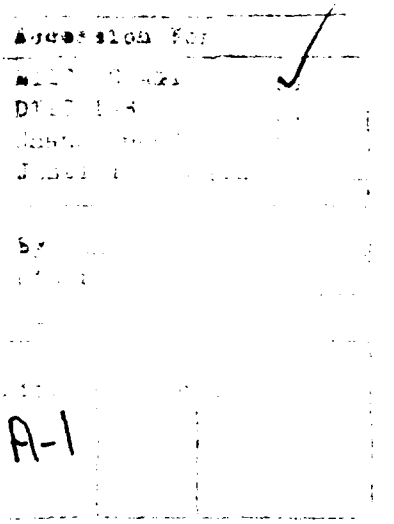

THE INVESTIGATIVE INTERVIEW:

A REVIEW OF PRACTICE AND RELATED RESEARCH

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This study examined current practice and research related to the investigative interview. A framework for examining the interviewing process was developed. Site visits were conducted to five government agencies and several industrial organizations were surveyed to identify current investigative interviewing practices. Existing research suggested that the investigative interview is a highly useful background investigation method. Related research from the employment interviewing, survey research, interrogation, general interviewing, and detection of deception literatures was also reviewed. Based on these findings, a scenario for conducting investigative interviews was developed. Finally, recommendations were made for research studies to evaluate the effectiveness of investigative interviewing procedures.

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THE INVESTIGATIVE INTERVIEW:

A REVIEW OF PRACTICE AND RELATED RESEARCH

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One of the major goals of the PERSEREC research program is to improve the process of performing personnel security background investigations. A major component in these investigations is the conduct of an investigative interview.

This first PERSEREC sponsored report on this topic documents current practice and research related to the investigative interview within five government agencies. The appropriateness to the investigative context of procedures used in employment interviewing, survey research, interrogation, general interviewing, and detection of deception is also reviewed. In conclusion, the report presents a scenario for conducting investigative interviews and recommendations for research to evaluate the effectiveness of investigative interviewing procedures.

This report will serve as a foundation for future work in the area of investigative interviewing, and from which ideas for research and operational practice may be derived.

Carson K. Eoyang
Director

THE INVESTIGATIVE INTERVIEW: A REVIEW OF PRACTICE AND RELATED RESEARCH

SUMMARY

Problem and Background

An important element in safeguarding national security is maintaining personnel security. Each year thousands of individuals are assigned to jobs that provide them with access to extremely sensitive or classified information that could adversely affect national security. The Interview Oriented Background Investigation (IBI) is the primary method for screening personnel for positions requiring a Top Secret clearance. This method relies principally on obtaining information from an interview with the subject. Supplementary information is gathered through local agency checks, national agency checks, credit checks, self-report background questionnaires, interviews with character and employment references, and if necessary, interviews with others. This information is evaluated against various administrative criteria by adjudicators. Although the IBI and other interview-oriented background investigations are used extensively, relatively little is known about their effectiveness.

Objectives

The primary objectives of this study were to: systematically describe investigative interview methods currently used by government and industry; identify and describe related interview procedures that could be adapted to the investigative interview; develop a framework for describing various interviewing procedures; review empirical and conceptual research related to the investigative interview; and develop a scenario of an effective investigative interview. This information was used as a basis to provide recommendations for research studies to evaluate and to improve the effectiveness of investigative interviewing procedures.

Approach

Information on government investigative interview practices was obtained by contacting and meeting with representatives of various Federal agencies (e.g., Defense Investigative Service, Office of Personnel Management). Additionally, a telephone survey was conducted to contact and interview sources on private industry practices. A review of the scientific and practitioner literatures on interviewing research and current investigative interviewing practices was undertaken to identify empirical and descriptive studies related to the investigative interview. These search activities included: conducting numerous computerized searches using data bases of relevant scientific and practitioner literatures; contacting leading interview researchers; contacting companies who train interviewers, interrogators or who publish integrity tests; and contacting organizations who frequently use investigative interview information.

Results/Discussion

A model of the important variables of interview research was developed to guide the integration and interpretation of the results of the

literature reviews and site visits. This model consists of four components--research on the measurement context (i.e., base rate, selection ratio, utility), the interview process and methods, the interviewer, and the interviewee. The model was used to organize and classify the information gathered.

The Investigative Interview: Existing Practice

The first step in information gathering was to interview representatives of organizations that regularly conduct investigative interviews. Site visits were made to five government organizations: the Defense Investigative Service (DIS), the Office of Personnel Management (OPM), the Federal Bureau of Investigation (FBI), the Central Intelligence Agency (CIA), and the Defense Intelligence Agency (DIA). These interviews and the materials received from the organizations indicated that there are remarkable similarities between the organizations in their investigative interviewing procedures, although several important differences exist as well.

The preparation, conduct, and structure of the interview are generally similar for each of the agencies. The investigator usually prepares by reviewing available background information for missing, discrepant, and issue-oriented information. The guidelines for investigator conduct, which are similar across agencies, include acting in a professional manner, dressing in a businesslike manner, and being courteous, respectful, and nonjudgmental.

The interviewer begins by introducing him or herself, positively identifying the subject, and showing credentials. Following the introduction, the investigator generally reviews the subject's background history form, questions the subject about specific items, especially items that have been identified as omitted or discrepant during the preparation phase. Then questions are directed to specific topic areas. In most agencies, a standard list of topics is covered. These topics include education, employment, residences, alcohol, drugs, mental treatment, moral behavior, family and associates, foreign connections, foreign travel, financial responsibility, organizations, loyalty, criminal history, handling information, and trust. While questioning proceeds, investigators look for possible verbal and nonverbal cues to deception on the part of the interviewee. Most of these indicators are based on patterns of various verbal, paralinguistic (i.e., pauses, intonation), and nonverbal (body gestures, facial expression) indicators. Notes are only minimally taken. In all agencies, investigators obtain the interview information but adjudicators make the clearance decisions.

As mentioned, there are differences between the agencies in their practices. DIS and OPM conduct both subject and non-subject interviews. DIA primarily conducts subject interviews. The FBI and CIA primarily conduct non-subject interviews. There are also differences in the sources that are used. Non-subject sources interviewed by OPM, CIA, and FBI often include neighbors, in contrast to DIS.

In terms of coverage, the OPM interview is probably the most comprehensive. Although the topic areas are generally structured, only DIS emphasizes use of a structured set of questions for each topic. DIS

investigators typically ask four to seven short, direct questions regarding a subject area, followed by summarizing questions. Other agencies use more open-ended questions, followed with summary or verification questions.

Investigator performance is appraised using different techniques by these agencies. Most agencies rely on evaluations of the interviewer's investigations through objective casework indicators (e.g., number of cases, number of leads obtained) and/or supervisory evaluations. DIS has the most extensive interviewer appraisal procedure.

The most important characteristic of investigators according to officials at the agencies visited is communication skills.

Investigator attrition is generally low in the agencies visited. Only one agency (DIA) indicated that interviewer burnout was a problem.

Related Interview Methods: Existing Practice

The next area of this research involved obtaining descriptions of interviewing procedures related to the investigative interview. These included investigative interviews in industrial firms, criminal interrogations, legal depositions, and employment interviews. The information gathered on these interview types was based on applied interviewing practices rather than research.

These four interview types provide a rich source of information on interviewing techniques. The results of reviewing these four interview types indicated that there are several important differences in these interviews that are important for understanding how the effects of interview procedures might generalize from one context to another. These differences can be characterized in terms of the following six dimensions: purpose, who talks most, the interview focus (facts, behaviors, etc.), motivational set of the interview, the type of content (positive or negative) requested from the interviewee, and the source of interviewer information (verbal, nonverbal, both). Probably the most significant of these differences for generalizing to the investigative interview are motivational approach and type of content considered.

The Investigative Interview: Empirical Research

The limited empirical research on investigative interviews suggested that they are useful personnel security screening devices. A study by DIS (1981) found that the subject interview obtains derogatory information not found by traditional background investigation procedures. A survey by the Director of the Central Intelligence (1980) reported that the subject interview was the second most effective method (next to the polygraph) in identifying issue-oriented information. Jayne (1988) found that subject interviews provide as much derogatory information as a polygraph examination. Barke, Gerstein, and Johnson (1987) and Gerstein, Barke, and Johnson (1987) found a short, prerecorded telephone interview (the Integrity Interview) showed modest correlations with polygraph ratings and subsequent employee theft. Finally, in a review of military personnel security research, Flyer (1986) found the subject interview was a valuable data collection method.

The Interview Method of Data Collection: Empirical Research

In the next phase of this research project, the scientific literatures for the employment interview and for survey research were reviewed. The results of this review can be organized by the four categories of the interview model proposed earlier--measurement context, interview process, interviewer, and interviewee.

The research reviewed indicated that substantial progress has been made in improving the psychometric properties of the employment interview. These improvements are apparently the result of basing interview questions upon a job analysis, asking the same questions of each candidate, recording interview information on a standardized rating form, providing interviewers with feedback, and making them accountable for their ratings.

Research on the interview process indicated that interviews should be conducted in private, that telephone interviews often produce results as effective as in-person interviews and at a lower cost, and that notes should be taken. Research on interviewing techniques were organized into four types--motivation, questioning, listening, and observing. The research on interviewing techniques suggested that interviewers should secure a commitment from interviewees for complete and accurate answers. Questions should be clear, well structured and pre-tested. Active listening techniques such as echoing or restating questions, smiling, and nodding the head, can be used to encourage interviewee elaboration of responses. The research on observation techniques indicated that interviewers were better at inferring information on social skills than for motivational level.

The key characteristics for interviewer success were found to be personableness, cognitive ability, and verbal fluency. Finally, the interviewee's verbal behavior (vs. nonverbal behavior) was found to be important in interviewer decisions.

Several limitations in the ability to generalize these findings to the investigative interview were noted. Among these were differences in the dependent variables studied, differences in the constructs assessed by the interview, differences in base rates of the behavior to be predicted, and differences in the interviewee motivational set.

Detection of Deception

In the next section of the report, four techniques that are commonly used in detecting deception--non-subject interviews, verbal and nonverbal indicators of deception, the polygraph, and paper-and-pencil "honesty" tests--were reviewed.

Research on non-subject interviews suggested that such interviews can be useful, especially when the sources are familiar with the subject. Practitioners suggest that some sources (e.g., employers) are better than others (e.g., listed references), although little empirical research has examined this issue.

The review of the detection of deception literature suggested that certain verbal cues (e.g., plausibility of the content, vague responses)

are better indicators of deception than nonverbal cues (e.g., paralinguistic, body gestures, facial expressions). The pattern of cues, rather than individual cues, provide the best indications of deception. There also appears to be a fairly general ability to lie successfully, and certain individual differences variables are related to skill at deception. Other research suggests that humans can detect deception at better than chance levels, but not much better. Familiarity with the subject, individual differences variables (e.g., social participation, self-monitoring), and training are some of the variables that have been found to improve the ability to detect deception.

Research on the polygraph suggested that persuading subjects that deception will be detected may be an important factor in minimizing deception. Few comparative studies have been performed which examine the effectiveness of different polygraph questioning techniques.

Finally, paper-and-pencil honesty tests have shown relatively high validities, although several limitations exist with this research.

Interviewer Training and Burnout

Interviewer training and interviewer burnout are two topics that are related to interviewer performance. Current practice and recent research on these two topics of special interest were reviewed.

Results of the site visits to the five government agencies mentioned earlier indicated that training activities are similar. All cover the various aspects of the investigation process, interviewing methods, and nonverbal communication. In addition, all of these agencies include both classroom and some type of exercise based training (usually videotapes and/or role playing). The on-the-job training programs are more varied, even within an agency. Most of the on-the-job training programs involve working with experienced investigators for a period of time, with the time period varying according to the field office.

Research on interviewer training suggests that training is useful for reducing rating errors and improving accuracy. The key variables for training success included trainee involvement, practice, and feedback. However, little research was found to indicate what other types of training content are important for interviewers to have.

The research on burnout provided several recommendations for preventive measures. These include providing a supportive and participative work climate, making use of workplace mentors, limiting rigid adherence to policies and procedures, and taking measures to identify and treat employee burnout in its early stages.

Conclusions and Recommendations

The search for empirical research on investigative interview procedures produced few studies. The extensive review of scientific research and organizational practice on related interviewing procedures did provide a rich source of ideas for investigative interviewing practice.

A detailed scenario was developed based on existing practice and research on how an expert interviewer might perform his/her duties. The scenario provides a description and rationale for the major steps in conducting both subject and non-subject investigative interviews. Included are descriptions of required interviewer characteristics, interviewing procedures (e.g., motivation, questioning, listening, and observation techniques), the interview process (e.g. preparation, interview setting, introduction, review of background forms, issue development, note taking, and conclusion of the interview). The scenario concludes with additional ideas for improving the effectiveness of the investigative interview process (e.g., using telephone interviews, supplementing the interview with other selection devices). However, many of these ideas have not been evaluated.

The review of the scientific and practitioner literatures produced a wealth of research proposals for evaluating and improving the investigative interview. Thirty-eight research recommendations are made. These recommendations are organized into six themes of investigation. They include: development of the performance criteria for personnel security and for interviewer performance; development and evaluation of the predictors--both interview content and alternate or supplementary measures; evaluation of the utility of background investigation methods; discovery and description of the personal characteristics, behaviors and processes of effective interviewers; evaluation of the effectiveness of interview procedures; and assessment of interviewer training programs.

In summary, although the interview has been extensively studied as a method of gathering information, little research is available regarding the investigative interview. Given the numerous limitations in generalizing interview research from other contexts to the background investigation context, the need for research on investigative interviews is compelling.

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CHAPTER 1. INTRODUCTION

Problem and Background

Safeguarding national security is one of this country's most important priorities. Perhaps the most important element in the national security process is personnel security--the suitability of personnel entrusted with sensitive or classified information. Each year thousands of individuals are assignec to jobs that provide them with access to extremely sensitive or classified information that could adversely affect national security. A recent report by the United States House of Representatives Permanent Select Committee on Intelligence (United States Counterintelligence and Security Concerns, 1987) indicated that approximately 200,000 requests were made for Top Secret clearances in 1984.

The Interview Oriented Background Investigation (IBI) is the primary method for screening personnel for positions requiring a Top Secret clearance. The IBI relies principally on obtaining information from an interview with the subject about several aspects of the subject's background. In addition to the subject interview, the IBI obtains information about the subject through local agency checks, national agency checks, credit checks, self-report background questionnaires, interviews with character and employment references, and if necessary, interviews with others. Information collected during the background investigation is then assembled and evaluated against various administrative criteria by senior adjudicators.

Although IBI and other interview-oriented background investigations are used extensively in government and industry settings, relatively little is known regarding their effectiveness. In their evaluation of security practices and procedures in the Department of Defense, the Stilwell Commission (Keeping the Nations Secrets, 1985) noted the lack of behavioral science research on the efficacy of information obtained in the personnel security background investigations and recommended research directed toward improving the effectiveness of background investigations and subject interviews. Recently, PERSEREC has studied the prescreening procedures used for sensitive military positions. Flyer (1986) has summarized much of the early military personnel security screening research.

Objectives

The primary objectives of this study were to: (a) develop a framework for describing various interviewing procedures and identify the location of the investigative interview within that framework, (b) summarize information on existing investigative interviewing techniques from government and industrial organizations, (c) review empirical and conceptual research related to the investigative interview, (d) develop guidelines for conducting effective investigation interviews, and (e) provide recommendations for research studies to evaluate the effectiveness of investigative interviewing procedures.

Organization of the Report

This report is organized into nine chapters. The remainder of this chapter presents a framework for examining the interviewing process and describes the search procedures used for identifying relevant literature. Chapter Two describes the investigative interviewing procedures used by five government agencies. Chapter Three describes the investigative interview procedures followed by selected industrial organizations, along with interviewing procedures related to the investigative interview. Chapter Four describes results of empirical studies that have examined the usefulness of the investigative interview. Chapter Five summarizes relevant research and theory related to the interviewing framework described below. Chapter Six reviews selected research on the detection of deception and discusses how some of these procedures might be incorporated into the investigative interview. Chapter Seven reviews literature on two important issues related to investigative interviewer effectiveness, interview training programs and work burnout. Chapter Eight presents guidelines for conducting investigative interviews based on existing practice and research. Finally, Chapter Nine provides recommendations for research studies to improve the efficiency and effectiveness of investigative interviewing procedures.

A Conceptual Framework of Interview Methods

The scientific literature concerning the interview is very diverse, reflecting the wide variety of purposes, methods, and settings to which this method of data collection is employed. This diversity is reflected in the listing of interview types provided in Table 1. For example, there are literatures on employment interviews, criminal interrogation interviews, criminal investigative interviews, and the background investigative interview with which this study is concerned. Each of these categories reflects a specific purpose for the data collected: making decisions on employment qualifications, obtaining previously undisclosed information, determining the facts of a crime, and determining qualifications for a position of trust. Within each of these categories of purposes, there are a variety of methods and techniques used. For example, stress interviews, realistic job previews, and the behavior patterned interview represent only a few of the types of interviews that are utilized in the employment setting.

