

Research Methods: How They Shape Views of Sexual Violence

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Abstract:

This article distinguishes among the various research strategies available to the sexual aggression researcher and notes the limited domains of explanation inherent in each approach. Runkel and McGrath's (1972) circumplex typology is adapted as an organizing framework to clarify the relationships among the various research approaches. Examples of each type of research are given from the sexual aggression literature. Specific research strategies are examined in light of their ability to illuminate the possible and probable importance of a relationship between variables. Also discussed is the influential effect that a researcher's assumptions about the nature of sexual assault has on the choice of a research question and a research methodology to investigate that question. A multiple-strategies approach is recommended for the study of sexual assault.

Article:

The credibility of science is threatened when inappropriate characterizations of findings go unchallenged. (Wilcox, 1987, p. 942)

Research methods have the potential for shaping one's view of reality. The resulting perceptions of reality, however, can become distorted when the purposes and limitations of various methodologies are ignored or misunderstood. This is a central issue in studies of sexual violence because of the tendency for consumers of research to make causal inferences based on correlational findings, to overlook the potential significance of higher order interactions not addressed in experimental manipulations, or to generalize beyond the data.

Each approach for studying sexual aggression has its own strengths and limitations. Empirical analytic methods cannot help us know the phenomenological experience of a beautiful sunset, nor can we know the phenomenological experience of a rape survivor using traditional research paradigms. Conversely, subjective reports shed little light on the incidence and prevalence of sexual assault. There is, however, much that can be learned from both subjective methods and traditional scientific approaches when applied to the study of sexual aggression and victimization. Making best use of this knowledge hinges on an understanding of some basic but easily forgotten concepts about research methods.

This article begins with a brief discussion of how assumptions about the nature of sexual assault can potentially influence the types of research questions asked. The following sections examine the relationships among research methods, their respective strengths and weaknesses, and their ability to address questions about the possibility and probability of relationships. Special emphasis is given to the types of inferences that can be drawn from these methods. The article concludes by emphasizing the need for a multiple-strategies approach for advancing knowledge about sexual violence.

Assumptions About Sexual Assault and Choice of Research Questions

Ideally, a thorough critique of research methods would begin with an examination of the underlying philosophy of science, and relatedly, the explicitly and implicitly held assumptions that guide the choice of research questions (Wittig, 1985). The assumptions that are made illuminate various facets of a domain of study, while obscuring others (Weiskopf, 1977). It is beyond the scope of this paper to undertake a thorough analysis of the assumptions underlying sexual assault research; however, one example can illustrate how assumptions set boundaries on that which is explored and explained.

Early theories examined rape from a male point of view and assumed that sexual assaults were perpetrated by a few deviant men whose sex drives compelled them to perform aberrant acts. Rape was studied as an aspect of sexual deviancy, and consequently much of the early research focused on sexual aspects of rapists' personality and behavior. Early work also focused on victim characteristics that "precipitated" the assault (Amir, 1971).

Feminist scholarship challenged the assumption that rape is largely an act of sexual deviancy, and instead insisted that sexual assault is better understood as an act of violence, supported by prevailing cultural attitudes that condone and normalize violence against women (Brownmiller, 1975). As feminist assumptions of sexual assault became adopted by sexual aggression researchers (see Donat & D'Emilio, this issue), a shift in research focus occurred. Cultural attitudes and rape myths (Burt, 1980), as well as dominance and power as motives for sexual assault (Ellis, 1989; Lisak & Roth, 1988; Malamuth, 1986; Palmer, 1988), became the focus of study. Similarly, the feminist assumption that sexual assault is a logical extension of cultural images of male sexuality and men's domination of women in a sexist society led to increased focus on "hidden" rape, i.e., sexually assaultive acts that do not come to the attention of the criminal justice system (Koss, 1988).

Although the feminist assumptions concerning sexual aggression illuminated facets of sexual assault that had previously been ignored (i.e., patriarchal values, the role of power, and dominance motives), exclusive adherence to such assumptions can result in an incomplete understanding of sexual violence. Feminist assumptions, for example, generally deemphasize the potential contribution that biologically driven sexual motives may play in the commitment of sexual assault (cf. , Palmer, 1988), a perspective currently receiving attention in the sociobiological literature (Ellis, 1991; Thornhill & Thornhill, 1990—see Langley & O'Neal, 1991, for a critique). Additionally, feminist ideology does not readily acknowledge the contribution of men's own childhood sexual victimization to their future commitment of sexually assaultive acts against women (Amir, 1971; Groth, 1979). Sexual assault researchers are

challenged to identify other assumptions underlying their work, to examine the implications of these assumptions, and to communicate these to their readers.

