults and other do not. Another example of explanatory research would be a study examining acts of police corruption to determine why they occur.

Sometimes a study may start out exploratory and then be expanded into a descriptive or explanatory study. For example, due to a report of increased criminal behavior, criminologists sought to find out what was going on in a

rural high school. They conducted exploratory research to find out about the criminal behaviors. On learning that it was gang related, they could rely on the literature to make recommendations as to how to deal with the problem. Or they might engage in further descriptive research to learn exactly how the gangs were made up and what they were doing. This process could then lead to explanatory research, which could examine why gangs were able to get a foothold in the high school, what the impacts of such activities are, and how to combat these gang activities.

Although all three reasons for conducting research are valid, it is most often the explanatory reason that many criminologists pursue and that is considered the gold standard of research. This type of study relies on strong, clear research questions, hypotheses, and variables. Each of these is discussed in more detail later in this chapter. However, there is still the question of choosing a topic. To demonstrate the myriad possible topics for study, the following is a short list of potential research examples.

1. Examine the role of criminal justice programs in a given state.
2. Survey education and job satisfaction among police, parole, or correctional officers.
3. Compare and contrast criminal justice educators: practitioner-academic versus pure academic and their work products.
4. Evaluate the relationships between job stress and race and ethnicity.
5. Explore the causes and extent of criminality among high school students.
6. Conduct a cost-benefit analysis of private versus state prisons.
7. Research drug usage among adolescents.
8. Evaluate the success of electronic monitoring.
9. Evaluate the effectiveness of community policing.
10. Survey public attitudes toward corporal punishment.

The process of choosing a topic can be aided through personal observations, suggestions from academics and other students, and the existing literature in criminal justice and criminology. It is through this third means that a large number of research topics are chosen.

Reviewing the Literature

For many researchers, the choice of an idea or concept to study may, at times, be frustrating. What becomes more frustrating is choosing a topic and finding either too little or too much information available in the current literature. Neither of these situations should prevent the individual from conducting the research. There is usually a substantial amount of literature to support most topics one might wish to research in criminal justice and criminology. With the extensive number of journals currently available, data from government agencies, and Internet access to information, one can usually collect enough information to support a research effort.

class, review the contents of the text that is being used in that class to determine if something of personal interest may be revealed.

Social Science Indexes

Annual indexes for journals are another source of information. Today, journals are available on microfiche, as hard copy, or online. Government documents and the Internet are additional sources for helping choose a topic or gathering information to support the research topic.

Internet Searches

A word of caution is appropriate regarding the use of the Internet. Although it is useful for gaining preliminary information about a topic, it does not replace conducting a solid literature review of the subject area. For all its convenience, the Internet has a great deal of information that is unsubstantiated, if not outright erroneous. If the source is not clearly scholarly (e.g., a reputable online journal), be cautious about using it as a research reference. The Internet augments the library and social science indexes and abstracts as search vehicles; it does not replace them. Nor does it replace journals and textbooks. Although the Internet may provide legitimate sources, a reference page filled with numerous websites instead of text and journal citations is indicative of lazy scholarship on the part of the researcher.

Overall, there are a number of sources from which one can choose a topic or find support for a given topic. Box 3-1 provides a sampling of refereed (peer-reviewed) journals that publish articles in criminology or criminal justice. This list is not intended to be viewed as an exhaustive catalogue. The literature search provides the basis for formulating or refining research questions.

Critiquing the Literature

To conduct a sound literature review, whether as a topical search or in developing the scholarly basis for the research being conducted, one must be able to properly interpret the research being read. This section provides guidance on what to look for in evaluating other studies. These guidelines are also helpful in preparing one's own work for others to review. More detail on preparing work for submission is provided in a later chapter.

Understanding Writing Styles

Scholarly journals and textbooks conform to specific writing styles. The various styles are precisely detailed in publication manuals. Several styles are used in criminal justice and criminology. At some point in the research process one may view Turabian (which uses numbers to indicate citations and footnotes at the bottom of each page); Chicago Style (also uses numbers after citations with endnotes instead of footnotes); American Psychological Association (APA; the

Box 3-1**Literature Review: Examples of Sources****Journals**

- American Journal of Criminal Justice
- American Journal of Sociology
- British Journal of Criminology
- Canadian Journal of Criminology
- Crime and Delinquency
- Criminal Justice Policy Review
- Criminology
- Criminology and Public Policy
- Justice Quarterly
- Journal of Contemporary Criminal Justice
- Journal of Criminal Justice
- Journal of Quantitative Criminology
- Police Quarterly
- Prison Journal
- Social Forces
- Social Justice
- Social Problems
- Social Science Quarterly

Compendiums

- Abstracts on Criminology and Penology
- Criminal Justice Abstracts
- Police Science Abstracts
- Psychological Abstracts
- Social Science Index
- Sociological Abstracts

Government Agencies

- Bureau of Justice Statistics
- National Criminal Justice Reference Service (www.ncjrs.org)
- National Institute of Justice (www.ojp.usdoj.gov/nij)

most commonly used style in criminal justice and criminology, listing the author and year of publication within the text); and American Sociological Association (similar to APA but may use endnotes for specific details and varies in the format of the references). Occasionally, one may also see Modern Languages Association style and styles unique to specific law or criminal justice journals, which are often variations of the previously mentioned styles. It is important to know what style is used when critiquing an article or text and even more important to know what style is required when submitting a paper, article, or text for review. For example, many criminal justice or criminology professors will require their students to submit all papers in APA format. The best way to become familiar with this format is through the APA stylebook.