In this section, we will present a conceptual framework for examining issues relating to the interview as a general method of data collection, across purposes and settings. There are four objectives for doing this: (1) to organize the diverse content of the scientific literature relevant to interviews, (2) to interpret the empirical and anecdotal evidence for the effects of specific techniques on the interview process, (3) to distinguish the investigative interview from other interview methods, and (4) to integrate the relevant research and to suggest needs for future research.

Table 1

Types of Interviews
(from Stewart and Cash, 1982)

1. Information giving
   a. Orientation
   b. Training, instruction, coaching
   c. Job-related instructions

2. Information gathering
   a. Surveys and polls
   b. Exit interviews
   c. Research interviews
   d. Investigations: insurance, police, etc.
   e. Medical: psychological, psychiatric, caseworker
   f. Journalistic

3. Selection
   a. Screening and hiring
   b. Determination
   c. Placement (internal)

4. Problems of interviewee's behavior
   a. Appraisal, evaluative, review
   b. Separation, firing
   c. Correction, discipline, reprimand
   d. Counseling

5. Problems of interviewer's behavior
   a. Receiving complaints
   b. Grievances
   c. Receiving suggestions or answering specialized questions

6. Problem solving
   a. Objective (mutually shared problems)
   b. Receiving suggestions for solutions (especially to problems covering a large group of people)

7. Persuasion
   a. Selling of products
   b. Selling of services
   c. Quasi-commercial selling

To accomplish these objectives we will present a content model of the major classes of variables studied in interview research. This model provides an organizing framework for identifying and describing what variables affect interview effectiveness. As such the "contents" of this model are the variables of interview methods (e.g., format, structure, question characteristics) that have been studied, not the psychological constructs (e.g., reliability, intelligence) that have been assessed using the interview as a method of data collection. To keep this distinction clear, in this report we will refer to the variables studied as procedural content and the psychological constructs as substantive content. Typically, this research has been conducted at an aggregate level of analysis (i.e., data analyses conducted across subjects within sub-groups such as race or sex).

This model will be employed to achieve the first objective, organizing the relevant literature. It will also serve as the organizing framework for the review of the descriptive and empirical literatures that are relevant to the investigative interview. Since most of the literature is only indirectly related to investigative interviews, this model will be used to guide our application of this research to investigative interviews. In a later section, we will use this model to summarize the empirical and anecdotal evidence and to suggest needs for future research.

Interview Research Variables: A Content Model

The scientific literature on interviews in general and the employment interview in particular have covered seven major content areas: (1) the context of measurement, including organizational variables or conditions (e.g., base rate, selection ratio); (2) the psychological characteristics of the interviewer; (3) the psychological characteristics of the interviewee; (4) characteristics of the interview process (e.g., format, structure, question characteristics) that impact interview effectiveness; (5) the criteria to be predicted; (6) the predictor constructs examined in the interview; and, (7) the methods for data combination and decision making.

The emphases of this report are on topics 1 through 4. These four content areas of interview research are represented in Figure 1, which is an adaptation of a model provided by Arvey and Campion (1982). Each of these content areas and the sub-topics contained within them represent major classes of variables that have been studied for their effect on interview outcomes. The variables are rationally grouped and organized to provide useful conceptual categories for interpreting the research results.

Current research does not permit empirically based taxonomies or strong causal hypotheses about the relations between these categories. As Arvey and Campion (1982, p. 282) point out, "we simply do not have sufficient knowledge, even after 60 years or so of research, to accurately pinpoint causal relationships between these variables at the present time". Their comment was directed at research on the employment interview, perhaps the most commonly researched interview context. It is certainly even more true for investigative interviews.

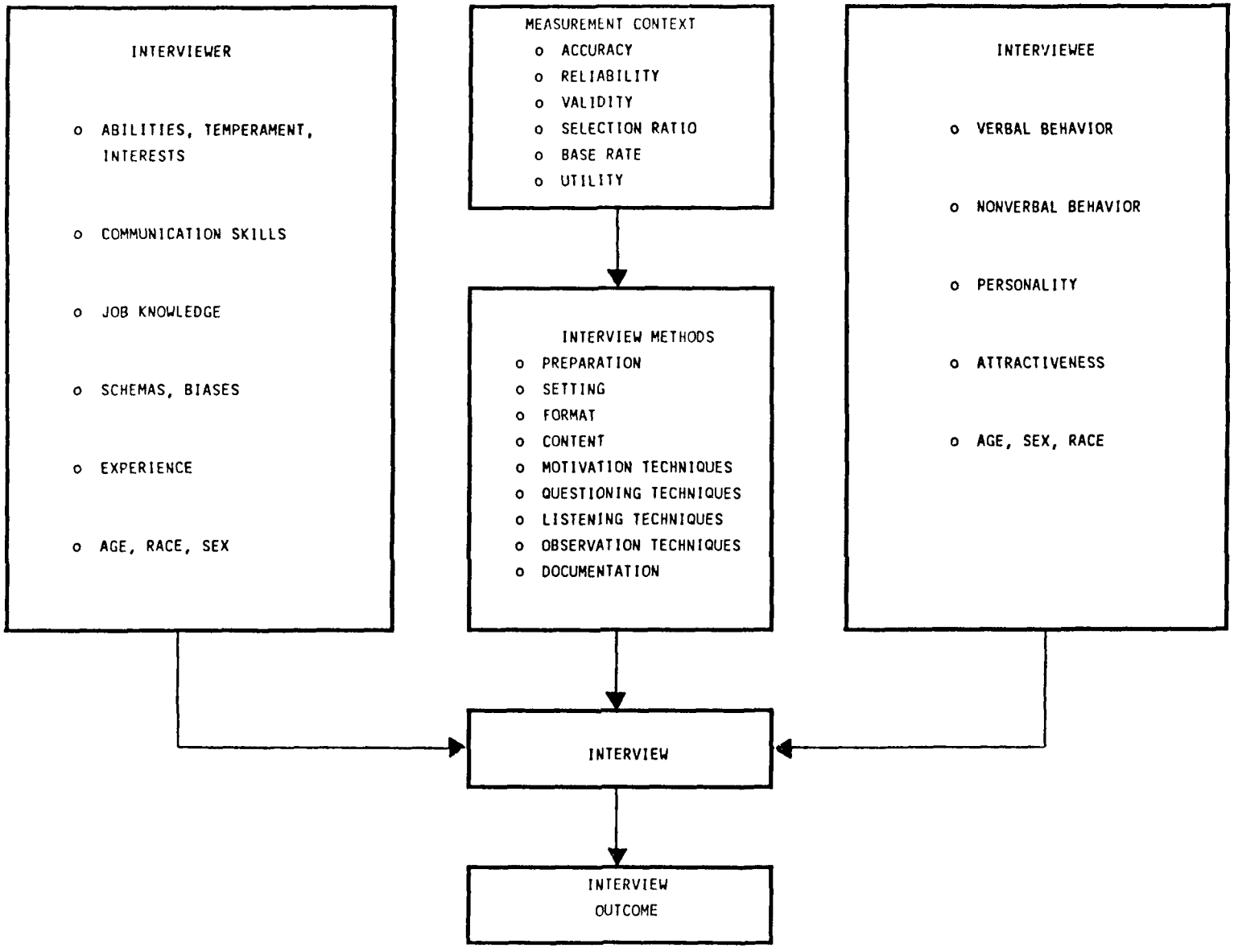

Figure 1
(Adapted from Arvey and Campion, 1982)

The four topics examined in this report cover the range of material on interview process--the people, strategies, tactics, and techniques of effective interviewing. For example, much research is focused on the characteristics of the interviewer and interviewee. Some studies have examined the effects of interviewer experience upon the interview process (e.g., selection of question content and order). However, the bulk of the research focuses on variables that moderate the accuracy and effectiveness of the interview outcome. For instance, Schmitt (1976) and Arvey (1979) summarized research on the effects of attitudinal, sexual, and racial similarities of interviewer and interviewee on interview effectiveness. These moderating effects can be the result of psychological characteristics of the interviewer, the interviewee, or interactive effects of both.

Another line of research has focused on the interview process--the conditions, methods of measurement, and interview procedures employed. Recent quantitative literature reviews (McDaniel, Whetzel, Schmidt, Hunter, Mauer, & Russell, 1987; Wiesner & Cronshaw, 1988; Wright, Lichtenfels, & Pursell, 1988) have investigated general characteristics of the interview process. Specifically, they examined the effects of structure on interview reliability and validity. The findings of this research indicate that providing a consistent set of questions across interviewers and interviewees has a substantial effect on reliability and validity. The interview format (e.g., panel vs. single rater) and question characteristics (e.g., specificity, order) are additional examples of interview procedures that have been studied.

More rarely, researchers address the impact of the measurement context upon the validity or utility of interview outcomes. For example, there have been articles on the effect of base rates and of selection ratios on the utility of the interview method.

Boundary Conditions for this Report

It is important to also note what areas will not be considered in this research. Figure 2 presents a graphical representation of a selection/promotion program. For this report, our focus is on the interview as a method of data collection. The report will not examine the substantive content assessed via the interview method. That is, we will not review or critique the performance criteria (e.g., behavioral reliability), the predictor constructs (e.g., integrity, stability) for those criteria, or the optimum methods for combining the data into predictor composites. Each of these areas also plays an important role in the effectiveness of interviewing as a selection or screening strategy.

For example, we could ask what psychological constructs are most usefully assessed with the interview method. Hunter and Hunter (1984) pointed out that the interview is, after all, a method of data collection and is independent of the particular constructs assessed by the method. Reviewers of the employment literature have differed as to which constructs can most usefully be assessed with the interview, with some proposing intelligence (cf. Mayfield, 1964) and others suggesting that interpersonal relations and career motivations (Ulrich & Trumbo, 1965) were constructs most appropriate for assessment via the interview.

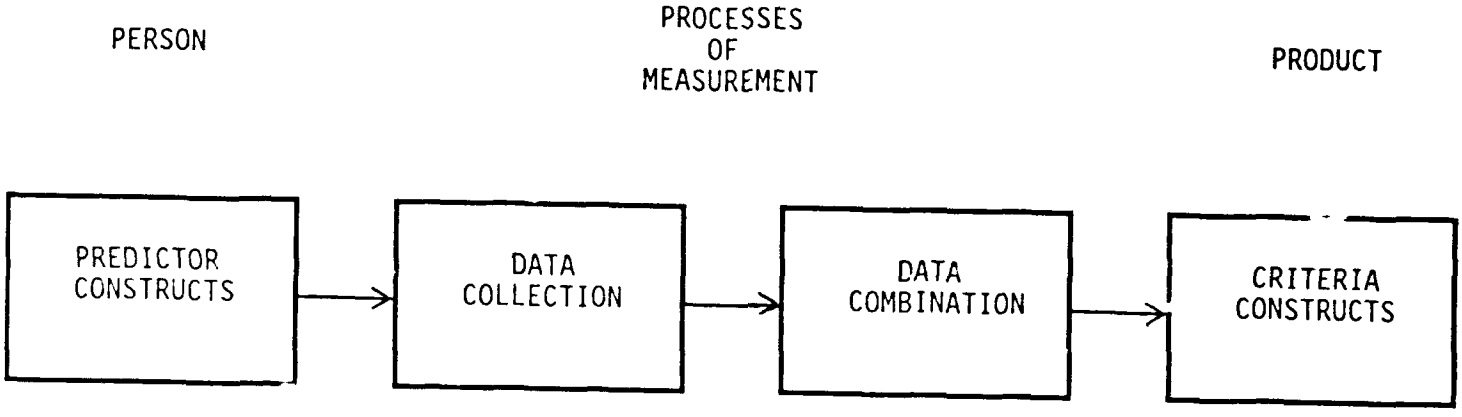

Figure 2

Overview of the Selection Process

Precise specification of the relevant behaviors to be predicted and the psychological constructs underlying them represents another important class of variables that substantially affect interview outcomes. As Campion, Pursell, and Brown (1988) noted, a systematic job analysis of the performances to be predicted is a necessary requisite for effective interviews. Clearly, precise definition of the criterion and careful development of the linkage of the predictor constructs and measurement methods to the criteria substantially affects interview methods (e.g., question content and specificity), and ultimately the interview outcomes.

Finally, Wagner (1949) was the first of many reviewers of the employment interview to discuss the issues of how data from the interview are combined and how decisions are made. In fact, most employment interview literature is concerned with the impact of various characteristics and procedures on interview decision.

Data collection and data combination in the employment setting is often combined into a single task. Conceptually, the tasks of gathering information in the interview and combining that information into effective decisions are very different and may require different knowledges, skills, and abilities. Furthermore, these tasks are performed at different times and by different persons in the investigative interview. Consequently, considerable caution is needed in generalizing results of employment interview research to the investigative interview setting.

The conceptual framework outlined in Figure 1 presents a comprehensive and general model of the interview as a method of data collection about people. The focus of this report is on how various interview procedures impact the effectiveness of investigative interviews. Specifically, this report will focus on the interview as a measurement process, examining how characteristics of the interviewer and interviewee, the interview process, and the measurement context contribute or detract from the completeness and truthfulness of interviewee responses.

Literature Review Procedure

A review of the literature on interviewing research and current investigative interviewing practices was undertaken to identify empirical and descriptive studies related to the investigative interview. These search activities included: (a) contacting and meeting with representatives of various Federal agencies (e.g., Defense Investigative Service, Office of Personnel Management), (b) conducting numerous computerized searches using PSYCINFO data bases (the psychology, government, legal, and book indexes), (c) checking the last several years' editions of selected journals (e.g., Security Management, Journal of Applied Psychology), (d) checking reference sections of relevant articles and reports, (e) contacting representatives from industrial organizations that develop security screening procedures (e.g., Equifax, Reid & Associates, London House) or use investigative interviews for Top Secret personnel security screening (e.g., defense contracting companies), and (f) contacting researchers who are active in the interviewing and detection of deception areas. These search procedures are described in more detail in Appendix A. We did not review military research in these areas.

CHAPTER 2. DESCRIPTIONS OF VARIOUS FEDERAL AGENCY INVESTIGATIVE INTERVIEW PROCEDURES

This chapter describes the investigative interviewing procedures followed by five U.S. government agencies: (1) the Defense Investigative Service, (2) the Office of Personnel Management, (3) the Federal Bureau of Investigation, (4) the Central Intelligence Agency, and (5) the Defense Intelligence Agency. The chapter also describes other selected topics related to the investigative interview programs at these agencies (e.g., interviewer appraisal, interviewer attrition, interview evaluation).

These descriptions are based on site visits to each agency and reviews of materials made available. Names of the officials interviewed at each agency are presented in Appendix B.

Defense Investigative Service

Overview

The Defense Investigative Service (DIS) conducts several types of personnel security investigations for military, civilian, and industrial personnel. The Interview-Oriented Background Investigation (IBI) is the primary method used for granting Top Secret personnel security clearances. The IBI consists of several components, including an interview with the subject, interviews with three developed character references, interviews with three employment references, employment record checks, credit checks, local agency checks, national agency checks, and additional work as needed. Of these components, the subject interview is the principal investigative method.

The investigative interviewing prccedures followed by DIS are described in the Manual for Personnel Security Investigations (1985). In our discussion of the IBI, we will first summarize the procedures followed in conducting subject interviews. Next, we will summarize the procedures used in conducting non-subject interviews. Following this, we discuss other selected topics (e.g., interviewer characteristics, interviewer appraisal methods).[1]

DIS background investigations are conducted by a staff of approximately 1350 investigators. Each investigator has a case load of anywhere from 15 to 40 background investigations at any given time depending on the complexity of the cases.

Subject Interview

The following subsections discuss the procedures followed in conducting DIS subject interviews.

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[1] Interviewer training practices will be described in a later chapter of the report.

Interview Preparations. The investigator prepares for the subject interview by reviewing available background information (e.g., Personnel Security Questionnaire, Statement of Personnel History, credit bureau records). These materials are examined to: (a) formulate a picture of the subject, (b) identify missing, discrepant, or questionable information, and (c) identify possible issues. The investigator then formulates a set of questions or a topic outline and reviews these with his or her supervisor. Following this, the agent obtains all necessary forms (e.g., Privacy Act letter) and releases. This preparation requires from 5 to 30 minutes, depending on the complexity of the case.

Interview Setting. The subject interview should be conducted in an office setting at either a DIS field location, a military site, or an industrial site. The most important requirement of the setting is privacy. In addition, the interview setting should be furnished, clean, free from interruption, and free of other distractions such as telephones, listening devices, or two way mirrors. As a general rule, the subject's office or residence should not be used as the interview setting.

The optimal seating arrangement has the investigator and subject sitting in chairs that face each other without an intervening desk or table. A small table may be necessary, however, if the agent or subject brings documents to the interview.