Conceptualizing Research on Sexual Aggression

The methods employed to test a question establish the domain of explanation (Garfinkel, 1981). For example, certain methods permit causal inferences; others do not. Some methodologies are geared toward identifying situational variables (e.g., antecedent and consequent stimuli) that may function to increase the likelihood that sexual aggression will occur, whereas others are concerned with the identification of stable structures or attributes (e.g., attitudes and personality characteristics) that covary with acts of sexual aggression. Methodologies that are designed to assess structural relations typically cannot be used to identify functional relations, and vice versa. Furthermore, methodologies that attempt to identify structural or functional relations do not adequately illuminate the phenomenology of sexual assault.

Relationships Among Methods

The structural analysis of research methods described below identifies distinguishing dimensions, and highlights each strategy's strengths and weaknesses. Three dimensions, described by Runkel and McGrath (1972), define eight basic research methods. A modified version of their typology is presented in Fig. 1. The circumplex figure displays the various research strategies, organized along axes that represent the following three dimensions: (a) controllability of research operations, which is maximized in laboratory experiments and experimental simulations; (b) manifest reality of behavior, which is maximized in field experiments and field studies; and (c) context independence of the data, which is

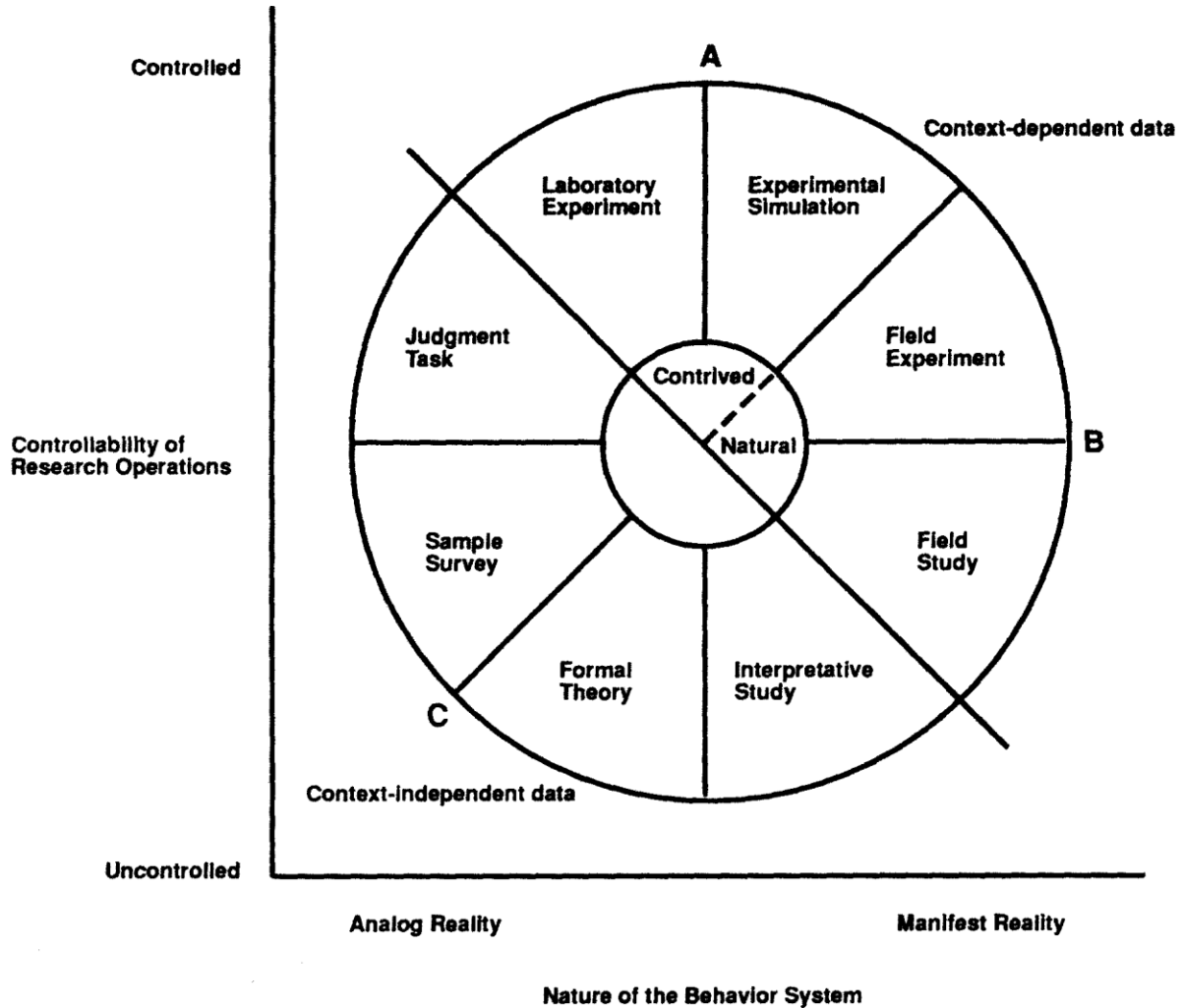


Fig. 1. Circumplex model of research strategies.