Knowing What to Look For

Most journal articles follow a similar format regardless of the publication journal with sections in this order: abstract, problem statement, literature review, methodology, findings, discussion, and conclusions. When scanning the articles to see if they are of value to your topic, it is helpful to first review the abstract, methodology, and conclusions. After determining that the article is useful, you will need to read it in its entirety (Kline, 2009; Kraska & Neuman, 2008; Lavrakas, 2008).

Abstract

The abstract is a brief overview of the article. What is the social issue that was studied? How was it investigated: exploration, description, explanation, or a combination of strategies? Who conducted the research? Who financed it (and is there a conflict of interest)? Did it have clarity of purpose? Were the findings reasonable based on the research design? What were the conclusions and recommendations?

Problem Statement

The problem statement identifies the research problem being addressed and as well as laying out possible research questions that the research is trying to answer. What was the problem being investigated? Did the literature review support the need for this research? What was the theoretical orientation? What was or were the research hypotheses? Were concepts properly defined? Were the dependent and independent variables clearly identified and defined?

Literature Review

The purpose of the literature review is to provide a foundational understanding for the reader, as well as the researcher, for understanding and evaluating the study. Did the literature review provide a thorough coverage of the prior research? Were previous studies adequately evaluated and discussed? Was the coverage complete? Are classic studies relevant to the research problem included and recent research included? Did the literature cited provide a justification for the current investigation?

Methodology

The methodology section provides details of the procedures used within the study and should provide enough details for the reader to be able to understand, evaluate, and critique the methods used within the study. What was the research design? Was it clearly developed from the theoretical frame of reference alluded to in the problem statement? Who were the subjects, and how were they included in the study? Did the study conform to ethical standards? What was the sampling method, and was it adequate for this research? Was the measurement instrument or strategy satisfactory? How were the data analyzed? Were there

any adverse effects or limitations because of the research design and the means of analysis being incompatible? Were measures of association and tests of significance clearly indicated and appropriately discussed? Were the measurement techniques valid and reliable? Methods sections that are incomplete and less than transparent create problems for readers and are ethically problematic if they were deliberately written in this manner by the researchers.

Findings

The findings section summarizes the results of the analysis and is typically the location of any tables that display some of the pertinent results. Were the findings displayed in a concise and readily understandable manner? How were the data summarized? Were the tables logical and clear? Were the statistical techniques appropriate? Would other statistical techniques have been more appropriate? Did the findings relate to the problem, the method, or the theoretical framework? How did the findings relate to those of prior research?

Discussion and Conclusions

Discussion and conclusion sections are designed to discuss the findings of the research and further analyze through the lens established by the problem statement and literature review. The impacts of study strengths and particularly weaknesses on the results are discussed as well as recommendations for future studies. Are the conclusions reached consistent with the findings that were presented? Are the conclusions compatible with the theoretical orientation presented in the problem statement? Based on the problem statement, the prior research, methodology, and findings, do the conclusions or recommendations make sense? Based on the problem statement and the literature, are the conclusions or recommendations of this study a significant contribution to the field of study?

The Research Question

Once a topic, or research problem, has been chosen, the next step is to create the research questions. A research question is a statement answered through the research process. It generally is formulated from the research problems or purpose and may be synonymous with the research problem. Essentially, what the researcher must do is decide what it is he or she is to study and why. It is the "why" that helps form the research question. For example, at one point, Detroit removed numerous streetlights to save money (Christoff, 2012). A research question could be "did the removal of street lights impact crime in the affected neighborhoods?"

The research questions should allow others to gain a clear understanding of why the research was conducted. A well-worded research question should give some indication of the outcomes one might expect at the conclusion of the research. The question should be directly linked to the research problem.

Hypotheses

A hypothesis is a specific statement describing the expected result or expected relationship between the independent and dependent variables. Variables are factors that can change or influence change. They result from the operationalization of a concept. There are two types of variables. Dependent variables are the factors being influenced to change. The dependent variables are the outcome items or what is being predicted. Independent variables are factors that influence or predict the outcome of the dependent variable. In the previous example, the presence of streetlights is the independent variable and the occurrence of crime is the dependent variable.