The IBI subject interview consists of four phases: (1) an introduction, (2) review of the subject's background form, (3) questioning on issues, and (4) the conclusion. Each phase will be discussed below along with other selected topics.

Introduction to the Interview. The investigator begins the interview by identifying him or herself as a representative of DIS and showing credentials. The subject is then asked to show proof of identity (e.g., drivers license, military identification card). Following this, the investigator states the general purpose of the interview (e.g., IBI or periodic investigation), mentions that others will be contacted as part of the investigation, states that honesty is important, and notes that adjudication follows the "whole person" concept. The agent then advises the subject of the privacy act and presents a letter which explains this act. If the subject refuses to participate at this point, the interview is terminated. If the subject agrees to be interviewed, the agent provides a detailed explanation of the interview purpose and topic areas. This overview should be memorized by the investigator. The agent should not read the introduction (or the questions) from a checklist.

The investigator attempts to build rapport with the subject during the early part of the interview. This is accomplished in different ways. For example, the investigator may offer the subject a cup of coffee or briefly discuss a topic of mutual interest. Making eye contact with the subject is also considered important.

Restrictions. The investigator must adhere to certain restrictions during the subject interview. The agent must limit questioning to areas that are related to personnel security standards and not violate the subject's privacy or civil rights. The questions should also be limited to

the subject and not focus on others (unless relevant to the subject's investigation). The agent must also inform the subject of any allegations against them, although classified information or confidential sources should not be disclosed. Finally, the investigator must not disclose any information that could damage a subject's mental or physical health.

Agent Conduct. Investigators should conduct themselves in a professional manner. According to the DIS respondents interviewed, the agent should be nonjudgmental, remain detached when derogatory information surfaces, and keep a constant tone of voice during the interview. The DIS manual discusses several other aspects of agent conduct. These include dressing in a neat, businesslike manner, treating subjects with courtesy and respect, avoiding repetitious or interrogative questioning, and avoiding questions or gestures that could be perceived by the subject as harassing or threatening.

Review of Background Form. Following the introduction, the investigator reviews the subject's Personnel Security Questionnaire (PSQ) or Statement of Personal History (SPH). During this phase of the interview, the agent asks general questions about omissions and discrepancies on the background form and makes specific inquiries about issues. Detailed questioning about each item on the background form is not undertaken. Toward the end of the form review process, the investigator reminds the subject of the importance of being honest and of the penalties for providing false information.

Topics Areas. Following review of the background form, the investigator questions the subject on several topics. These include education, employment, residence, alcohol, drugs, mental treatment, moral behavior, family and associates, foreign connections, foreign travel, financial responsibility, organizations, loyalty, criminal history, handling information, and trust.

The order of topics may differ across interviews. However, the investigator generally covers less stressful topics (e.g., education, employment) during the early stages of the questioning and more sensitive areas later in the interview.

Questioning Methods. The general questioning approach described in the DIS interview manual involves asking short, direct questions about each topic, followed by summarizing questions. Typically four to seven structured questions are asked on each topic (unless issues arise). Each question covers a slightly different aspect of the topic. Nearly all of these direct questions ask for a yes or no response. According to the DIS officials interviewed, such questions have several advantages over open-ended questions: (a) they get to the point quickly, (b) they are less ambiguous to the subject, and (c) they are better suited to less experienced investigators.

After asking all of the direct questions on a topic, the investigator asks summarizing questions. Here the agent summarizes the subject's answers about a topic and then asks the subject to confirm the agent's

understanding. The important point here is that the investigator pauses to allow the subject to affirm the summary question.

After discussing the first few topics, the investigator reminds the subject of the purpose of the interview, the importance of being honest, and that the adjudication procedure uses a "whole person" concept.

The investigator is trained to be alert for possible verbal deception by the subject during the interview. Indicators of possible deception include inconsistent information, evasiveness, and pauses before answering. The agent also listens to the entire response and searches for possible inferences or omissions.

The investigator observes the subject's nonverbal behavior for additional cues to deception. Possible nonverbal indicators of deception include flushing, perspiring, sudden changes in posture, or "nervous" behaviors. In addition, the investigator compares the subject's verbal and nonverbal behaviors with responses given to less stressful questions earlier in the interview. When the investigator suspects deception on the part of the subject, the agent asks probing questions to clarify the answer.

When issues arise during an initial subject interview, the investigator seeks a complete explication of the issue. Subtle rather than direct questions are recommended during the initial probing of an issue. As the subject expands on the issue, the investigator asks direct ("who, what, when, why, where") questions to obtain specific information about the issue. Confrontation questions may also be asked, if necessary, although questions involving misrepresentation, deception, or trickery are prohibited. During questioning on issue-oriented areas, the investigator also seeks additional leads to verify the information. In addition, the investigator will request a signed, sworn statement from the subject when potentially disqualifying information surfaces.

If the subject refuses to discuss a particular topic, the investigator explains the purpose and reason for the questioning. If the subject persistently refuses, the investigator terminates that line of questioning.

Note Taking. The investigator usually takes limited notes during the interview. These notes are generally restricted to significant findings or issue oriented information. Extensive note taking is discouraged because it may distract the agent from the listening and observation processes. In order to obtain the subject's cooperation for note taking, the investigator explains the reason for note taking (i.e., so that the adjudicator's security clearance decision is based on accurate and complete information). If the subject refuses to permit note taking, the investigator does not take notes, but summarizes the findings immediately after the interview is finished.

Concluding the Interview. The investigator concludes the interview by asking the subject if there is anything the subject would like to restate or change.

Interview Report. The investigator prepares a short written report that briefly summarizes the findings on each topic and the investigator's

observations. The typical "favorable subject" report is less than one page. If derogatory information is found, more detailed information is provided. If issues arise after completion of the subject interview, a second issue-oriented subject interview may also be conducted.

Special Interview Conditions. When interviewing subjects who have engaged in highly sensitive matters or advocated violence against law enforcement agencies, two agents (rather than one) conduct the interview. If the subject has a third party representative (e.g., attorney, union representative) at the interview, the agent directs all questions to the subject. If the third party hinders the interview, the investigator terminates the interview.

Non-Subject Interviews

The next subsections briefly describe the procedures used by DIS in conducting non-subject interviews. Since many of these procedures are similar to those used in the subject interview, our discussion will be somewhat abbreviated.

Interview Preparations. The investigator prepares for the non-subject interview by reviewing all available background materials (e.g., subject application form, subject interview, available case files). The agent examines these materials for missing, discrepant, and issue-oriented information, and for the relationship between the interview respondent and subject. The investigator then formulates questions or a topic outline prior to the interview. Unlike the subject interview, the questions are intended to elicit open-ended, rather than yes-no, responses. The agent then obtains all needed forms for the interview.

Interview Setting. Non-subject interviews are typically conducted in field settings. The important requirements of the setting are privacy, freedom from interruptions, and freedom from distractions.

Types of Respondents Interviewed. Several types of respondents may be interviewed during the course of a Top Secret security clearance investigation. Typically, at least three employment references (e.g., supervisors or coworkers) and at least three developed references (e.g., associates, peers, neighbors) are interviewed. The subject's immediate family members and ex-spouses are usually not interviewed.

Introduction to the Interview. The investigator begins the interview by introducing him or herself, presenting credentials, identifying the respondent, and identifying the subject of the investigation. The agent then states the general purpose of interview.

At the outset of the interview the investigator attempts to establish view the investigator attempts to establish rapport with the respondent. This is often accomplished by mentioning topics of common interest. Proper agent conduct (see following section) is also important in establishing rapport with the respondent.

During the early stages of the interview, the investigator seeks information about the respondent (e.g., name, address, occupation), the

respondent's association with the subject (e.g., frequency of association, type of association, time period of association), and the respondent's credibility as a source.

Agent Conduct. Guidelines for agent conduct are similar to those presented in the subject interview section. Key aspects of the investigator's conduct include dressing in neat, businesslike manner, acting in a professional manner, being courteous, and respecting the respondent's privacy.

Interview Topics. During the non-subject interview, the investigator seeks information about the subject's behavior on a variety of topics. These topic areas are similar to those covered in the subject interview. They include the subject's unreliable behavior, criminal behavior, dishonest behavior, immoral conduct, drug use, alcohol use, illnesses, emotional stability, credit reputation, financial responsibility, foriegn travel, foreign connections, family and associates, and disloyalty to the United States.

Several areas are normally not discussed. These include beliefs on religious, racial, political, or legislative matters, and affiliations with union or fraternal organizations.

When issues arise on certain areas (e.g., criminal, dishonest, or immoral conduct; drug or alcohol use), the investigator asks about the subject's efforts to rehabilitate and the frequency of those efforts. Whenever derogatory information arises, the investigator seeks leads regarding other persons who know the subject and can verify the information obtained.

Near the end of the interview, the investigator asks the respondent whether the subject should be recommended for a clearance.

Questioning Methods. The DIS manual recommends that agents ask specific rather than general questions. In contrast to the subject interview, the non-subject interview is less structured. The questions are typically "who, what, where, how, why" questions that verify information about the subject and develop new information. In addition, when a source expresses a negative opinion about the subject's conduct, the investigator asks probing questions to determine the basis for this opinion.

Note Taking. The investigator takes only limited notes. Note taking during non-subject interviews is usually restricted to names, adresses, dates, specific unfavorable information, and "significant" quotes.

Conclusion of the Interview. Usually at the end of the interview the investigator informs the respondent of the subject's Privacy Act rights (i.e., the respondent's interview information and identity may be released to the subject upon request). In some cases, the respondent may request that the information obtained during the interview be kept confidential.

If unfavorable information about the subject arises during the interview, the investigator asks the subject to provide a written statement on this information. If substantial unfavorable information is obtained, the investigator will also determine the respondent's ability to appear at

a hearing.

Interview Report. The investigator prepares a short, written report that summarizes the findings of the interview.

Special Interview Conditions. For interviews involving hostile respondents or highly sensitive matters, two agents (rather than one) conduct the interview. When respondents become hostile during the interview, the investigator is trained to be courteous and businesslike, and to avoid arguing.

Telephone interviews are also used in special circumstances. These include: (a) when an established relationship exists with the interviewee, (b) when a listed character reference is being interviewed, (c) when a telephone interview is requested by the individual or agency (e.g., school, employer), (d) when information is sought regarding the location or availability of records, and (e) when the safety of the investigator might be jeopardized by an in-person interview. Telephone interviews are also occasionally used when respondents are in remote locations, when weather conditions make travel impossible, or when time pressures exist to complete an investigation.

Appraisal of Agent Performance. Investigator performance is evaluated in at least five ways. First, the agent's supervisor accompanies the investigator for one day during the appraisal period and evaluates the agent on numerous aspects of the investigation process using DIS Form 193. Second, the supervisor accompanies the investigator on at least one issue-oriented subject interview during the appraisal process and evaluates the investigator on several areas using DIS Form 194. Third, the supervisor routinely reviews the investigator's investigation reports for timeliness, quantity of information, adequacy of issue-oriented information, amount of missing information, and other factors. Fourth, agent evaluation rating forms are sent to non-subject interviewees who were recently interviewed by the agent. These forms request evaluations of the agent's performance in seven areas (e.g., was purpose of interview adequately explained; were the agent's questions pertinent, clear, and direct). A final performance evaluation standard is the percentage of cases in which the agent produces derogatory information.

Evaluation of Interview Procedures. DIS has a quality assurance program to ensure that personnel security investigations are conducted according to established requirements. Key elements of this program are the investigative techniques review and the subject interview quality review described above. Other aspects of this program include agent training programs, inspections of field offices by agency officials, and reviews of randomly selected cases by senior agency adjudicators.

One of the DIS officials interviewed for this report presented the results of a small study that evaluated the productivity of several non-subject sources during a recent two day period. Specifically, for all cases which had derogatory information, the percentage of interviews yielding derogatory information was determined according to the type of respondent. Derogatory information was found in 16.9 percent of the interviews with employment references, 11.0 percent of the interviews with developed character references, 10.5 percent of the interviews with

neighbors, and 8.7 percent of the interviews with listed character references. No information was available regarding derogatory information obtained in the subject interview. The DIS representatives interviewed mentioned that a large scale study will soon be undertaken to examine the productivity of different background investigation sources.

Investigator Attrition. The DIS representatives interviewed were not aware of the attrition rate among investigators. They suggested that the principal reason for leaving was for higher paying jobs. They did not perceive "interviewer burnout" to be a major problem.

Characteristics of Good Investigators. The DIS manual mentioned several skills and abilities that are important for investigative interviewers. These include knowledge of security regulations, communication ability, high motivation, persistence, maturity, thoroughness, good judgment, patience, and self-control. The DIS representatives interviewed suggested that communication ability is the most important ability for investigators. Other important characteristics mentioned were inquisitiveness, ability to work independently, adaptability, ability to handle criticism, ability to be nonjudgmental, and intelligence.

Office of Personnel Management

Overview

The Office of Personnel Management (OPM) conducts approximately 25 percent of all Federal background investigations. These background investigations include initial screening investigations and periodic reinvestigations which the agency conducts for over 90 Federal agencies (although not for the Department of Defense).

The agency has a total of about 725 investigators, 250 of whom are retired investigators under contract with OPM. Each investigator typically has 10 to 15 cases. These investigations include both subject and non-subject interviews.

The subject interview is a critical component of the OPM background investigation. This interview is usually conducted before field coverage is undertaken. Because of this, the interview is oriented around topics covered on the Questionnaire for Sensitive Positions (QSP), a background history form completed by the subject.

Although there are differences in the background investigations conducted by OPM for different Federal agencies, there are certain interviewing guidelines which are followed in all OPM subject interviews. Our discussion will focus on these common elements.

Interview Preparation. The investigator prepares for the subject interview by reviewing available case materials (primarily the QSP). During this review, the agent becomes familiar with the subject's background and identifies missing, discrepant, and issue-oriented information.

Contacting the Subject. The investigator contacts the subject to arrange for the interview. During this contact, the investigator schedules a meeting and informs the subject of the purpose of the interview. In some cases, the investigator requests the subject to bring certain documents (e.g., diplomas, licenses) to the interview. When scheduling the interview, the investigator arranges for completion of the interview during one sitting if at all possible.

Setting. The subject interviews are conducted by field investigators in the subject's geographic area. The preferred setting for the interview is a government office. Non-government employment settings or private residences are not recommended interview sites.

The main requirement of the interview setting is privacy. Ideally, the interview setting will be furnished and free from distractions (e.g., telephones, interruptions).

The preferred seating arrangement is for the investigator and subject to sit in chairs that directly face each other, without a desk or table between these chairs. This arrangement allows the investigator to more fully observe the subject's nonverbal behavior.

The subject is normally interviewed by a single investigator. However, a second investigator may be present in situations that involve extremely hostile subjects or highly sensitive issues. The subject is not allowed to have a third party present.

Investigator Conduct. The investigator should maintain a professional demeanor throughout the interview. Important aspects of this demeanor include being nonjudgmental, displaying fairness, showing empathy, and respecting the subject's rights and privacy. Such behaviors are important in building rapport and drawing out the subject when negative information arises during the interview.

Introduction to the Interview. The investigator begins the interview by introducing him or herself, showing credentials, and asking the subject to provide identification (e.g., driver's license). The agent then explains the interview and the Privacy Act. Following this, the investigator mentions the importance of being honest, mentions that the subject's interview responses will be compared to information from other sources, and mentions that the interview is completed under oath. The agent then administers the oath.

Topic Areas. Questioning typically begins on background areas and proceeds into suitability and security issue areas. This pattern of topic coverage enables the investigator to establish rapport with the subject and become familiar with the subject's reaction to less sensitive topic areas before discussing issue-oriented or sensitive information. The background areas covered include residences, person(s) living with the subject, education background, employment and military background, references and associates, foreign contacts, foreign travel, relatives, and other prior or pending investigations. Following questioning on background areas, the agent discusses suitability and security areas such as criminal conduct, drug and alcohol use, health, financial matters, personal conduct, associations and memberships, loyalty, and handling classified materials.

Questioning Procedures. The pattern of questioning typically proceeds from general questions about a topic to specific issues. There is no standard set of questions that is used. The investigator is trained to ask different types of questions depending on the type of information sought, although the guiding principal is to use the type of question which elicits the most useful information. When seeking new information, the agent typically asks questions which require a narrative, rather than a "yes-no", response. There are two types of narrative response questions. Direct questions, which request a precise answer, are often used when discussing background information. In contrast, non-direct questions are preferred when probing sensitive or personal behavior topics. When seeking to expand a subject's discussion on a topic, the agent often uses assumptive questions, which are based on a subject's admitted involvement in some activity. Finally, when seeking to confirm what the subject said, the investigator uses summarizing questions. Here, the agent summarizes his or her understanding of the answer, and then pauses to allow the subject to affirm or correct the summary response. Whatever type of question is used, investigators are trained not to read questions from a list or ask questions in a rote drill manner.