maximized through sample surveys and formal theory. The model also identifies the primary concern of each subset of strategies. Point A on the figure is the point of maximum concern with control and measurement. Point B is the point of maximum concern with ecological reliability and validity. Finally, point C is the point of maximum concern with generality across persons.

Dimension 1: Controllability of Research Operations

Studies concerned with precise measurement and control of behavior typically accomplish these goals through the creation of settings within which to observe behavior. A goal of such research is to draw causal inferences. Variables of primary interest are manipulated by the investigator, and their impact on target behaviors is assessed. The specific variables chosen for manipulation reflect an investigator's judgment of what is most important and will shape the nature of the interpretations subsequently made.

Laboratory studies, experimental simulations, and judgment tasks share

these goals, with their position on the other two dimensions marking their differences. These three methods can be contrasted by examining three different studies that tested hypotheses about variables affecting attitudes toward a rape victim.

Linz (1989) reviewed a number of laboratory experiments that examined the effects of sexually violent stimuli on sexual arousal, attitudes toward women, aggression toward women, and attributions of responsibility for a rape to the victim and the perpetrator. He concluded from his review that exposure to sexually violent stimuli consistently produced less sensitivity toward rape victims. In one such study, Donnerstein (1980) first had research participants observe one of three film types: neutral, with neither aggressive nor sexual content, sexually explicit with no accompanying aggression, or sexually explicit with accompanying aggression. After participants observed one of these films, they were allowed an opportunity to aggress against a female confederate. Results indicated that the mean shock intensity administered to the female confederate was no different in the neutral and sexually explicit conditions, but was significantly less than that in the sexually-explicit-with-aggression condition.

Whereas the characteristics of a laboratory study are more generic, abstract, or artificial, an experimental simulation is created to approximate some class of a naturally occurring behavior system (Runkel & McGrath, 1972). A study by Cann, Calhoun, and Selby (1979) highlighted the realistic context by having participants read purported newspaper accounts of rape (which were actually constructed by the experimenters). As a result of manipulating the type of information participants were given about the past sexual experiences of a rape survivor, these researchers found that respondents were inclined to assign to the rape victim greater responsibility for her rape if she refused to testify about her sexual history than if she did not refuse.

Unlike laboratory studies and experimental simulations, data collected in judgment tasks are not conceptually setting dependent. That is, the investigator assumes there will be no interactions between the stimuli being judged and extraneous, uncontrolled situational variables present in the environment in which judgments take place. However, this does not imply that a researcher using a judgment task is uninterested in context-dependent behavior. Rather, the physical location of the data collection is not a critical determinant of the results. For example, Goodchilds, Zellman, Johnson, and Giarusso (1988) developed vignettes in which several features of a hypothetical date rape were manipulated. After reading a scenario, research participants made judgments about the justifiability of the rape. Rape was viewed as more justifiable if the man paid for the date, the couple went to his house, the woman was dressed provocatively, or she led the man on or got him sexually excited.

Each of these latter two studies focused, for the most part, on features of the woman's character and/or behavior, but did not state explicitly the underlying assumptions that directed their attention to her rather than to the man or the situation. Calhoun and Townsley (1990) have noted that a focus on the woman's characteristics in such research implies that judgments of blameworthiness depend more on her than on the assailant.

Dimension 2: Manifest Reality of Behavior

In contrast to laboratory studies, experimental simulations, and judgment tasks, field experiments and field studies are maximally concerned with the systematic observation of behavior in real-

world systems. Behavior as it occurs in the context of day-to-day life is the focus of interest, rather than behavior produced in artificial situations or analog environments. Petrinovich (1979) has stressed the need to consider behavior within the natural system in which it occurs, noting that such systems contain the full range of ecological variables that contribute to the determination of behavior. For example, the features of a situation in which a woman is raped possess manifest reality; rape is a concrete action influenced by a variety of co-occurring features of the situation. On the other hand, level of shock, which has been used frequently as an operational definition of aggressive behavior in laboratory investigations of violence toward women, is an analog behavior produced in an artificial environment that lacks manifest reality. People do not generally deliver electric shock as a means of expressing aggression in real-life situations (although see Berkowitz & Donnerstein, 1982, for arguments supporting the external validity of analog measures of human aggression).