The development of hypotheses and their linkages with theory and research is discussed further in Chapter 4. The three most common types of hypotheses are (1) the research hypothesis, which is a statement of the expected relationship between variables offered; (2) the null hypothesis, which is a statement that the relationship or difference being tested does not exist; and (3) the rival hypothesis, which is a statement offering an alternate explanation for the research findings.

FROM THE REAL WORLD

Dantzker (2010) conducted a study of police psychological pre-employment screening and examined the research problem related to whether there were differences, based on the type of psychologist involved in the process, in the evaluative instruments or protocols used in conducting pre-employment screening for potential police officers and whether different types of psychologists select those instruments or protocols for reasons of job-specific validity. The work of psychological screening for potential police candidates is conducted by two types of psychologists: police and general clinical psychologists. Whether there is a difference between the two groups of psychologists in terms of this work has not been examined. One could suggest that if police psychologists do differ in this area from general clinical psychologists, then a question for future research is whether their selections of questionnaires and protocols to conduct such screenings are more applicable than those chosen by general clinical psychologists.

This problem produced the following research question:

Are there differences between police psychologists and general clinical psychologists in the evaluative instruments or protocols used in conducting pre-employment screening for potential police officers and do they select those instruments or protocols for reasons of job-specific validity?

After establishing the research problem and then the research questions related to this problem, the researcher must next explain what specifically is going to be studied and the expected results. This requirement is usually accomplished through statements or propositions referred to as *hypotheses*.

The research hypothesis, which is the focus of the study, is generally a statement that fits the equation, "if X, then Y," with X representing the independent variable and Y indicating the dependent variable. For example, if there is an increase in the number of patrol units in a given area, then the amount of reported crime increases. Note that the statement suggests a relationship between two variables, patrol units (X) and reported crime (Y), in a manner indicating the belief that more patrol cars will cause more crime to be reported. Therefore, the research would focus on examining this relationship to disprove the null hypothesis.

The null hypothesis fits the equation, "X has no relationship with Y." For the previous research hypothesis, the null hypothesis would read, "The increase in patrol units will not increase the amount of reported crime (no relationship exists)." If the study results support the research hypothesis, then the null hypothesis can be rejected, indicating that there is a relationship between the variables.

The rival hypothesis predicts the opposite of the research hypothesis. Using the previous example, the rival hypothesis would be if there is an increase in the number of patrol units in a given area, then the amount of reported crime decreases. An explanation for the rival hypothesis is helpful to consider in designing the research. Although the general research goal is to support the research hypothesis by disproving the null hypothesis, one should not consider the inability to disprove the null hypothesis as a failure. On the contrary, the failure to support the null hypothesis may actually lead to new information or additional research not previously conducted.

Whether the hypothesis is research, null, or rival, it must be clearly stated and consist of readily identifiable variables. Continuing from the Dantzker study, the independent variable is the individual psychologist and associated demographics. The main element is how the respondent labeled himself or herself as a psychologist. This research uses categories that best represent the potential psychologist involved in police psychological services: Police Psychologist, full

FROM THE REAL WORLD

The study by Dantzker from the previous Real World feature offered the following hypotheses:

Hypothesis One: Police psychologists will not differ significantly from general clinical psychologists in their choices of instruments or protocols used for pre-employment screening of police officer candidates. Hypothesis Two: Police psychologists will differ significantly from general clinical psychologists in their choices of instruments or protocols used for pre-employment screening of police officer candidates.

time in-house psychologist; Psychologist Consultant, full-time consultant to law enforcement; Clinical Psychologist, occasional service provider to law enforcement; and Other, to allow respondents the opportunity for self-identification into unforeseen categories.

The dependent variables include the types of protocols and the reasons for their use. The protocol choices were garnered from previous research. The choices or reasons were developed from the literature, existing guidelines, and state legislation. Ultimately, the researcher must identify the variables properly, because misidentification can cause the research to be useless.

Summary

Before starting any research effort, a topic must be chosen, keeping in mind that the research effort can explore, describe, or explain the topic. This topic should be of interest, be relevant, and have support in the literature through journals, government documents, and/or online resources.

On choosing the topic, the research question is created, which advises others what is to be studied. From the research question comes the hypothesis or hypotheses, a statement or group of statements that indicate the nature of the relationship to be studied. The three main types of hypotheses are research, null, and rival. The goal of research is to find support for the research hypothesis and disprove the null hypothesis. Finally, for the hypothesis or hypotheses, clearly identifiable variables are required, which include the independent and dependent variable. Failure to clarify the variables could render the research useless.

APPLICATION EXERCISES

1. You recently took a job with the research unit of a police department in a city of 50,000 residents. Within the city there is considerable variation of crime rates between geographic areas. In an effort to combat the problem, the police chief wants to know why some areas have higher rates of crime. You want to impress your new boss by developing a list of three possible research problems related to the topic of crime rates and geographic areas. Choose the idea that you think would be the most useful and use it as the basis for your research.
2. There are three