Issue-Resolution Interviews. During questioning, the investigator seeks issue-oriented information. If issues arise in certain types of subject interviews (e.g., Federal Agency cases, non-Department of Energy contractor cases), an Issue Resolution Interview (IRI) is conducted. These interviews focus on information that could disqualify an individual from obtaining a clearance. Key aspects that distinguish the IRI from a typical subject interview include questioning the subject for evidence of rehabilitation on the issue area and obtaining an affidavit or signed statement from the subject which details the issue. IRIs that are conducted after the initial subject interview are limited in coverage, focusing primarily on the issue(s) under consideration.

Handling Hostile Subjects. The investigator is trained to deal with antagonistic subjects in several ways. These include explaining the purpose of the investigation, mentioning that the information is voluntary, and/or explaining that refusal to participate will be noted in the interview report. If a subject refuses to address a particular line of questioning, the investigator explains the purpose for the question and attempts to learn the reason for refusal. If the subject requests that the interview be terminated, the investigator attempts to dissuade the subject by addressing the subject's concerns and mentioning that refusal might prevent the agency from making a clearance decision. If the subject persists, the investigator terminates the interview and notes the reasons for declining in the interview report.

Listening Techniques. Listening skills are stressed as an important aspect of the subject interview. Investigators are trained to listen to the subject's entire response for qualifications or inferences. Attentive listening also provides a basis for follow-up questions and provides clues to possible deception. Possible indicators of deception that agents look for include pauses before answering a question and vague responses.

Observation Methods. Observation of a subject's nonverbal behavior (e.g., gestures, body movements, facial expressions) is another key element of the OPM subject interview. In general, the investigator looks at the consistency of nonverbal and verbal behavior, patterns of inconsistent behaviors, or changes in nonverbal behaviors. Such situations indicate possible deception and the need for additional questioning. These situations are most common when the subject becomes more anxious.

The investigator looks for several general types of behaviors that may indicate deception. These include evasiveness, guardedness, lack of cooperation, lack of concern, overpoliteness, rationalization, overanxiousness. In contrast, truthful subjects are more likely to display cooperation, concern, sincerity, and confidence. The agent is also trained to observe the subject's posture. Mannerisms such as slouching, sitting in an overly stiff manner, or leaning away from the interviewer may indicate deception. In contrast, nondeceptive subjects are more likely to sit in a more upright, relaxed manner, directly facing the investigator and leaning forward slightly.

Investigators are taught to observe the subject's facial expressions during the interview. Changes in the pattern of eye contact may suggest possible deception, although individual and cultural differences exist in the extent of eye contact.

Investigators are also trained to look for various mannerisms that subjects might exhibit to reduce tension. Examples of such behaviors include standing up, moving the chair away from the investigator, grooming hair, swallowing, coughing, cracking knuckles, tapping fingers, shuffling or tapping feet, and brushing or adjusting clothing. In order to minimize the subject's use of outside objects that might be used to reduce anxiety (e.g., purses, books, papers, keys, sunglasses, cigarettes, gum, candy), the agent has the subject put these objects aside at the start of the interview.

Note Taking. The investigator takes notes during the interview. Notes are taken to ensure an accurate and complete record of the interview. The guiding principle here is that note taking should document the information provided but not disrupt the conversation or interfere with the investigator's observation of the subject.

In order to overcome reservations the subject might have about note taking, the agent should establish rapport with the subject, explain the reason for taking notes, and if necessary, allow the subject to review the notes at the completion of the interview.

Following completion of the subject interview, the investigator assesses the information obtained and provides input to follow-up field activities involving the subject's case.

Interview Report. The investigator dictates a report detailing the results of the interview. If an IRI has been conducted as part of the subject interview or as a separate follow-up interview, the investigator dictates the IRI report and attaches the affidavit or signed statement. These reports are reviewed and assembled at a central office by OPM or the requesting agency, and eventually adjudicated.

Differences Between the OPM and DIS Subject Interviews. According to the OPM representative interviewed, the OPM investigative interview differs from the DIS investigative interview in two important ways. First, OPM background investigations typically include neighborhood interviews, in contrast to DIS. Second, OPM background investigations are less likely to be scoped investigations.

Agent Selection. New OPM investigators are usually hired out of college, with selection limited to persons in the top 10 percent of their class. The selection process includes an application blank, a two-person panel interview (which focuses on the applicant's answers to hypothetical situations), and a background investigation (which focuses on such factors as ability to work independently, verbal skills, and drug use). According to the OPM representative interviewed, communication ability is the most important ability for investigators. A research study conducted by OPM in the late 1960s found that the best agents were ex-clergy workers and college graduates with liberal arts majors.

Appraising Investigator Performance. Investigators are evaluated on four factors: (1) productivity (number of sources in a day and number of sources per unit of work), (2) timeliness (number of days to complete cases in relation to agency guidelines), (3) quality (two percent deficient information is allowed on reports), and (4) professionalism (i.e., appearance, bearing, manner). Supervisors also evaluate 10 percent of all investigations, rating each case on a 0 to 5 scale.

Investigator Turnover. Turnover among agents is about 20 percent per year, with most terminees leaving during their first year on the job. An OPM exit interview study found that most former OPM investigators progressed into other government jobs or left to work for other agencies or security firms.

Evaluation of the Subject Interview. The OPM representative interviewed mentioned one study that examined the effectiveness of the subject interview. A comprehensive analysis of all cases completed during a four-week period in the Denver region found that approximately 20 percent of issues came from the subject interview only.

A recent 1988 OPM newsletter (Federal Investigations Program - FIP Newsletter, undated), which was provided by one of the DIS officials interviewed, found investigations involving the subject interview identified issues in 53.7 percent of the cases (total number of cases unknown). Of the investigations with issues, 65.5 percent of the issues were originally found by a combination of the QSP and subject interview and 34.5 percent of the issues were originally found through field work.

Productivity of Non-Subject Interview Sources. According to the OPM representative interviewed, neighbors and ex-spouses tend to be good sources of information about a subject.

Federal Bureau of Investigation

Overview

The Federal Bureau of Investigation (FBI) conducts Top Secret clearance subject background interviews for FBI job applicants and non-subject background interviews for the Department of Justice, the White House, and the Department of Energy. In conducting background investigations, three references and three associations are typically sought.

Since the majority of investigative interviews conducted by the FBI are non-subject interviews, we will discuss these procedures first. Following this, the FBI applicant selection process will be described, with emphasis on subject interviewing procedures. (The non-subject background interviewing procedures for FBI job applicants are similar to the non-subject interviewing procedures used in other FBI Top Secret clearance background investigations.)

Interview Preparations. The agent prepares for the non-subject interview by examining available case materials. The primary document reviewed is the subject's application blank, which contains extensive information about the subject's background. The investigator also reviews other available interviews and materials. The investigator examines these materials to obtain a picture of the subject, to identify questionable or inconsistent information, and to formulate ideas regarding the subject's character, associates, and reputation. Based on this review, the investigator formulates a general line of questioning for the interview.

Interview Setting. The interviews are conducted in the field, with the specific setting dictated by the respondent. The specific time and place of the interview are often arranged ahead of time by the agent through telephone contact with the respondent. Wherever the interview is held, the investigator tries to ensure the setting is private and free from distractions.

Investigator Conduct. According to the FBI representatives interviewed, several aspects of the investigator's conduct are important in conducting non-subject interviews. The investigator should dress neatly, similar to that of a businessman or businesswoman. The agent should conduct himself in a professional manner. Important aspects of professional conduct include a nonjudgmental attitude, courtesy, respecting the respondent's privacy, and not "talking down" to the respondent. Finally, the investigator's communication style is important. Agents who conduct the interview in a comfortable, as opposed to dominating, manner tend to obtain more information.

Introduction to the Interview. The investigator begins the interview by identifying him or herself and presenting credentials. The agent then positively identifies the respondent, identifies the subject of the investigation, mentions the general purpose of interview, and seeks the respondent's consent. If the respondent is reluctant to cooperate, the investigator tells the respondent that the subject has put him or her down as a reference. If the respondent agrees to be interviewed but only as a confidential source, the investigator explains the Privacy Act at this

time. If the subject expresses no reservations about providing information during the introduction, the agent normally explains the Privacy Act, as well as the Freedom of Information Act, near the end of the interview. Typically, no oaths are administered and no statements are taken during the interview.

At the outset and throughout the interview, the investigator attempts to establish rapport with the respondent. These rapport building techniques will differ according to the respondent (for example, a busy executive may want to begin the interview immediately whereas a retired neighbor may require a period of small talk before questioning begins). Following the initial rapport building activities, the investigator evaluates the respondent's credibility and questions the respondent about the subject's activities in several areas. When proceeding through a topic area, the investigator tries to verify information, obtain new information, and develop leads.

Topic Areas. The specific topic areas covered during a particular interview will vary according to the subject's relationship with and knowledge of the subject. The questioning typically focuses on four general areas: (1) character, (2) associations, (3) references, and (4) patriotism. The specific topics covered include education, employment, residences, alcohol use, drug use, mental treatment, moral behavior, family and associates, foreign connections, foreign travel, financial responsibility, organizations, loyalty, criminal history, handling classified information, trust, and medical fitness.

Questioning techniques. Although the topic areas are determined in advance, the investigator does not use a set list of questions. During questioning, the agent attempts to get the respondent to talk in a "conversational mode". The pattern of questioning usually begins with general, open-ended questions regarding a topic area, followed with specific probes. However, different types of questions may be used in covering a topic area. These include narrative response, yes-no response, direct, subtle, and even interrogative questions. Whatever type of question is used, the agent should not read the questions off a list.

The investigator uses summarization questions to verify the respondent's information. If questioning has been limited in scope, the investigator may summarize the entire interview, seeking verification from the respondent at relevant points. If the interview covers an extensive amount of background information, the investigator typically summarizes the respondent's information after only one or few topics.

Agents are trained to recognize possible deception during the interview. Although the FBI representatives interviewed for this report suggested there is no single reliable indicator of deception, investigators do look for certain verbal and nonverbal behaviors. Verbal behaviors that indicate possible deception include evasiveness or pausing before answering a question. Nonverbal behaviors that indicate possible deception include changes in the pattern of eye contact and "nervous" behaviors. The agent also looks at the correspondence between the respondent's verbal and nonverbal behavior for additional clues to possible deception.

When the investigator suspects deception, the agent takes one or more of several actions. These include emphasizing the importance of being honest, mentioning the Privacy Act, appealing to the respondent's patriotism, and stating that being forthright is in the subject's best interest (to prevent the subject from encountering more serious consequences at a later time).

Note Taking. The investigator typically does not take notes until the summarization questions are asked. The rationale here is that such questions might inhibit the respondent.

Concluding the Interview. The investigator concludes the interview by asking the respondent if there is anything else that he or she would like to mention that might be relevant to the investigation.

Interview Report. The investigator summarizes the results of the interview in a narrative report. These reports are typically less than one page when no derogatory information is found. When derogatory information is obtained, the report may be several pages.

FBI Applicant Selection Procedures. The FBI conducts subject interviews for Top Secret clearances only for persons being considered for positions within the FBI. The general applicant selection process includes written examinations, an application form, subject interviews, and non-subject background interviews.

Early in the selection process, an investigator conducts an unstructured subject interview at an FBI office to review several items on the application form. The emphasis here is on verifying items on the application form and obtaining missing information. Non-subject interviews are also conducted (following procedures described earlier in this section).

A later step in the screening process is a one hour Targeted Selection Interview with the subject which is conducted by three senior agents at an FBI office. This is an unstructured interview that focuses on a candidate's accomplishments and past experiences in eight areas: major accomplishments, oral communication ability, knowledge of current events, resourcefulness, range of interests, interest in becoming an investigator, the applicant's initial impact, and overall impact. Unlike the non-subject interview, little or no attempt is made at assessing deception during this interview.

Evaluation of Investigator Performance. The performance of FBI investigators is appraised by field supervisors. Investigator performance is evaluated primarily on the basis of the quality and thoroughness of their casework.

Evaluation of Interview Procedures. The FBI representatives interviewed were not aware of any research studies that evaluated the effectiveness of the FBI's investigation interview procedures or examined the productivity of different background investigation sources. One representative did mention that among non-subject interview sources, ex-spouses and former coworkers tend to be good sources, whereas friends of the subject are generally less useful sources of information.

Investigator Attrition. No information was obtained about investigator attrition. One FBI representative suggested investigator "burnout" was probably not a widespread problem at the agency. According to this respondent, most investigators leave because of personal problems off the job, for financial reasons (e.g., to accept higher paying jobs elsewhere), or because of difficulties associated with job transfers (transferring from a rural to an metropolitan area).

Investigator Abilities. According to the FBI representatives interviewed, communication ability is the most important characteristic for background investigators.

Central Intelligence Agency

Overview

The background investigation procedure generally begins with law enforcement checks and other record checks. Following these checks, an agent interviews a "good" reference, and later interviews other sources. The interview procedures used by the CIA are described below.

Interview Preparations. The investigator prepares for the interview by reviewing all available background information about the subject under consideration. Of these materials, the most important is the subject's Personal History Statement. According to the CIA representatives interviewed, this background form contains more information than the corresponding form used by DIS. The agent examines this background form, along with other available case materials, for omissions, questionable information, and possible issues.

Interview Setting. The selection of an appropriate place and time to interview is an important consideration in obtaining productive information. The interview setting will be a field location, and often will not be in an office. Wherever the interview is held, the most important element of the setting is privacy.

In contrast to some of the other investigative interviewing procedures described, the investigator does not bring materials to the interview. This is because some of the materials may contain classified information.

Introduction. The investigator begins the interview by identifying him or herself and establishing the identity of the respondent being interviewed. For neighbor or reference interviews, the agent also obtains the respondent's address. The agent then attempts to build rapport with the respondent prior to questioning. Following this, the investigator asks questions to establish the respondent's knowledge and relationship with the subject.

Topic Areas. The specific topic areas covered during the interview will vary somewhat according to the type of respondent interviewed (e.g., reference, neighbor, supervisor, employer, educator). Typical topic areas covered during the interview include the subject's family background and relationships, education background, military history, employment

background and performance, residences, criminal activity, foreign travel and contacts, foreign business, memberships, drug use, alcohol use, hobbies and interests, health, financial responsibility, maturity, morals and character, stability, trustworthiness and dependability, and security consciousness.

Questioning Methods. The CIA investigator does not use a standard set of questions, although the topic areas for a particular type of respondent (e.g., reference, neighbor, employer) are relatively standard. The agent usually begins questioning on a topic with general questions followed by more specific questions. Several types of questions are used. Most are "who, what, where, how" questions which request specific factual information. Other questions ask for "yes-no" responses. Still other questions ask for the respondent's opinion about the subject's behavior in a particular area.

When issue-oriented information arises, the investigator usually emphasizes "who, what, where, how" questions which seek specific factual information about the issue. In addition, the agent asks the respondent for names of others who might also have knowledge of the subject's activities in this area.

Investigators are trained to recognize possible deception during the interview. According to the CIA representatives interviewed, common indicators of deceptive responses include shifts in the respondent's posture or eye movement toward the floor or ceiling. When the investigator suspects a respondent is being deceptive, the agent notes this and generally reminds the respondent that the information provided is confidential. The agent then asks specific questions to obtain additional information.

Conclusion of Interview. The investigator concludes the interview by asking the respondent whether there is anything else that might be relevant the investigation. The agent then asks the respondent about the subject's loyalty to the U.S. and whether the subject should be recommended for a position of trust or access to classified materials. Usually at the end of the interview, the investigator provides the respondent with the advisement that the information is confidential.

Documentation. The investigator may or may not take notes during the interview. According to the CIA representatives interviewed, investigators are more likely to take notes when they have many interviews to conduct within a short time period. Investigators are also more likely to take notes if they believe the note taking process will not inhibit the respondent being interviewed.

At the completion of the interview process, the investigator dictates a short (one to two page) report. This report includes direct quotes from the respondent where possible.

Differences Between the CIA and DIS/OPM Interviews. According to the Central Intelligence Agency (CIA) representatives interviewed, the investigative interviews conducted by the CIA for Top Secret clearances differ from the interviewing procedures followed by DIS and OPM in at least two respects. First, CIA background interviews are conducted with persons

other than the subject (e.g., employers, supervisors, education, references, neighbors, etc.). Second, the CIA investigative interview tends to be less "boilerplate" than the procedures used by DIS and OPM.

Investigator Attrition. Attrition among trainees is almost zero. Once on the job, the attrition rate for investigators is low.

Appraising Investigator Performance. The performance of investigators is based on three criteria: (1) the number of cases investigated, (2) the number of leads covered in a day, and (3) the amount of noteworthy information obtained.

Investigator Characteristics. According to the CIA personnel interviewed, there are several characteristics of good investigators. These include intelligence, hard work, experience, curiosity, patience, enjoyment of contact with the public, listening skill, oral communication ability, writing ability, and desire to obtain more information.