A field experiment typically involves unobtrusively exposing persons to one of several levels of an independent variable under conditions of random assignment. The differential impact resulting from exposure to this variable on some naturally occurring behavior is then assessed. For example, Malamuth and Check (1981) randomly assigned college students to attend one of two feature-length films shown on campus, and assessed attitudes toward women and violence after the film presentation. They found that viewing a sexually aggressive film resulted in greater acceptance of rape myths than did viewing a nonaggressive film.

In contrast to field experiments, a field study takes events as they happen; that is, there is no manipulation of variables nor random assignment to conditions. In an example of a field study, McCormick (1988) observed the nonverbal behaviors of women and men in bars to examine various dimensions of "sexual scripts" that govern male—female interactions. Based on her coding system, she concluded that, contrary to self-reports, women control the nature of interactions more than men during the early stages of interaction, especially through the use of deescalating behaviors (i.e., turning away, looking away).

However, bias in field research can result in spite of the "real" nature of the phenomena observed. Decisions about which behaviors to observe in which context, and how to code (i.e., label) the behaviors of interest, can lead to some features of the situation being overlooked or distorted while others are highlighted.

Dimension 3: Context Independence of the Data

According to the circumplex model, sample surveys and formal theory are the two research strategies most concerned with generalizability across situational domains. Although sample surveys deal with naturally occurring behavior, they are based on self-report (as opposed to direct observation), and questions are generally phrased with little regard for the specific situational context in which the behavior of interest took place (e.g., "Have you ever . . ." or "How many times . . ."). Rather, emphasis is placed on the characteristics of those sampled (e.g., rape survivors, rape perpetrators), and as a consequence, great care must be taken to sample the population of interest adequately in order to ensure generalizability across persons within the group studied (see Koss, this issue, for a discussion of biases associated with this method). Because of the decontextualization of behavior inherent in this approach, sample surveys are

placed, in the circumplex model, on the analog side of the dimension concerning the nature of the behavior system.

Survey approaches frequently are used to determine the prevalence and/or incidence of sexual assault. Data bases have been varied: police records, census data, representative national and local samples, and convenience samples. For example, Koss, Gidycz, and Wisniewski (1987) conducted a nationwide survey of college students. The resulting prevalence estimates suggested that approximately 53% of all college women have experienced some form of unwanted sexual contact, with over half of these women (27.5% of the total sample) being survivors of attempted or actual forced sexual intercourse. The data also indicated that 25.1 % of college men have engaged in various forms of unwanted sexual behavior with women, with almost a third of these men (7.7%) admitting to attempted or actual rape.

Using a local convenience sample, Muehlenhard and Linton (1987) reported findings from a survey of 635 students, which indicated that 77.6% of the women and 57.3% of the men had been involved in some form of sexual aggression in a dating situation. Based on the respondents' descriptions of actual dates, risk factors for sexual assault included miscommunications about sex, heavy alcohol and drug use, "parking," and the man's initiation of the date, payment of expenses, and driving. This survey also revealed that certain attitudes held by the men were risk factors: acceptance of traditional sex roles, tolerance of interpersonal violence, adversarial attitudes about relationships, and acceptance of rape myths (Burt, 1980).

Although formal theorizing is rarely perceived as a research strategy, Runkel and McGrath (1972) argued persuasively that it merits a recognized place among research strategies. It is in theorizing that we "rearrange existing information into new forms to make it more useful" (p. 84). That is, theorizing involves the deconstruction and reconstruction of existing conceptualizations, and is an integral part of the research enterprise (Hare-Mustin & Maracek, 1988). In theorizing, one can both critique the work of others and put forth one's own assumptions and interpretation of a phenomenon. For example, Hall and Hirschman (1991) critiqued unidimensional models of rape as well as sociobiological theories, and presented a quadripartite model of sexual aggression. Their multifactor model identified four subtypes of sexual aggressors, based on the aggressors' primary motivation for rape. The four motivational precursors identified were physiological sexual arousal, cognitive distortions that justify aggression toward women, affective dyscontrol, and personality problems.

The eighth major research strategy, interpretative study, is positioned between formal theory and field experiments. Like formal theory, interpretative studies impose the researcher's meaning onto the phenomenon, and like field studies, they are concerned with real behavior in context, specifically the phenomenological experience of the research participant. These strategies include case studies, interviews, and other methods that describe and understand the victim's or perpetrator's phenomenological experience. They share with field studies the goal of explaining behavior in context. But unlike formal theory, interpretative strategies acknowledge and explain from the perspective of the participant rather than from a detached, impersonal perspective. Examples include Warshaw's (1988) accounts of victims' experiences and Beneke's (1982) transcriptions from men talking about rape.

Matching Method to Question

The goals of all research are to understand, explain, and/or predict, though certain theoretical formulations define these terms synonymously (e.g., radical behaviorism) and others define them as different (e.g., humanistic psychology). Inherent in these goals are questions regarding the probability and possibility of events (Petrinovich, 1979). This section addresses the research strategies discussed above with regard to their ability to answer questions of possibility and probability.

The probability of a relationship refers to the degree of covariation or likelihood of co-occurrence between two or more factors. Probability is inherently a numerical concept and requires a quantitative approach. In contrast, the possibility of a relationship refers to whether or not a relationship could exist. Possibilities can be established via quantitative or qualitative approaches. For example, both quantitative methods (Malamuth & Ceniti, 1986; Malamuth, Feshbach, Fera, & Kunath, 1988) and qualitative methods (Russell, 1988) have implicated exposure to pornography as a contributing factor in the commitment of rape.

Possible relationships occur with varying degrees of probability. On one hand, possible relationships may be highly probable. For example, research has indicated that half of all children who were victims of rape or attempted rape are raped again as adults (Wisniewski, 1989). On the other hand, possible relationships may occur infrequently. For example, it is possible, but highly improbable, that a woman will report an acquaintance rape to the police (Feild & Beinen, 1980; Koss, 1988). One should, therefore, guard against the assumption that if a relationship is possible, it is also probable.

Koop's (1987) personal elaborations on the consensus statements reached during the Surgeon General's Workshop on Pornography and Public Health exemplify the problem of confusing probability and possibility. Koop (1987), after considering the consensus view that "pornography that portrays sexual aggression as pleasurable for the victim increases the acceptance of the use of coercion in sexual relations," stated:

I am certain that this kind of pornography is at the root of much of the rape that occurs today. Impressionable men—many of them still in adolescence—see this material and get the impression that women like to be hurt, to be humiliated, to be forced to do things they do not want to do It is a false and vicious stereotype that leads to much pain and even death for victimized women. (p. 945)

Although the workshop group reviewed research that demonstrated possible relations between violent pornography and behavioral and attitude change, they stated their conclusions in a causal fashion. Koop's conclusion confused two kinds of relationships—one dealing with the association between viewing violent pornography and modification in attitudes or analog behavior such as setting electric shocks, and the other dealing with the association between watching violent pornography and committing rape.

Strategies of Possibility

Field studies and interpretative studies suggest possible causal relations by observing the naturally occurring covariations of factors. These studies allow one to observe real people in real situations, from the participants' own perspective. For example, Warshaw's (1988) interviews

with victims of acquaintance rape suggest that their trust in the perpetrator prior to the assault contributed to his ability to get the victim into a vulnerable position, significantly lessening her ability to resist and escape. However, when using qualitative data, causal inferences are difficult, both due to the presence of a host of uncontrolled covarying factors, and to the post hoc nature of observations and personal accounts. The external validity of such data, on the other hand, is not compromised by artificiality and control.

Strategies of possibility also include laboratory experiments, field experiments, experimental simulations, and judgment tasks, in all of which an independent variable is varied systematically while other variables are controlled. These strategies (a) suggest the possibility that a particular stimulus condition, when present in the person's natural environment, may affect behavior in a way similar to that observed under controlled conditions; (b) show how relationships vary as a function of changes in the independent variable; and (c) reveal naturally occurring phenomena that might otherwise go unnoticed (Henshel, 1980). For example, Malamuth, Heim, and Feshbach (1980) found that written depictions of a rape in which the victim became sexually aroused resulted in greater sexual arousal in male and female readers than did depictions of rape in which the victim became physically ill. This relationship between victim feelings and observer arousal would have been difficult to detect with strategies other than laboratory investigation.

Weaknesses associated with strategies of possibility that are quantitative in nature arise from (a) the control of variables other than those being manipulated, (b) the artificialities associated with the experimental and procedural design, and (c) statistical necessities that result in the use of a small number of variables and cell sizes that may misrepresent actual group rates. Each of these points is discussed below.