Evaluation of the Interview. The CIA respondents interviewed were not aware of any studies conducted within the agency that evaluated the the effectiveness of the investigative interview. However, they suggested that among non-subject interview sources, peers are the most productive sources to interview.

Defense Intelligence Agency

Overview

The Defense Intelligence Agency (DIA), which is located at Bolling Air Force Base in Washington D.C., has a staff of four investigators and six adjudicators.

The typical DIA subject interview requires about 30 minutes. However, interviews that involve substantial derogatory information may last an entire day. The general interview procedures followed are described below.

Preparation for the Interview. Prior to the interview, the investigator reviews the subject's background history form (e.g., PSH) and any other available information (e.g., credit check). During this review the investigator looks for missing, discrepant, and issue-oriented information. The review generally takes five to ten minutes.

Setting. Interviews are conducted at the subject's site. The principal requirement of the interview setting is privacy.

Introduction to the Interview. The investigator begins the interview by introducing him or herself and positively identifying the subject. The investigator does not usually show credentials. During this introduction, the investigator tries to develop rapport with the subject. The DIA officials interviewed suggested that effective rapport building results in more productive interview information.

At some point during the interview, the investigator informs the subject that the information provided is confidential. This is usually done towards the end of the interview.

Questioning Phase. Following the introduction, the investigator reviews the subject's background history form with the subject. During this phase of the interview, the investigator questions the subject about specific items on the form, emphasizing those items that have been identified as omitted or discrepant during the preparation phase.

Topics Covered. The subject interview covers many areas. Topic areas mentioned during the meeting with DIA officials include the subject's employment background, alcohol use, drug use, criminal record, health, stability, family and associates, foreign connections, foreign travel, and financial responsibility.

Questioning Methods. The questioning strategy usually begins with general questions about a topic and then proceeds into more specific follow-up questions. The investigator does not use a standard, structured set of interview questions. When the agent has developed a pre-determined list of questions prior to the interview, these questions should not be read in a "checklist" fashion.

Detection of Deceptive Subjects. The investigator is trained to look for possible verbal and nonverbal deception on the part of the subject during the interview. Several methods are used. For example, the investigator observes the subject's nonverbal behavior when asking the same question in different ways, and looks for such mannerisms as shifts in the subject's posture and avoidance of eye contact. When the subject appears to be answering deceptively, the investigator asks probing questions related to the topic and/or mentions that the interview information is confidential.

Interview Documentations. The investigator typically takes only limited notes during the interview. Upon completion of the interview, the investigator writes a short report which summarizes the results. To facilitate the report writing process, the investigator sometimes uses standard paragraphs on topics where no derogatory information was found.

Follow-up Subject Interview. A follow-up subject interview may be conducted if derogatory information surfaces after completion of the first subject interview. This interview is typically restricted to specific issues. In general, this interview tends to be more confrontational than the initial subject interview.

Adjudication. The investigators do not adjudicate the investigation results. This is done by special adjudicators. In routine investigations in which no derogatory information is obtained, one adjudication is performed. In cases where derogatory information occurs, more than one adjudicator reviews the case.

Appraisal of Investigator Performance. Investigator performance is appraised in at least two ways. First, the team chief reviews individual cases and provides feedback to the investigator. Second, investigators are rated by their supervisor in several areas such as expertise, action-

orientation, communication, adaptability, interpersonal and supervisory skills, and organizational skills.

Characteristics of Good Interviewers. The DIA officials interviewed for this study mentioned several characteristics of good investigators. These include communication ability (e.g., to ask appropriate questions, to ask focused questions, to ask follow-up questions), listening ability, perceptiveness (e.g., to identify potential issues arising from verbal or nonverbal responses), ability to maintain control of the interview, and good writing skills.

Investigator Attrition. The DIA officials interviewed mentioned that "burnout" among investigators is a problem. In order to control this, agency officials try to give the investigators as much variety in their job duties as possible. For example, an investigator experiencing symptoms of burnout might be given more adjudication or other job responsibilities.

Interview Evaluation Studies. The DIA representatives interviewed were not aware of any empirical studies which have investigated the effectiveness of the investigative interview.

Chapter Summary

This chapter described the investigative interviewing procedures followed by five federal organizations (DIS, OPM, FBI, CIA, DIA) for Top Secret personnel security clearances. DIS and OPM conduct both subject and non-subject interviews. DIA primarily conducts subject interviews. The FBI and CIA primarily conduct non-subject interviews.

Subject and non-subject interviews are often conducted in different settings. Subject interviews are usually conducted in a government office setting, whereas non-subject interviews are less likely to be held in an office. In both types of interviews, privacy and freedom from distractions are the principal requirements for the interview setting.

Guidelines for investigator conduct are similar across agencies. These guidelines include acting in a professional manner, dressing in a businesslike manner, and being courteous, respectful, and nonjudgmental.

Overall, the interview procedures followed by these agencies are remarkably similar in many respects. The investigator generally prepares for the interview by reviewing available background information about the subject for missing, discrepant, and issue-oriented information. The interviewer begins the interview by introducing him or herself and positively identifying the subject. The investigator usually (although not always) shows credentials. During this introduction, the investigator attempts to develop rapport with the subject.

At some point during the subject interview, the investigator informs the subject of the privacy act. This may be done at the beginning of the interview (e.g., DIS, OPM) or near the end of the interview (e.g., FBI, CIA). OPM subject interviews are conducted under oath. None of the other

agency officials mentioned use of an oath, although DIS investigators seek written signed statements when the subject provides significant derogatory information.

Following the introduction to the subject interview, the investigator generally reviews the subject's background history form. During this phase of the interview, the investigator questions the subject about specific items on the form, emphasizing items that have been identified as omitted or discrepant during the preparation phase. A review of each item on the form is generally not undertaken.

In most agencies, a standard list of topics is covered. These topics, which are similar across agencies, include education, employment, residence, alcohol, drugs, mental treatment, moral behavior, family and associates, foreign connections, foreign travel, financial responsibility, organizations, loyalty, criminal history, handling information, and trust.

Coverage of interview topics generally begins with questions on the subject's background (e.g., education, employment) and later proceeds into suitability and more sensitive areas. In terms of degree of topic coverage, the OPM interview is probably the most comprehensive.

Although the topic areas are generally structured, only DIS emphasizes use of a structured set of questions for each topic. DIS investigators typically ask four to seven short, direct questions regarding a subject area, followed by summarizing questions. Other agencies use more open-ended questions, followed with summary or verification questions. Different types of questions are asked. Interrogative questioning methods are not used by DIS, but are occasionally used by FBI investigators.

All of the agencies visited train their investigators to look for possible verbal and nonverbal cues to deception on the part of the interviewee. Most of these indicators are based on patterns of various verbal, paralinguistic, and nonverbal (body gestures, facial expression) indicators.

Investigators normally take only limited (or no) notes during the interview. OPM investigators tend to take the most extensive notes, while FBI investigators generally take fewer notes. Upon completion of the interview, investigators write or dictate a short report summarizing the results of the interview. In all agencies, investigators obtain the interview information but adjudicators make the clearance decisions. OPM is unique in that it conducts interviews on a contract basis for over 90 Federal agencies.

If derogatory information surfaces after completion of the first subject interview, a follow-up subject interview may be conducted by DIS, OPM, or DIA. These follow-up interviews are usually more limited in scope than the initial subject interview.

Non-subject interviews tend to be less structured than subject interviews. During the non-subject interview, respondents are advised of their confidentiality rights as well as the subject's privacy act rights. Questions in the non-subject interview are usually more open-ended. In addition to covering those topics included in the subject interview,

investigators conducting non-subject interviews also seek information about reasons for a subject's actions and the subject's efforts to rehabilitate when derogatory information is found. Non-subject sources interviewed by OPM, CIA, and FBI often include neighbors. In contrast, DIS does not typically interview neighbors.

Investigator performance is appraised using different techniques by these agencies. Most agencies rely on evaluations of the interviewer's investigations through objective casework indicators (e.g., number of cases, number of leads obtained, amount of missing information) and/or supervisory evaluations. DIS has the most extensive interviewer appraisal procedure.

The most important characteristic of investigators according to officials at the agencies visited is communication skills.

Investigator attrition is generally low in the agencies visited. Only one agency (DIA) indicated that interviewer burnout was a problem.

CHAPTER 3. RELATED INTERVIEWING PROCEDURES: A DESCRIPTION OF PRACTICE

This chapter provides a description and summary of applied interviewing methods. We describe the procedures used in investigative interviews in industrial settings, interrogations, legal depositions, and employment interviews.

This chapter is organized into ten sections. Section One describes the results of a telephone survey conducted to identify investigative interview methods used in private industry. Sections Two and Three briefly outline two investigative interview approaches taught by commercial trainers. Section Two discusses the Reid Integrity Assessment Interview and Section Three describes the Kinesic Interview. Sections Four through Seven discuss the interrogation methods taught by John E. Reid and Associates. Section Four provides an overview of their procedures, including a psychological model of effective interrogation. Section Five describes the Behavioral Analysis Interview. Section Six outlines the Interrogation Interview. Section Seven describes methods used to detect deception during interrogation. Section Eight describes the approach and methods used in interviewing witness for legal depositions. Section Nine outlines "state of the art" employment interview practice. Consistent with the other material in this chapter, this employment interview description is based upon interviewing practice. Finally, Section Ten summarizes the chapter with a discussion of the similarities and differences in these interviewing procedures and contexts.

The Investigative Interview In Industry

Overview

We conducted a telephone survey of private industry to identify the strategies, tactics, and techniques that have evolved in practice. This section briefly describes the results of that survey.

Method

We identified ten organizations that conduct business that either concerns national security or involves proprietary information in an especially competitive environment. These organizations were the Boeing Corporation, Investor's Diversified Services, Control Data Corporation, McDonnell Douglas, Cray Research, Texas Instruments, Honeywell, 3M, Honeywell Bull, and Unisys Corporation. We made initial contacts with the personnel departments of these corporations to identify the appropriate person to survey. We then contacted these persons to obtain information on their investigative interview practices with respect to hiring into sensitive positions.

Results

Eight of the organizations reported that while they conducted investigative interviews, it was only done for personnel violations (EEO

charges, rule violations, etc.) or specific incident investigations (e.g., theft). No organizations reported conducting investigative interviews themselves for hiring into sensitive positions. Those organizations that require investigative interviews for security classification purposes utilize investigations conducted by the government agency that sponsors the project they are working on. Two organizations, Texas Instruments and 3M, declined to discuss this topic, one for security reasons and the other declined to give a reason.

A representative of one of the organization's commented that his organization formerly conducted such investigations but found them too costly, time consuming, and non-productive. Local agency police checks have also been discontinued for similar reasons. Instead, credit checks are now conducted for all cashier's, and drug testing is done during pre-employment screening. Another organization reported that they had never used personnel screening measures for sensitive positions (other than those conducted by government agencies for security classifications). Their industry (supercomputers) changes so rapidly that stolen information can not be put to use soon enough to cause damage.

A representative of a third organization commented upon their procedures for reference checking. This consists of telephoning former employers, identifying their organization and purpose, and asking open-ended questions concerning the applicant's work performance. This procedure generally takes 5 to 10 minutes. They had conducted no research, but reported that the open-ended format yielded substantially greater information than other approaches.

Reid Integrity Assessment Interview

Overview

The Integrity Assessment Interview (IAI) is used for pre-employment screening for applicant honesty, integrity, and truthfulness. The interview focuses on obtaining admissions of work misconduct, theft, drug use, and employment application falsifications (e.g., salary, tenure, disciplinary actions, reasons for leaving a job). The methods used and questions asked are designed to meet EEOC guidelines.

Methods

The IAI uses a patterned behavior analysis approach. The interview questions are based upon knowledge of types of misconduct specific to a particular industry and upon the applicant's background questionnaire. The interviewer presents himself professionally and begins the interview with an explanation of purpose and follows with an "ice-breaking" period. The interview proceeds with a review of the background form and then moves to a discussion of sensitive issues (e.g., drug use). Throughout the interview, the interviewer attends to both verbal and non-verbal behaviors that indicate possible deception. Untruthful applicants are confronted as to the truthfulness of their responses. The tone of the interview and of any confrontations is designed to be unoffensive. The scoring of admissions of misconduct is based upon the standards of the company that applicants are applying to.

In one informal study provided by John E. Reid and Associates, this interviewing method obtained more admissions of misconduct than did a polygraph screening approach. Furthermore, applicants preferred the interview.

Training

John E. Reid and Associates provide training on this interviewing approach. The focus of the training is on recognition of deception on application blanks and in the interview itself. Training is also provided on interview preparation and conduct, and on legal considerations of hiring.

The Kinesic Interview

Overview

The Kinesic interview is taught commercially by Interrotec. The Kinesic interview combines behavior analysis and interrogation technologies. A primary focus of the technique is on the detection of deception through analysis of verbal and non-verbal behaviors. The Kinesic approach to interviewing is used extensively by government organizations.

Procedures

The Kinesic approach emphasizes control of the interview by the interviewer, including planned strategies, tactics, arguments, and the spatial arrangement of the chairs and the interviewee's posture. Interviewers classify subjects by type to facilitate interpretation of their responses, defense mechanisms, and coping behaviors. A patterned interview procedure is utilized to facilitate interviewer control and to sustain the interviewer dialogue that is central to interrogational success. Both rational arguments and emotional appeals are used to secure subject cooperation.

Methods of detection of deception are also utilized. These include close observation of both verbal and non-verbal behaviors. Verbal behaviors considered include analysis of speech errors, analysis of stereotypic answers to structured questions, and analysis of inconsistent logic in written statements. Non-verbal behaviors considered include subject facial expressions, posture, and physical activity.

Interviewing and Interrogation Methods of Reid and Associates: Overview

Interview procedures used for interrogating criminal suspects and witnesses to crimes are briefly outlined in the next few sections. The primary source of information for these sections is the book, Criminal Interrogation and Confessions, by Inbau, Reid, and Buckley (1986). This book represents the content of training programs provided by John E. Reid and Associates to police and security personnel.

Inbau et al. (1986) present a psychological model of the interrogation process. They suggest that interrogation is a dynamic interviewing process used to elicit a subject's personal knowledge of an event, usually a crime. There are numerous negative consequences for divulging this information, both real and perceived, for witnesses, suspects, and perpetrators of crimes. The interrogator's task is to persuade the subject to tell the truth.

Effective persuasion is a result of two factors--reducing the perceived negative consequences of confessing, while increasing the anxiety level associated with maintaining deception. At the beginning of interrogation, the level of perceived consequences is high and the anxiety level is relatively low, due to the suspect's psychological defense mechanisms. The skilled interrogator reduces the perceived level of consequences through rationalization (e.g., it happened because of stress) and sympathy, and increases anxiety (e.g., by moving close to the suspect, feigning anger). Decreased perceived consequences and increased anxiety create the conditions that are conducive to a confession.

Due to the perceived negative consequences of disclosing certain information, the interrogator's job necessarily involves a skill at detecting deception, whether of omission, evasion, denial, or distortions and then persuading the subject to tell the truth. Brian Jayne, in an appendix to the Inbau et al. (1986) book, proposed that four conditions must be met for this persuasion to be effective. First, the interrogator must be highly credible (e.g., have a professional demeanor, display confidence). Second, he must have an awareness of the subject's attitudes. Third, the subject must internalize the message. And fourth, the interrogator must adapt his interviewing tactics and procedures to the subject's responses.

When the subject actually committed a crime and is denying it, the dynamic process of interrogation will typically proceed through five sequential stages. The first stage is direct positive confrontation. In this stage, the interrogator confronts the suspect with a confident assertion of the suspect's guilt. This serves two purposes. It neutralizes the suspect's defense mechanisms for denying the truth to himself. Typically, it also elicits nonverbal behaviors indicating the suspect's truth/deception and anxiety tolerance level.

In the second stage, active rejection, the suspect objects to the evidence, denies his guilt, and tries to persuade the interrogator of his innocence. If the suspect's tolerance of anxiety is low, he may psychologically withdraw. As each of these objections and defenses are met and handled by the interrogator, the suspect enters stage three, passive relating. During this stage, the suspect passively listens while the interrogator provides a series of general rationales, or themes, for why such a crime is understandable. During this stage, a rapport and trust develops as the interrogator is perceived as a credible sympathetic individual by the subject.

As the suspect passively relates to the progressive development of the themes, he moves into a stage of acceptance, the fourth stage. Now the suspect is engaged in weighing the consequences of confessing against the anxiety associated with deception. Finally, at this crucial juncture, the

interrogator provides a way to admit the offense with minimal anxiety and in the fewest words.

An incentive to confess is given in the form of a question with two alternatives, one that is easier to accept. For example, "Did you steal out of spite or because your family needed food?" The two alternatives have been extensively developed during the themes. The use of the question alternatives has the effect of reducing the perceived consequences of confessing, since remaining silent gives tacit acceptance of the worse alternative. It also increases the anxiety level, because the psychological defenses have been removed. During this fifth stage of message internalization, with anxiety increased and the perception of consequences decreased, the suspect confesses.

The next three sections discuss other topics covered by Inbau et al. (1986). The next section outlines an approach to interviewing witnesses to gather the facts of a case--the behavioral analysis interview. Following this, a discussion of interrogation methods is presented. A third section discusses observation methods for detecting deception during interrogations.

Behavioral Analysis Interview

Overview

The behavioral analysis interview (Inbau et al. 1986) is designed to obtain investigative information on criminal cases through both listening to the verbal content and observing the nonverbal responses of the interviewee. The procedures are designed to provoke nonverbal, behavioral indications of guilt or innocence which can then be used to guide further investigation. This interview is directed towards obtaining basic facts from suspects, witness, or others who may have relevant information. These interviews should precede the interrogation of a suspect.

Procedures

The interrogator begins by asking simple, innocuous background questions such as the name, age, address, place of employment. This allows a baseline observation of the subject's normal behaviors. It also helps the subject to acclimate to the interview. The interrogator then asks the subject the following series of open-ended questions:

"Do you know why you are here?"
"Why do you think someone would do this?"
"Of the people you know, who would be above suspicion?"
"Who do you think might have done something like this?"

These questions, in addition to requesting important information, are designed to provoke nonverbal behaviors that are indicative of guilt or innocence.

Baiting questions are also used to elicit information from both verbal and nonverbal behaviors. Such questions should not be directly accusatory. To be effective, this technique must be used as a plausible, sincere

inquiry and must avoid positive, challenging statements not based in fact. Such challenges are counterproductive because they can give guilty suspects confidence in their deception if the information should prove wrong.

The responses to such baiting questions provide useful information for differentiating guilty from innocent persons. Guilty suspects will pause or delay before responding because the implications need to be considered. Innocent persons respond more quickly, typically with a vehement denial.

Baiting questions can also be used to invite a suspect to lie, if inclined to do so. Such lies, when known, are valuable tools for later obtaining a confession.

Interrogation Interview

Qualifications of Interrogators

Successful interrogators are intelligent and have good verbal skills. They exhibit characteristics such as compassion, patience, persistence, dominance, have a high degree of personal impact and credibility, and possess a strong interest in the field. They also possess a thorough knowledge of legal requirements and constraints and have well developed skills in a wide range of effective interviewing techniques.

Preparation

Prior to interrogating, interviewers become thoroughly familiar with all available facts. Such information is useful in formulating probing questions and conveying credibility to the subject. Also, a preliminary interview (such as the behavioral interview described above) should already have been conducted.

Setting

An important factor in successful interrogation is privacy. The suspect is more likely to reveal information when alone with the interrogator than in a room with additional persons. The room should be quiet, private, properly lit, with no door locks (to prevent claims of imprisonment), and no large objects or drapes (to prevent claims of concealed persons). The room should have plain colored pictureless walls and no telephones (to avoid distractions). Chairs should be arranged about four to five feet from the subject with no intervening objects between them. Straightbacked chairs should be used, and if possible, there should be an adjoining observation room behind a two-way mirror to the side of the subject. A home or office setting is not recommended for interrogation.

General Interrogator Conduct

Interrogators dress in civilian clothes rather than in uniform, keeping a coat on throughout the investigation (to command respect). They sit about 4 or 5 feet from the subject (long distances afford the subject some relief) and remain seated through the interrogation (to be attentive; to show patience).

Effective interrogators avoid the impression of being confession seekers. Instead, they seek the impression of searching for the truth. When speaking, interrogators should not use straightforward words to describe the criminal behaviors (e.g., murder, stealing). Instead, they should use vaguer referents that conforms to the subject's language. They should address low social economic status (SES) persons using "Mr." or "Mrs." (to flatter the person), but use first names with high SES subjects (to reduce their superiority). They avoid note taking, if possible (it reminds the subject of the significance of a remark).

Finally, interrogators should treat the subject with decency and respect, never scold the subject after catching a lie, and emphathize with the position of being interrogated.

Procedures

The interrogation begins by having another person (other than the interrogator) bring the suspect into the room, where he is left alone for about 5 minutes (this allows a guilty person to plan, and doubt, the effectiveness of deceptions). The interrogator enters the room in a deliberate fashion, exhibiting confidence. The interrogation proceeds through the following nine steps (not all steps are always necessary, nor are they always given in this order).

1. Direct Positive Confrontation. The suspect is immediately confronted with an accusation, stated in a deliberate, confident tone, with the interrogator standing in front of the seated subject. After a brief pause to assess behavioral reactions, the accusation is repeated, coupled with a transitional comment. The major goal at this step is to keep the suspect from denying involvement in the crime, since commitment to a lie makes a confession more difficult.

2. Theme Development. The interrogator proceeds to develop a "theme" or moral excuse for the commission of the crime. For emotional offenders, such themes usually are developed to reduce their inhibitions about expressing their guilt, usually through the use of sympathy and compassion (e.g., it was someone else's fault, it wasn't that bad a crime). For nonemotional offenders, the themes relate to the facts of the case (i.e., seeking an admission to lying about an incidental detail).

3. Handling Denials. During theme development, both innocent and guilty subjects will attempt to interrupt the interrogator to express their objections. Again, the goal of the interrogator is to prevent any further denial of the accusation. This is accomplished by admonishing the subject to listen to what is being said because of its importance. The guilty subject will typically preface their denial with a permission phrase, "But, sir, can't I say one thing?". The innocent person simply interrupts with a direct, simple denial.

4. Overcoming Objections. After repeated interruptions of his denials, a guilty subject will typically change tactics to gain control of the conversation. This will take the form of an embellishment of the denial. This change in tactics is a good indication that the interrogation is proceeding well--the denial phase has changed to one of offering objections. Innocent subjects do not typically feel the need to embellish

their denials with any other objections. At this point, the interrogator calmly inquires about the nature of the objection and uses it to further develop the theme.

5. Retention of the Suspect's Attention. When the subject shows indications of indecision (becomes pensive, talks less, seems not to be paying attention, fiddles with clothes, etc.), the interrogator should realize that the subject is beginning to consider telling the truth. Consequently, the interrogator will attempt to maintain the suspect's attention by leaning forward, gently moving the chair closer to the subject, and maintaining eye contact.

6. Handling Suspect's Passive Mood. At this point, the interrogator should have achieved a close rapport with the subject. As a consequence, the subject is more reticent and willing to listen. The interrogator should continue with the development of the theme, observing carefully to note which of the motives suggested by the interrogator the subject seems to accept. The interrogator should continue to display sympathy and move physically closer to the subject. The subject should be urged to tell the truth on the grounds of decency, honor, or for relief of inner strain and guilt. The subject is ready for step 7 when he displays a defeatist posture, stares blankly, is silent, or cries.

7. Presenting an Alternative Question. The alternative question is one that presents to the suspect a choice between two explanations for possible commission of the crime. It is a face saving device that eases the burden of beginning to tell the truth. This question should then be followed by a supporting statement, that only calls for a one word answer, or even a nod. It is very important to ease the suspect gently into telling the truth. It is difficult for humans to admit even minor wrong doings, much less serious crimes.

8. Having Suspect Orally Relate Various Details of the Offense. After accepting one of the answers to the alternative question, the objective now is to develop the details of the crime. This is done by first reinforcing the answer. Then the interrogator should directly request more detail. In this way, the details of the case should be developed. When the basic structure of the story has been told, a second person should be brought in to witness the oral confession.

9. Converting an Oral Confession Into a Written One. The oral confession should now be converted to a written confession. This confession should contain a warning of the suspect's Constitutional Rights and should be written in the confessor's own language. It should contain some personal history questions and some intentional errors for correction by the confessor (to counter claims that the confession was not voluntary or not read by the subject).

Finally, the interrogator should conduct a post confession interview to learn what techniques had been especially effective or ineffective. This is a primary source for improving the knowledge and skills of the interrogator. Primary among these skills is developing an insight into human nature, and the development of understanding and sympathy for criminal offenders. In the opinion of Inbau et al. (1986), this attitude of compassion is a prime requisite for effective interrogation.

Detection of Deception

Inbau et al. (1986) suggested that several verbal and nonverbal behaviors are useful indicators of an interviewee's truthfulness or deception. To be effective, these behaviors should be interpreted in terms of patterns of behavior, rather than as isolated behaviors. They suggest the following verbal responses are indicative of deception (vs. truthfulness):

- Denies specific aspects of a situation (vs. gives sweeping, general denials).
- Avoids (vs. readily uses) realistic, harsh words about crime.
- Gives vague, delayed responses (vs. is direct and spontaneous in responding).
- Gives qualified (vs. unqualified) answers.
- Has poor or extremely good (vs. reasonable) memory.
- Does (vs. does not) inject irrelevant matters into conversation.
- Does (vs. does not) ask for repetition of clearly stated questions.
- Provides irrational (vs. rational) answers or is unable to remember.
- Uses a mumbled, subdued (vs. a distinct, clear) voice.
- Does (vs. does not) reinforce denials by swearing or using references to religion.
- May be overpolite (vs. assertive or defiant) when answering questions.
- May joke (vs. is serious and concerned).
- Does not inquire (vs. insists) on knowing if he/she is still a suspect after completing the interrogation.

Inbau et al. (1986) suggested the following nonverbal responses may indicate deceptive subject behavior:

- Displays certain gross body movements (e.g., changes posture; moves chair away from the interrogator; indicates readiness to stand up).
- Uses supportive gestures [e.g., places hand over mouth or eyes when speaking; crosses arms or legs, hides hands (by sitting on them) or hides feet (by pulling them under the chair); holds forehead with hand; or places hands under or between legs].
- Exhibits excessive grooming gestures and cosmetic adjustments (e.g., rubs and wrings the hands; strokes the back of the head; touches the

nose, earlobes, or lips; picks or chews the fingernails; shuffles, taps, swings, or arches the feet; rearranges clothing or jewelry; dusts or picks lint or pulls threads from clothing; adjusts or cleans glasses; and straightens or strokes the hair).

Inbau et al. (1986) noted that it is also important to look for deviations from the subject's normal behavior. The investigator should evaluate the timing and frequency of these behaviors. If these behaviors occur when asked or when answering certain of the questions, they are more likely to indicate deception.

Cautions

Inbau et al. (1986) suggested that verbal and nonverbal behaviors indicating deception should be evaluated collectively rather than as isolated indicators. It is important to understand that although behavior symptoms can be indicative of deception, they are only tentative indicators. Other legitimate reasons exist for exhibiting these behaviors (e.g., nervousness, anger, use of medication).

These authors also noted that honest suspects are usually composed, cooperative, sincere, concerned, and interested. Guilty suspects are typically more unconcerned, uncooperative, insincere, excessively polite, apologetic, or overanxious. However, the distinctiveness and reliability of these symptoms can vary with the level of intelligence, social responsibility, and maturity of the person. Generally, the more responsible, mature, or intelligent the subject, the more pronounced and reliable are the behavioral cues.

The Legal Deposition

Overview

Legal depositions are interviews conducted by attorneys to obtain documented testimony from witnesses who are unavailable for courtroom testimony. The witnesses often are expert witnesses such as physicians, psychologists, and technical experts. Depositions are also conducted with character references, witnesses to crimes, etc. Typically, the deposition is attended by the witness, attorneys for both the plaintiff and defendant, and a court reporter.

Preparation

Thorough knowledge of the topic to be discussed in the deposition (e.g., accident, crime) is a pre-requisite for effective results. Experienced attorneys suggest the following steps:

- Prepare a chronological outline of all known events.

- Prepare an index of all documents.

- Make site visits to the location of the event in question.

- Define the deposition purpose carefully.

- Plan the strategy and tactics for questioning.

- Anticipate the interests which the witness seeks to project.

- Prepare an outline of topics to be covered.

Setting

The interview typically takes place in the requesting attorney's office.

Introduction

The interviewer creates a relaxed and casual atmosphere by introducing all parties and seeing to their comfort (e.g., providing coffee). The deposition purpose and procedures are then explained to the witness. Blumenkopf (1981) and Wallach (1984) suggest that witnesses tend to have better recall and are less guarded when they are comfortable.

Interview Tone

The interview is best conducted in a courteous and pleasant manner. Abrasive or hostile manners are recommended only when the purpose is to overwhelm the witness into settling the matter out of court or when the witness is hostile. Otherwise, allowing the witness the opportunity to be neutral is the recommended approach.

Questioning Methods

The attorney uses broad, open-ended questions to allow witnesses to reveal the previously undiscovered details. These questions are usually short, clear sentences that are sequenced to provide continuity to the witness. The open-ended nature of the questions are recommended as the best approach for securing unfavorable information. The attorney takes notes and uses these to develop specific follow-up questions. These follow-up questions are used to commit the witness to a particular position and to obtain admissions. The use of these questions is to commit the witness as firmly and completely to details as possible. Additional important information can be obtained by asking the witness what documents were used to refresh his/her memory in preparation for the deposition. Wrap-up questions are used to close off "escape routes" (i.e., later changes of memory). When answers seem too contrived or rehearsed, the attorney will move from topic to topic in quick fashion to prevent such calculated responses.

The Employment Interview

This section presents a summary of "state of the art" employment interview practice. It is based upon a synthesis of practical guides to interviewing and the procedures used by one major corporation.

Overview

The purpose of the selection interview is to gather information that enables the interviewer to predict an applicant's behavior (performance on the job). The best predictions of future behavior are based on a person's past behavior in similar situations. The underlying assumption is that behavior is relatively consistent over time. This "behavior consistency" principle is not perfect, however, since people grow and change. Two corollaries to this principle take change into account. First, the more recent the behavior, the more confidence we can have in its consistency. And second, the more long-standing the behavior, the more likely it is to continue. Many job-related abilities, skills, and attributes show considerable stability over time.

The job of the employment interviewer is to elicit information from applicants about the candidate's past performance so that their future behavior in the position under consideration can more accurately be predicted. In predicting how well a candidate is likely to do on a job, the interviewer should rely on how well the person has done in past situations that required behavior similar to that required on the job, rather than on the candidate's personal appearance or the "chemistry" between the candidate and the interviewer.

Interviewer Qualifications

The employment interviewer should have several qualifications. These include extensive knowledge of the requirements of the job; knowledge of human motivation, adjustment, and abilities; and knowledge of personnel administration (e.g., company policies, salary structure, organizational structure). Furthermore, expert interviewers are skilled in interpersonal communications.

Preparations

Prior to the interview, the interviewer reviews the requirements of the particular position under consideration and examines the candidate's resume or application, noting any areas that should be covered in greater detail during the interview.

Setting

The interview setting should be one that facilitates the sharing of information by the candidate. Thus, interviews should be held in a private room or office. Phone calls and other interruptions should be avoided. The interviewer should also, when possible, get out from behind his or her desk and interview "corner-to-corner".

Introduction

The atmosphere in the interview should be warm, friendly, and accepting. The interviewer should greet the candidate warmly with a handshake and introduce him or herself using first and last names. The interviewer should inform the candidate of his or her preferred form address and ask the applicant how she/he prefers to be addressed. The interviewer then briefly explains his/her position at the company.

The interview begins with a brief period of small talk to put the candidate at ease and to establish rapport. Before the questioning begins, the interviewer outlines or structures the interview process for the candidate. This structuring statement informs the candidate about the length of the interview, the topic areas to be covered, and that time will be provided to the interviewee at the end of the interview for questions about the position or the company. The interviewer also informs the candidate that notes will be taken.

Format

Trainers of employment interviewers recommend the use of a standard interview protocol or guide for each position. Such interview protocols are developed on the basis of a thorough job analysis to elicit information about the candidate's past performance in the important performance categories for the position. Standard interview protocols have the following advantages:

- they ensure that the questions asked are job-related;
- they ensure comprehensive coverage of the important areas in each interview;
- they ensure that all candidates for a position are asked essentially the same questions; and
- they ensure that the interviewer (and other decision makers) compare the same aspects of every candidate's background in making a selection decision.

These advantages result in more accurate selection decisions and in a fairer selection process.

The interview protocol begins with a brief review of the candidate's current job. This consumes only five minutes or so. The purpose of this review is to provide enough information about the candidate to effectively ask questions about his/her past performance.

The remaining sections of the interview protocol correspond to categories of effective performance identified in a job analysis of the position under consideration. Each category includes a small number (e.g., two or three) questions designed to elicit information about the candidate's relevant past performance.

The interview questions are intended to provide three types of information about a candidate's past behavior: a description of the situation, the applicant's behavior in that situation, and the outcome of the applicant's actions. Research has shown that probing for specific situations and behaviors is important in preventing the applicant from giving broad, rehearsed answers such as being "hard-working."