Control over nonmanipulated variables is essential for quantitative possibility strategies if conclusions are to be drawn about the directionality of relationships among variables. Such control eliminates the possible confounding effects of extraneous variables on the variables of primary interest. One undesirable consequence of such control is "[the separation of] the variables controlling behavior from the fabric in which they are embedded" (Petrinovich, 1979, p. 375). Left unaddressed in such approaches is the pattern of relationships that the independent variable has with controlled variables that, if present in the natural environment, would be likely to influence behavior. For example, it is likely that the association found in the laboratory between exposure to sexually aggressive pornography and behavioral aggression against individuals is more robust than may actually be the case in naturally occurring environments (see Postman, 1955, for a discussion of the robustness of experimentally manipulated variables). This is likely because variables that function to inhibit acts of aggression in day-to-day life are commonly eliminated through experimental control, and this may result in the potentially misleading appearance of a strong association between these two variables. Studies of possibility can only suggest the potential that a given individual, when confronted with similar stimulus conditions in the natural environment, may react in a manner similar to that observed in the laboratory.

Necessities of experimental procedure often result in the imposition of other artificialities that would not be found in natural environments. Because statistical

analyses can handle only a relatively small number of levels of a given independent variable, findings are necessarily limited in their generalizability across the entire range of values that naturally occur (Petrinovich, 1979; Postman, 1955). Similarly, dependent variables in experimental studies must be easily quantifiable and preferably observable (Petrinovich, 1979), and this often results in the selection of behaviors or behavior patterns that are infrequent or not naturally occurring (e.g., administering shock to another person as a measure of aggression) or the simplification of complex processes (e.g., the verbal report of emotional experiences).

Strategies of possibility also frequently employ procedures in which cell sizes are made equal, as in factorial designs, for example. Requiring that cells be of equal size may greatly distort the actual base rate of cell membership as it occurs in natural environments, and this may lead to problems when attempting to interpret significant effects, particularly when interactions are observed. As Petrinovich (1979) pointed out, the significance of such interactions can be severely exaggerated relative to their significance in the natural environment. Petrinovich noted that, in order to generalize findings to related natural environments, cell sizes should be represented proportionately to their frequencies in situations to which the experimenter wishes to generalize. In turn, however, unequal cell frequencies will result in the independent variables becoming correlated, necessitating the use of alternative data analytic strategies such as multiple regression. Finally, the effect of being observed, particularly by someone with the implied status of a psychological researcher, can influence behavior in a manner quite different from what would occur in the absence of such observations (e.g., Henshel, 1980).

Strategies of Probability

Strategies of probability include correlational and survey sampling approaches that attempt to elucidate relationships among variables or behaviors as they occur under natural conditions (Petrinovich, 1973; Postman, 1955). These strategies (a) allow for the observation and organization of highly complex naturally occurring phenomena, and (b) take into account the associations among several variables. For example, factor analytic procedures identify the dimensionality of complex phenomena. In one application of factor analysis, Feild (1978) identified eight dimensions underlying attitudes toward rape. A number of variables such as gender, race, and marital status were then correlated with each of the factors in order to determine the magnitude of relationships between rape attitudes and various demographic characteristics of the respondents. Among his findings, Feild (1978) reported that men were more likely than women to endorse the belief that it is a woman's responsibility to prevent rape.

Because strategies of probability are concerned with the relationships among phenomena as they naturally occur, they cannot maintain control over extraneous variables that have the potential for interacting or covarying with those that are of primary concern (Postman, 1955). For example, given the retrospective nature of many survey studies of sexual behavior (e.g., Koss et al., 1987; Muehlenhard & Linton, 1987), whether or not attitudes and values are causes, consequences, or merely surface manifestations suppressing primary contributing factors cannot be determined. It may be that adversarial attitudes help produce sexual assaults or, on the other hand, that having once engaged in a sexually assaultive encounter, men and women develop adversarial attitudes toward male—female relationships. Only a longitudinal investigation can reveal the direction of relationship between such attitudes and behavior.

Since there is a potential for interaction or covariation among several non-controlled variables, the investigator who uses strategies of probability must be concerned about the representativeness of the sample in relation to the population to which the research findings will be generalized. Also, since generalizations with such strategies usually occur at the group or variable level, one cannot state with certainty anything specific about a given individual within that population.

Toward a Synthesis: A Multiple-Strategies Approach

Many researchers develop a preference for one methodological approach to research over another, the consequence of which may be a misleading or one-sided representation of reality. Often a researcher's preference is reduced to a choice between experimental and naturalistic approaches. Analysis of variance is frequently the preferred statistical tool for the former, while correlational analyses are typical for the latter. In studies of sexual aggression, correlational approaches may encourage one to think about sexual aggression in terms of stable characteristics of victims and assailants. In these approaches the person is the focus of study. On the other hand, experimental approaches may encourage one to think about victim or assailant behavior as being malleable and under the influence of environmental contingencies. Here the situation is generally the focus of study. As Bowers (1973) observed,

it is easier to notice behavior change with the experimental method, and behavioral stability with correlational techniques. Thus both methods move our minds to differing perceptions of reality. What a preferred method does not readily see can become less and less important to our conceptualizations of the phenomena; what a method sees easily sometimes becomes the sole basis of our understanding. (p. 317)

The circumplex typology of research strategies clarifies the circumstances under which experimental and naturalistic approaches are most appropriate. It also illuminates the critical dimensions that underlie various research strategies, and highlights their complementary strengths and weaknesses. Finally, the model provides guidance regarding the most appropriate strategies for quantitative and qualitative data. With quantitative data one assumes that empirical relations exist, can be described by numerical relations, and can be examined by algebraic manipulations of numbers. To ensure statistical reliability, one studies many cases, frequently in a highly delimited fashion. Research designs that emphasize control and examine the influence of specific features of the situation are well suited for studying quantitative phenomena, as are designs that assess the covariations of attributes. On the other hand, qualitative research methods do not rest on the assumption that the attributes studied have an underlying quantitative structure that can be measured. An interest in qualitative phenomena usually demands in-depth, comprehensive investigations of a small number of cases. Research designs that emphasize manifest reality and uncontrolled research operations are best suited for qualitative questions.

From the above discussion of the circumplex research typology, the difference between questions of possibility and probability, and the issue of quantitative and qualitative phenomena, the conclusion emerges that a multiple-strategies approach is the best means of achieving a greater understanding of sexual assault. Katzer, Cook, and Crouch (1991) note that the various methods for acquiring knowledge are not absolute in their precision; each is subject to various forms of error. The use of several different methods allows the researcher to "cross-check"

observations; what is observed with one methodology may not be seen reliably when using other methodologies and may simply be a methodological artifact. Conversely, what one method cannot detect readily, another method may reveal. Certain research topics (e.g., the quality of emotional experience of an assault victim) do not lend themselves readily to investigation by quantitative research methods, and are better understood through the use of interpretative methodologies.

Finally, a multiple-strategies approach is a necessary condition for a thorough understanding of sexual assault, but it is not sufficient. Without an examination and critique of fundamental assumptions of sexual assault and victimization, both those that prevail in society and those that guide the individual researcher, the value of a multiple-strategies approach can be undermined. Consequently, researchers are challenged to engage in the self-reflexive process of identifying and critiquing two broad, overlapping classes of assumptions that guide their research: (a) meta-theoretical assumptions that guide the choice of research questions, provide a framework for how the research question is asked and investigated, and guide the interpretation of research findings; and (b) specific assumptions that are tied directly to substantive theories and methods.

References

- Amir, M. (1971). *Patterns in forcible rape*. Chicago: University of Chicago Press.
- Beneke, T. (1982). *Men who rape*. New York: St. Martin's Press.
- Berkowitz, L., & Donnerstein, E. (1982). External validity is more than skin deep. *American Psychologist*, 37, 245-257.
- Bowers, K. (1973). Situationism in psychology: An analysis and critique. *Psychological Review*, 80, 307-336.
- Brownmiller, S. (1975). *Against our will: Men, women, and rape*. New York: Simon & Schuster.
- Burt, M. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology*, 38, 217-230.
- Calhoun, K. S., & Townsley, R. M. (1990). Attributions of responsibility for acquaintance rape. In A. Parrot & L. Bechhofer (Eds.), *Acquaintance rape: The hidden crime* (pp. 57-70). New York: Wiley.
- Cann, A., Calhoun, L. G., & Selby, J. W. (1979). Attributing responsibility to the victim of rape: Influence of information regarding past sexual experience. *Human Relations*, 12, 57-67.
- Donnerstein, E. (1980). Aggressive erotica and violence against women. *Journal of Personality and Social Psychology*, 39, 269-277.
- Ellis, L. (1989). *Theories of rape: Inquiries into the causes of sexual aggression*. New York: Hemisphere.
- Ellis, L. (1991). A synthesized (biosocial) theory of rape. *Journal of Consulting and Clinical Psychology*, 59, 631-642.
- Feild, H. S. (1978). Attitudes toward rape: A comparative analysis of police, rapists, crisis counselors, and citizens. *Journal of Personality and Social Psychology*, 36, 156-179.
- Feild, H. S., & Bienen, L. B. (1980). *Jurors and rape: A study in psychology and law*. Lexington, MA: Heath.
- Garfinkel, A. (1981). *Forms of explanation*. New Haven, CT: Yale University Press.
- Goodchilds, J., Zellman, G., Johnson, P., & Giarusso, R. (1988). Adolescents and their perceptions of sexual interactions. In A. W. Burgess (Ed.), *Rape and sexual assault* (Vol. 2, pp. 245-270). New York: Garland.
- Groth, A. N. (1979). Sexual trauma in the life histories of rapists and child molesters. *Victimology*, 4, 10-16.