The interviewer should be flexible in using an interview protocol. The protocol contains several general, open-ended questions followed by one or more suggested follow-up probing questions. The interviewer should ask

the candidate all the general questions on the protocol, but may change the order of the questions depending on the flow of the interview. Suggestions for asking good probe questions include:

- using open-ended rather than closed-ended (yes/no) probing questions that focus on a situation, behavior, or outcome relevant to the candidate's response and to the dimension of interest;

- avoiding lengthy or "double-barreled" probing questions; and,

- avoiding "transparent" probes which indicate to the applicant the preferred type of response.

Controlling the Interview

The interviewer must control the interview so that all topics are covered in the time allowed. This can be difficult when applicants are overly talkative or do not respond directly to the questions asked. Suggestions for controlling talkative candidates include:

- briefly summarizing key aspects of the candidate's response to finish a topic;

- avoiding nonverbal cues (e.g., head nodding) that encourage the candidate to continue talking;

- avoiding verbal responses (e.g., "uh huh," "oh really") that encourage the applicant to continue talking;

- using nonverbal cues (e.g., straightening your posture) to indicate readiness to change topics; and

- interrupting the applicant politely, if necessary.

In contrast, interviewers find some applicants are reluctant to talk. Suggestions for drawing out reticent candidates include:

- using open-ended probing questions,

- using calculated pauses (while maintaining eye contact with the applicant) to encourage the applicant to talk;

- using nonverbal cues (e.g., head nodding, leaning forward in your chair) to encourage the applicant;

- using active listening responses (e.g., "uh-huhs," "oh really");

- restating what the applicant said to encourage the applicant to elaborate.

The interviewer's nonverbal behavior also helps control the interview. Generally recommended interviewer behaviors include smiling frequently, maintaining eye contact with the interviewee, using active listening responses (e.g., head-nodding), and avoiding frowning or other evaluative

behaviors. Finally, the interviewer should let the applicant do most of the talking.

Note Taking

In order to effectively evaluate the candidate, the employment interviewer takes notes on relevant aspects of the candidate's background. This helps the interviewer base the evaluation on the candidate's relevant past background rather than on "gut feelings" about the candidate (based largely on the candidate's appearance and behavior during the interview). When taking notes, the interviewer jots down the important aspects of the candidate's response using key words or phrases. Writing down everything the applicant says makes it difficult to listen and may disrupt the conversation.

The interviewer more fully documents the applicant's responses after the interview. These notes provide information about the candidate's past behavior in job relevant areas.

Closing the Interview

After completing the interview protocol, the interviewer provides the applicant an opportunity to state any information s/he thinks is important. The candidate is also asked if s/he has any questions before ending the interview. The interviewer then concludes the interview in a warm, friendly manner and informs the candidate about the next steps in the screening process and when to expect a decision.

Evaluating the Candidate

The employment interviewer should use a standardized rating form to accurately score the information gathered in the interview. The rating form should have separate scales for each performance dimension assessed. Each dimension can be scaled (e.g. from 1 to 5) and anchored with behavioral statements. The statements describe actual behaviors the candidate discussed during the interview. These statements provide standards for what constitutes high, moderate, or low effectiveness in a category and ensure that different interviewers interpret the different levels of the scale in a similar manner.

After the interview, the interviewer reviews and completes his or her notes and then rates the candidate using the behavior-based rating form. The interviewer also makes a few comments about why the candidate was given a particular rating in each performance area. When completing the candidate rating form, the interviewer should avoid common rating errors (e.g., halo, leniency). The structured evaluation form helps to ensure that candidates are evaluated on job relevant aspects. After rating the candidate on all the rating categories, the interviewer makes an overall evaluation of the candidate.

Chapter Summary

We presented descriptions of interviewing procedures used in practice for the purposes of investigative interviewing in the commercial setting,

criminal interrogation, legal depositions, and employment selection. Each type of interview is intended to gather information about individuals. Consistent with recent employment interviewing research, to some extent, each method can be characterized by a use of structure--a consistent format and content for the interview.

The employment interview has some unique features. The question content is developed from a systematic job analysis and it is the only interview that combines data collection with decision making. Consequently, there is more focus on impression management (avoiding first and last impression biases) and controlling rating errors.

These four interview types can also be described in terms of their differences. This is especially important for understanding how the effects of interview procedures might generalize from one context to another. Table 2 characterizes some of the differences between interviews in terms of six dimensions that should be considered when generalizing procedures from one context to another.

Perhaps the most significant differences are those for the motivational approach and for the type of content considered. The investigative interview employs a different motivational set than do the other interview types. Typically, the investigative interviewer begins the interview by reminding the subject of the importance of complete candor and the consequences of the failure to be forthright. Then s/he reminds the interviewee of this periodically throughout the interview. Although the characterization of this approach as "punishment" is not precise, it is clear that this motivational set is an important element in the investigative interview approach and a distinguishing feature between interview types. The focus upon derogatory information is a second important distinguishing feature. The combination of these two components, motivational approach and type of content, are probably the key features to evaluate when generalizing the effects of interview procedures from one context to another.

Table 2

A Comparison of Four Types of Interviews

	INVESTIGATIVE INTERVIEW	INTERROGATION	LEGAL DEPOSITION	EMPLOYMENT
PURPOSE	*Select Out*	*Confession*	*Gain Information*	*Select In*
WHO TALKS MOST	*About even*	*Interviewer*	*About even*	*Interviewee*
FOCUS	*Facts*	*Specific Event*	*Facts*	*Behavior/ Traits*
MOTIVATIONAL APPROACH	*Punishment**	*Negative Reinforcement***	*Varies*	*Positive Reinforcement*
TYPE OF CONTENT	*Negative*	*Negative*	*Neutral*	*Positive*
INFORMATION SOURCE	*Verbal & Nonverbal*	*Verbal & Nonverbal*	*Verbal*	*Verbal*

* The motivational approach to investigative interviews involves 'punishment' in the sense that subjects are warned that failure to provide accurate and complete information may result in a failure to hire or to receive a security clearance.

** The motivational approach to interrogation is negative reinforcement in the sense that confessions are obtained by reducing the perceived negative consequences of disclosure, which is reinforcement through (partial) removal of a punishing contingency.

CHAPTER 4. EMPIRICAL RESEARCH--SUBJECT INVESTIGATIVE INTERVIEWS

This chapter discusses results of studies that have examined the investigative subject interview. Only five non-military studies, all of which were unpublished, were located that examined the usefulness of the investigative subject interview. Each study is described below.

Defense Investigative Service (1981)

The Defense Investigative Service (1981) conducted a study which compared a background investigation similar to the IBI with the traditional background investigation. The IBI-type procedure included the subject interview, national agency checks, credit checks, law enforcement record checks, and selected additional investigating as necessary. The traditional background investigation included National Agency Checks, credit checks, law enforcement record checks, reference checks, employment record checks, employment interviews, education record checks, and selected additional work as necessary. The principal difference in the investigations was whether a subject interview was included.

Both types of background investigations were conducted for a random sample of 471 persons. This sample consisted of 71 percent military members, 18 percent contractor employees, and 11 percent DoD civilian personnel.

The results indicated that significant information was developed in 186 of the 471 cases (39 percent) using one or both investigation methods. (Significant information was defined as information that could "justify an adverse personnel security determination, or which would prompt an adjudicator to seek additional investigation or clarification".) Of the 186 cases in which significant information was developed, 92 cases (49 percent) found significant information using both types investigations, 72 cases (39 percent) found significant information using only the IBI-type investigation, and 22 cases (12 percent) identified significant information using only the traditional investigation.

The results also indicated that the subject interview developed significant information in 133 cases, or 72 percent of all cases having significant information (and 28 percent of all cases). In addition, the subject interview yielded approximately the same percentage of significant cases across three age groups (under 20 years, 20 to 25 years, and over 25 years) and across professions (military personnel, contractor employees, DoD civilians).

Based on these results, the research staff concluded that inclusion of the subject interview resulted in a significant improvement in the background investigation procedure.

It should be noted, however, that the subject interview has limitations. As noted above, 12 percent of the cases containing significant information were not identified using the subject interview. In addition, a reanalysis of this study by a DoD Personnel Security Select panel in 1982 (as described in a report for the Office of Personnel

Management--Office of Federal Investigations, 1986) found that the subject interview "failed to identify 20% of the data this group felt were significant" (p.6).

Director of Central Intelligence (DCI) Survey (1980)

The DCI study surveyed 12 government agencies (excluding the National Security Agency) regarding the productivity of various background investigation sources for the purposes of applicant screening and security clearances. Background investigation sources included in this study were subject interviews, neighbor interviews, education and employment record checks, national agency checks, and the polygraph. The results of the study suggested that the subject interview was the second most productive source (after the polygraph) with respect to both "unique adverse information" and "unique adverse information in cases resolved against the individual".

Jayne (1988)

Jayne (1988) described preliminary results of a study which examined the validity of several screening procedures, including polygraph admissions, an integrity interview, and a computer-administered interview. Three screening procedures were completed by three samples of job applicants. A brief description of each procedure is given below.

The polygraph examinations were conducted by licensed examiners from John Reid and Associates. No information was provided regarding the specific polygraph questioning procedure(s) used.

The integrity interview was similar to the interview that precedes the actual polygraph examination (i.e., pretest interview). However, this interview included more follow-up questions (to develop disclosures) and more behavioral questions (to obtain verbal and nonverbal behaviors regarding the subject's truthfulness) than the typical polygraph pretest interview.

The other interview studied was computer-administered and included questions similar to the integrity interview. This interview also included pre-programmed follow-up questions depending on the subject's answers. In addition, the interview included questions about attitudes toward honesty and questions measuring the respondent's propensity to provide "fake good" answers.

The screening techniques were judged on their ability to obtain disclosures on the following criteria: (a) no more than $50 in theft of merchandise from previous employers in the past 5 years, (b) no more than $1 theft of money from previous employers in the past 5 years, (c) no more than 12 uses of marijuana in past year, (d) no use of narcotics or major drugs in the past year, (e) no unauthorized use of alcohol on the job during the past year, (f) no more than one falsification of signification information on job history form in the past 5 years, (g) no shoplifting in the past 3 years, and (h) no involvement in a serious crime in the past 7 years.

The percentage of persons who made admissions exceeding one or more of the criteria for each screening method were: integrity interview (45 percent, n = 47), polygraph[2] (30 percent, n = 1000), computer interview (38 percent, n = 32). In addition, a subsample of the polygraph group (n = 172) was matched with the integrity interview sample on race, age, and sex. This group had a disqualifying admissions rate of 26 percent. The differences between the disqualifying admissions rate for the integrity interview and the matched polygraph sample were not statistically significant,

Jayne (1988) hypothesized several reasons for the polygraph's failure to produce a larger percentage of disclosures: (a) the small size of the integrity interview sample, (b) applicants were more open during the interview, or (c) examiners tried harder to obtain admissions during the integrity interview because they could not rely on their polygraph charts.

Preliminary results that indicate the percentage of persons who provided disqualifying admissions on various criterion categories for each of three methods (polygraph admissions, integrity interview, and computer interview) are shown in Table 3. The results suggest that the admissions obtained using the integrity interview and computer interview were generally greater than or similar to the admissions obtained using the polygraph pretest interview.

In interpreting these results, however, it should be noted that the sample sizes for the integrity and computer interviews were small. In addition, it should be reiterated that the polygraph results were based on applicant admissions and not on polygrapher judgments.

The Integrity Interview

Barke, Gerstein, and Johnson (1987) and Gerstein, Barke and Johnson (1987) reported research on the development and validity of a pre-employment honesty measure called the Integrity Interview (CIC Enterprises, Inc., 1984). This is a prerecorded telephone interview which consists of 75 short yes/no response questions or topics such as honesty, permissiveness, ethics, and vulnerability. The subject's response to each question is tape recorded, with three seconds allowed for answering each question. The entire interview requires a total of only 10 to 15 minutes.

Barke, Gerstein, and Johnson (1987) examined the factor structure of the Integrity Interview using data from 505 employees and applicants (later hired) from three companies. A principal components analysis (retaining eigenvalues greater than 1.0) yielded seven components: (1) Misrepresentation, (2) Beliefs About Human Nature, (3) Ethical Behavior, (4) Employer Dishonesty, (5) Need Dishonesty, (6) Personal Honesty, and (7) Attitudes Towards Punishment.

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[2] Only subject admissions made during a polygraph were counted. The examiner's judgments of the person's honesty were not used in tabulating the results.

Table 3

Percentage of Admissions to Various Screening Criteria for Three Screening Methods (from Jayne, 1988)

Category	Screening Method: Polygraph Admissions (n = 1000)	Integrity Interview (n = 47)	Computer Interview (n = 32)
Merchandise theft of $1 - $50 from previous employers in the past 5 years	12	38	56
Merchandise theft of more than $50 from previous employers in the past 5 years	5	2	6
Money theft of $.01 - $1 from previous employers in the past 5 years	1	2	6
Money theft of more than $1 from previous employers in the past 5 years	11	16	13
Marijuana used socially 1 - 12 times during the past year	11	29	22
Marijuana used socially more than 12 times during the past year	8	8	3
Narcotics used during the past year	1	0	NA
Cocaine used during the past year	7	10	3
Drugs used on job during the past year	6	4	0
Alcohol used on job during the past year	2	2	NA
Involved in serious crime(s) in the past 7 years	5	6	19
Shoplifting in the past 3 years	4	8	16
Falsification of one job on job history form	4	17	NA
Falsification of more than one job on job history form	2	4	NA

Note. "NA" means not available.

Gerstein, Barke and Johnson (1987) discussed four additional studies investigating the reliability and validity of a 60-item version of the Integrity Interview. Two of these studies examined the test-retest reliability of the Integrity Interview over 24 hour and 5 month periods for employees from a midwestern company. The resulting reliability estimates (Pearson Product Moment Coefficients) were .70 (n = 44) for the 24 hour period and .66 (n = 20) for the 5 month period.

In a third study interview scores were correlated with polygraph ratings for a sample of 48 employees from a midwestern oil company. Scores on the interview and on the polygraph were dichotomized into high honesty vs. low honesty scores. The resulting phi coefficient was .41 ($p < .01$).

The final study compared the interview scores of 179 applicants who were hired as money-handlers by a midwestern firm with employment status (still-employed vs. fired for theft) two months later. The resulting phi coefficient between interview score (high vs. low) and employment status was 0.23 ($p < .01$).

Gerstein et al. (1987) cited several advantages of recorded integrity interviews over paper-and-pencil measures of honesty: reduced hiring costs, less personnel time, increased applicant anonymity, increased test standardization, and elimination of reading ability as a performance factor.

Flyer (1986)

Although a review of military research on the subject investigative interview was outside the scope of this report, it should be noted that Flyer (1986) has summarized much of the early personnel security screening literature conducted in the military. Flyer noted that the most important finding of Air Force research on personnel security screening was "the unique and considerable value of the subject interview. Used primarily for prescreening purposes, the subject interview proved extremely valuable in providing suitability information." (p.27)

Chapter Summary

In summary, little empirical research was located which examined the usefulness of the subject investigative interview. A study by DIS (1981) indicated that the subject interview obtains issue-oriented information not found in traditional background investigation procedures. A survey by the Director of the Central Intelligence (1980) suggested that the subject interview is second only to the polygraph in identifying derogatory information. Research by Jayne (1988) suggested that subject interviews may provide as much issue-oriented information as a polygraph examination, although the sample sizes in that study were small. Barke et al. (1987) and Gerstein et al. (1987) described research on a pre-employment telephone subject interview that showed modest correlations with polygraph ratings and subsequent theft. Finally, Flyer (1986), in a summary of military research on personnel security screening, found the subject interview provided valuable information. Overall, these studies suggest that the subject interview is a useful personnel security screening technique.

CHAPTER 5. THE INTERVIEW METHOD OF DATA COLLECTION: EMPIRICAL RESEARCH

In this chapter we discuss selected empirical research that is relevant to the investigative interview. We examine interviewing methods and procedures from the personnel and survey research literatures. This review and discussion is organized according to the topics presented in the model in Chapter 1. We first examine the issues of the measurement context--the accuracy, reliability, and validity of the employment interview, the impact of the selection ratio and base rate, and utility. Next, we examine the interview process--the optimum setting, format, and interviewer preparation; and the motivational, questioning, listening, and observing techniques employed in the interview. Third, we review research on characteristics of the interviewer (e.g., interviewer personality, voice intonation, personal constructs, gender) that contribute to interview effectiveness. Fourth, we consider research on interviewee variables and on the interactive effects of the interviewer and interviewee. Finally, we assess the implications of these findings for the investigative interview.

The Measurement Context

The measurement context consists of all variables that affect the linkage of the predictor constructs to the criterion constructs. These variables can be grouped into considerations of accuracy, reliability, validity, and utility. Accuracy concerns the completeness and correctness of the interviewee's responses. Reliability is an assessment of the consistency of a rater's recording and scoring of interview information. Validity indicates the degree of overlap between the predictors and relevant criteria. Utility is an index of the effectiveness of measurement under differing conditions.