- Hall, G. C. N., & Hirschman, R. (1991). Toward a theory of sexual aggression: A quadripartite model. *Journal of Consulting and Clinical Psychology, 59*, 662-669.
- Hare-Mustin, R., & Marecek, J. (1988). The meaning of difference: Gender theory, postmodernism, and psychology. *American Psychologist, 43*, 455-464.
- Henshel, R. L. (1980). The purposes of laboratory experimentation and the virtues of deliberate artificiality. *Journal of Experimental Social Psychology, 16*, 466-478.
- Katzer, J., Cook, K. H., & Crouch, W. W. (1991). *Evaluating information: A guide for users of social science research*. New York: Hill.
- Koop, C. E. (1987). Report of the Surgeon General's workshop on pornography and public health. *American Psychologist, 42*, 944-945.
- Koss, M. P. (1988). Hidden rape: Sexual aggression and victimization in a national sample of students in higher education. In A. W. Burgess (Ed.), *Rape and sexual assault* (Vol. 2, pp. 3-25). New York: Garland.
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology, 55*, 162-170.
- Linz, D. (1989). Exposure to sexually explicit materials and attitudes toward rape: A comparison of study results. *Journal of Sex Research, 26*, 50-84.
- Lisak, D., & Roth, S. (1988). Motivational factors in nonincarcerated sexually aggressive men. *Journal of Personality and Social Psychology, 55*, 795-802.
- Malamuth, N. M. (1986). Predictors of naturalistic sexual aggression. *Journal of Personality and Social Psychology, 50*, 953-962.
- Malamuth, N. M., & Ceniti, J. (1986). Repeated exposure to violent and non-violent pornography; Likelihood of raping ratings and laboratory aggression against women. *Aggressive Behavior, 12*, 129-137.
- Malamuth, N. M., & Check, J. V. P. (1981). The effects of mass media exposure on acceptance of violence against women: A field experiment. *Journal of Research Personality, 15*, 436-446.
- Malamuth, N. M., Feshbach, S., Fera, T., & Kunath, J. (1988). Aggressive cues and sexual arousal to erotica. In G. W. Russell (Ed.), *Violence in intimate relationships* (pp. 239-251). New York: PMA Publishing.
- Malamuth, N. M., Heim, M., & Feshbach, S. (1980). Sexual responsiveness of college students to rape depictions: Inhibitory and disinhibitory effects. *Journal of Personality and Social Psychology, 38*, 399-408.
- McCormick, N. (1988, May). *Flirtation and seduction*. Paper presented at Nags Head Interdisciplinary Conference on Sex and Gender, Nags Head, NC.
- Muehlenhard, C. L., & Linton, M. A. (1987). Date rape and sexual aggression in dating situations: Incidence and risk factors. *Journal of Counseling Psychology, 34*, 186-196.
- Palmer, C. T. (1988). Twelve reasons why rape is not sexually motivated: A skeptical examination. *Journal of Sex Research, 25*, 512-530.
- Petrinovich, L. (1973). Darwin and the representative expression of reality. In P. Ekman (Ed.), *Darwin and facial expression: A century of research in review* (pp. 223-256). New York: Academic Press.
- Petrinovich, L. (1979). Probabilistic functionalism: A conception of research method. *American Psychologist, 34*, 373-390.
- Postman, L. (1955). The probability approach and nomothetic theory. *Psychological Review, 62*, 218-225.
- Runkel, P. J., & McGrath, J. E. (1972). *Research on human behavior*. New York: Holt, Rinehart & Winston.
- Russell, D. E. H. (1988). Pornography and rape: A causal model. *Political Psychology, 9*, 41-73.
- Thornhill, N. W., & Thornhill, R. (1990). An evolutionary analysis of psychological pain following

- rape. III: Effects of force and violence. *Aggressive Behavior*, 16, 297-320.
- Warshaw, R. (1988). *I never called it rape: The Ms. report on recognizing, fighting, and surviving date and acquaintance rape*. New York: Harper & Row.
- Weiskopf, V. (1977). The frontiers and limits of science. *American Scientist*, 65, 405-411.
- Wilcox, B. (1987). Pornography, social science, and politics: When research and ideology collide. *American Psychologist*, 42, 941-943.
- Wisniewski, N. M. (1989). *A path analytic model of the after-effects of childhood sexual victimization*. Unpublished doctoral dissertation, Kent State University.
- Wittig, M. A. (1985). Metatheoretical dilemmas in the psychology of gender. *American Psychologist*, 40, 800-811.