Literature reviews of the employment interview have identified several factors that affect interview accuracy, reliability, validity, and utility. These include interview structure, type of constructs assessed, the job relatedness of the constructs, and the interviewer's personal constructs and biases. While earlier reviews have commented on most of these topics (Arvey & Campion, 1982; Hakel, 1982; Schmitt, 1976; Ulrich & Trumbo, 1965; Mayfield, 1964; and Wagner, 1949), more recent reviews, using quantitative methods, have more clearly expressed the relationships between these variables and interview effectiveness. These meta-analytic findings, along with other relevant research, are summarized in the following subsections.

Accuracy

No studies were found that directly investigated the accuracy of the investigative interview. However, a number of studies have examined the accuracy of interview information obtained in other contexts (e.g., employment, occupational guidance). These are briefly described below.

Weiss and Dawis (1960) investigated the accuracy of various types of information obtained in a survey interview involving 91 physically handicapped employment applicants and 48 counselees. Included were questions regarding the respondent's age, sex, marital status, education, veteran status, nature of disability, age at disablement, whether receiving assistance, job title, job duties hours, pay, and length of employment. Using existing agency and employer records as the criterion, these researchers found the accuracy of interview responses ranged from 45 percent to 100 percent. Higher levels of truthfulness (i.e., greater than 85 percent) were found for questions about the interviewee's sex, age, veteran status, marital status, nature of disability, and job duties. Lower accuracy was found for questions on agency assistance, age at disablement, job title, length of employment, pay, hours, and education. In addition, information obtained from relatives was found to be as accurate as information obtained from the subjects.

Other researchers have obtained similar results. Kahn and Cannell (1957) found the accuracy of interviewee responses varies greatly, with some questions having inaccuracy rates greater then 50 percent. Bancroft (1940) verified the interview responses of 1,595 unemployed persons against relief agency records and found inaccuracy rates of 8 to 75 percent, depending on the type of question.

Several researchers have looked specifically at the accuracy of reported work history information. Keating, Paterson, and Stone (1950) examined the validity of applicant work histories for 236 employment applicants seeking vocational guidance and found correlations in the .90s between interviewee-reported and employer-verified work history information on wages, length of employment and job duties. The study, however, was conducted in a setting which emphasized occupational guidance and respondents had little incentive for distorting their responses. Clague, Couper, and Bakke (1934) examined the accuracy of reported work history information jobs against employer records for 233 workers and found only a very small fraction of the sample provided misleading information. In this study, reported wage information was more accurate than reported length of employment. Myers and Maclaurin (1943) compared work history responses of 223 workers with employer records. Although no quantitative data were reported, they concluded that interviewees were often unable to remember all of their past jobs, the order in which they had these jobs, the dates of employment, the length of their jobs, and their earnings.

Hyman (1944-45) found that the data gathering method and type of respondent can affect the results. In a study comparing reported absenteeism against company records for two samples of factory workers, Hyman found inaccuracy rates of 4 percent for 158 workers interviewed and 23 percent for 134 workers polled by questionnaire. In a separate study comparing reported savings bond redemptions to redemption records, Hyman found much higher invalidity rates for higher income respondents (43 percent) than for poorer respondents (7 percent).

In summary, the available research suggests that: (a) responses to interview questions are often inaccurate, (b) certain types of questions are more likely to be distorted, and (c) certain groups may be more likely to distort certain questions. Several factors may account for these results. Inaccuracies in employer records or transcription of those

records may be one factor. Memory distortion is a second factor. Deliberate distortion is a third factor. Overall, these results suggest that interview information should be verified using other information sources when possible.

Reliability

Wagner (1949), in the first employment literature review, noted the positive effect that interview structure has on interview reliability. Structure may be defined as providing systematic coverage of a specified set of topics. Additionally, some structured interviews also provide a uniform method of recording information and rating interviewees' qualifications.

In a recent quantitative summary of interview reliabilities (McDaniel et al. 1987), the mean of a distribution of 204 reliability coefficients was 0.82 with a standard deviation of 0.15. Grouping the studies by interview structure, the mean reliability coefficient for structured interviews was 0.84 and for unstructured interviews, 0.75. In separate meta-analyses by Weisner and Cronshaw (1988), the mean reliability coefficient for structured interviews was 0.82 and 0.61 for unstructured interviews. Furthermore, Weisner and Cronshaw (1988) found higher reliabilities for panel interviews (0.85) than for individual interviewers (0.78) and for combining the interview data between the panel members through consensus (0.84) compared to averaging across dimensions (0.74).

Finally, Rozelle and Baxter (1981) found that both interviewer responsibility and accountability increase the reliability of interview ratings.

Validity

The interview has traditionally been touted by practitioners and dismissed by researchers. Reviews as recent as 1984 (Hunter & Hunter, 1984) found the mean validity of employment interviews to be 0.14. With an expanded database of studies, McDaniel et al. (1987) found the mean validity to be 0.25 overall (0.45 when corrected for criterion unreliability and range restriction), and 0.36 (0.64 corrected) for structured, job-related interviews, using research criteria. The key factors for improving interview validity are clearly structuring the interview, having a well developed criterion, and basing the interview on a formal job analysis. Weisner and Cronshaw (1988) directly compared meta-analytic results for formal and armchair job analyses and found the formal analysis resulted in higher validities--0.48 vs. 0.35 (0.87 vs. 0.59 corrected for criterion unreliability and predictor range restriction).

In an attempt to evaluate the effectiveness of the interview for assessing different types of content, McDaniel et al. (1987) compared interviews assessing "job-related" content (i.e., past experience and job-related information) with "psychological" content (i.e., traits such as dependability). The mean validities were 0.26 (0.47 corrected) for job-related content and 0.16 (0.31) for psychological content. Assessment of the mean validities for individual variables (e.g., intelligence, interpersonal skills) was not possible.

The implications of the meta-analytic results for improving the psychometric properties of the interview were directly tested by Campion et al. (1988). They developed and implemented a structured interviewing approach that included the following properties: (1) questions were based upon a job analysis, (2) rating scales anchored with examples were developed, (3) questions were identical for each applicant, (4) a panel of interviewers recorded and rated the responses, (5) large discrepancies in ratings were discussed, then ratings were averaged across raters, and (6) the performance criterion was carefully developed using a separate, behaviorally oriented job analysis. The results indicated that these procedures are effective. Interrater reliability was 0.88 and interrater agreement was 95 percent (within a standard of 0.5 points on total score). The uncorrected validity coefficient was 0.34 and the corrected validity (corrected for criterion unreliability and predictor range restriction) was 0.56.

Utility

The usefulness of a selection procedure is directly related to selection efficiency (e.g., validity, accuracy). It is also affected by contextual factors such as the ratio of accepted applicants to the total number of applicants (i.e., the selection ratio) and the base rate for success.

Taylor and Russell (1939) demonstrated the interrelations between the base rate, selection ratio, and selection validity. They showed that maximum effectiveness occurs when the selection ratio is low (i.e., when only a small proportion of applicants is selected) and when the base rate is about 50 percent. Under these conditions, for a given level of validity, the increase in successful employees will be greatest.

However, in the investigative interviewing context, the selection ratio and base rate are far from ideal. A realistic estimation of these parameters for the investigative interviewing context might assume a base rate for successful security related behaviors of 95 percent and a selection ratio of 95 percent.

Murphy (1987) pointed out the difficulty of a base rate that differs greatly from 50 percent. For example, the base rate for employee theft (more than $5) is less than 5 percent in most settings (Hollinger & Clark, 1981). If some selection measure was used to screen out persons at high risk for theft, it would need to have an exceptional level of accuracy in order to effectively screen out many of the potential thieves without also screening out an equally high number of high integrity applicants (a false positive error). Given the low base rate, a rate of false positive errors of 5 percent yields only a 50 percent conditional accuracy rate--fully half of those screened out are honest. To achieve a statistical level of error of 0.05 at a base rate of 5 percent, the maximum permissible false positive error rate becomes 0.5 percent (0.005). Stated differently, a test with a 98 percent accuracy rate would be too inaccurate to detect deception when deception when the base rate is as high as 5 percent, or even as high as 9 percent. Such accuracy levels far exceed even the most optimistic claims made for any kind of predictor measure.

However, this argument is based upon giving equal utility to false positive and false negative error rates, or giving far greater weight to false positive rates (e.g., in terms of a polygraph setting, concluding that a subject is lying when in fact he is telling the truth). The utilities for false positive and false negative error rates are arguably very different in a setting of selection screening for security classification. In this example, the major concern is in preventing false negative errors and identifying the individuals of highest integrity. In the legal setting, the orientation is rightly quite different, to prevent false positives (i.e., convicting innocent people) by establishing a criterion of reasonable doubt.

Clearly, the effect of base rates and selection ratios upon utility must be given careful consideration.

A second issue concerns the comparative utility of the use of a dichotomous vs. continuous model for the criterion distribution of security related performance. Several authors have noted (cf., Cascio, 1982) that utility is underestimated by utility models that are based upon a dichotomous criterion (e.g., the Taylor-Russell model). This approach fails to distinguish degrees of "success" among those who are accepted. This underestimates the increase in the mean level of performance of those who are accepted.

The current approach to selection into jobs requiring a security classification is a multiple hurdle approach. Applicants are evaluated as either high or low risk (a dichotomous prediction) and screened out on the basis of unsuitability criteria if they fail to meet the criterion. However, if performance with respect to security is best characterized by a continuous distribution, then important information about performance can be lost by imposing a dichotomous selection system. In this circumstance, information concerning degrees of effectiveness for those identified as "successful" are not fully utilized. For example, an alternate approach to screening for security could be based upon a continuous distribution of the criterion of security related behaviors. With this approach, the security selection system includes standards for "selecting in" persons who are maximally effective in security-related areas (e.g., conscientious about securing sensitive documents, demonstrating exceptional levels of personal integrity), as well as standards based on unsuitability criteria.

Summary: The Measurement Context

Recent research has led to substantial improvements in the psychometric properties of interviews. These improvements can be summarized as follows:

- Develop questions based upon a job analysis.
- Ask the same questions of each candidate.
- Anchor the rating scales for scoring answers with examples and illustrations.
- Provide the interviewer (and adjudicator) with feedback.

- Make the interviewer (and adjudicator) accountable for the information collected and decisions made (e.g., by discussing their decisions in a group of peers and/or supervisors).

- Improve accuracy by obtaining confirming evidence for certain types of questions and groups of people.

- Improve utility by increasing validity, decreasing the selection ratio, and reorienting the selection process to select in applicants who demonstrate the highest levels of security related behaviors.

The Interview Process

In this section, we review research on variables that affect the interview process. Variables affecting interview preparations are examined first (e.g., mode of communication, interview setting, privacy). Following this, studies examining different interview techniques are reviewed. These studies can be grouped into four types of interviewing techniques: motivation, questioning, listening, and observing. The characteristics of interview questions are examined in greater detail, including wording, open-endedness, behavior content, context effects, and question order. Interview documentation is also considered.

Mode of Communication

In this section, we discuss research comparing in-person interviews with telephone and computer interviews.

Telephone vs. In-Person Interviews. An alternative to conducting investigative interviews in a face-to-face setting is to conduct them over the telephone. Several studies have compared information gathered from telephone survey interviews with information gathered from face-to-face interviews. The topics of such surveys have included opinions and attitudes about political or social issues, television viewing or product preferences, health-related information, voter behaviors, family interaction or planning, crime victimization, and alcohol or drug usage.

Quinn, Gutek, and Walsh (1980) reviewed 25 empirical evaluations of telephone interviews and concluded that the telephone interviewing method compares favorably with face-to-face interviewing in terms of the range of subject matter that can be covered, length of interview, response rates, quality of data, and cost. They also performed a study which corrected many of the problems found in other research (which are described below) and obtained results consistent with previous research.

Quinn et al. (1980) identified a number of limitations in existing research, most notably the lack of random assignment of interviewers to experimental conditions and the failure to differentiate initial contact interviews from interviews which followed a previous interview. In addition to these limitations, one important point should be made with regard to most of the research that compares telephone and face-to-face interviewing. In most studies, a different (albeit random) sample of persons is interviewed with each interviewing method. This means that it was impossible to tell whether or not individuals give the same or

different responses when they are interviewed in person as they give when they are interviewed by telephone. In one of the few studies that interviewed the same sample of persons with both a face-to-face and a telephone interview, Rogers (1976) found results that are consistent with the results discussed above. The fact remains that most of the research results must be viewed with caution since they allow an assessment only of group behavior.

Results of other research comparing in-person and telephone interviews suggests the following:

- The quality of data gathered on a variety of topics is about the same with both interviewing methods (Colombotos, 1969; Groves & Kahn, 1979; Herman, 1977; Hochstim, 1967; Janofsky, 1971; Klecka & Tuchfarber, 1978; Locander, Sudman, & Bradburn, 1976; Lucas & Adams, 1977; Rogers, 1976; Siemiatycki, 1979; Thornberry, 1976; Wiseman, 1972).

- Respondents are somewhat more likely to give socially desirable answers in a face-to-face interview than in a telephone interview (Colombotos, 1969; Hochstim, 1967; Rogers, 1976).

- Respondents are more likely to refuse to answer sensitive questions over the telephone than in person (Groves, 1977; Jordan, Marcus, & Reeder, 1980).

- Response rates are usually slightly higher for face-to-face interviews than for telephone interviews (Groves & Kahn, 1979; Henson, Roth, & Cannell, 1974; Herman, 1977; Hochstim, 1967; Klecka & Tuchfarber, 1978; Rogers, 1976; Siemiatycki, 1979), although not always (Locander et al. 1976; Wiseman, 1972). Several studies supplemented an initial contact (either by mail, phone, or in person) with a second or even a third contact (again either by mail, phone, or in person). When supplemental contacts were made, the response rate tends to reach the same fairly high level regardless of the method used to make the contacts (Coombs & Freedman, 1964; Herman, 1977; Hochstim, 1967; Kegeles, Fink, & Kirscht, 1969; Rogers, 1976; Schmiedeskamp, 1962; Siemiatycki, 1979). On the basis of this finding, some researchers suggest that initial contacts be made by phone or by mail since those methods are less expensive than the face-to-face method. Face-to-face interviews could then be used to gather data from persons who refuse to respond to mail or telephone interview attempts.

- Face-to-face interviews generally last slightly longer than telephone interviews (Quinn et al. 1980).

- Telephone interviewing is less costly than face-to-face interviewing. In general, research indicates that telephone interviews cost about half as much as face-to-face interviews (Groves & Kahn, 1979; Herman, 1977; Hochstim, 1967; Lucas & Adams, 1977; Siemiatycki, 1979; Thornberry, 1976).

In summary, the empirical research suggests that the quality and quantity of information obtained over the telephone is similar to that

obtained in a face-to-face interview. In addition, telephone interviewing is less costly than face-to-face interviewing.

Computerized vs. In Person Interviews. A second alternative to face-to-face interviewing is an interview conducted by a computer. In a computerized interview, the interviewee interacts directly with the computer, responding to questions asked by the computer. Three studies have compared information gathered in face-to-face interviews with information gathered in a computerized interview. All three studies involved the reporting of alcohol or drug usage. The results indicated that the amount of alcohol or drug usage reported was higher in the computerized interview than in face-to-face interviews (Duffy & Waterton, 1984; Lucas, Mullin, & McInroy, 1977; Skinner & Allen, 1983). It should be noted, however, that the Lucas et al. (1983) study was the only one which included interviews of the same persons using each interviewing method.

Setting

Campbell and Herren (1978) conducted research to determine the effect of furniture arrangement on the impressions of students who interviewed faculty members. They found that desk placement (between vs. beside interviewer and interviewee) did not influence interviewer impressions. However, observation of non-verbal behaviors was not a consideration of this study.

No research was located that examined the amount of negative and positive information revealed when interviews are conducted in different settings (e.g., home vs. work). However, Zanes and Matsoukas (1979) and McKennell (1980) examined the effect of setting on responses to survey questionnaires. These studies found that children tend to report a higher incidence of drug use and cigarette smoking behavior when surveys are administered at school rather than at home.

Managing the spatial distance between the interviewer and interviewee has been cited by one technical report (Office of Personnel Management-Office of Investigations, 1986) as an effective interviewing technique. Termed the study of proxemics, this approach is used to detect interviewee deception. Practitioners of this approach recommend beginning the interview at a comfortable distance of about four feet. The interviewer, using a wheeled chair (the interviewee's should be immobile), then moves to as close as one foot away as questions progress from general to more specific or when the interviewee' gives inconsistent responses. This method is based two assumptions: that close physical proximity produces anxiety, and that anxiety inhibits lying. Although no research was presented, the authors cite FBI use of this method.

Privacy

No research was located which directly examined the effects of privacy on responses to sensitive topics. Most practitioners (e.g., Lopez, 1975) suggest that privacy is an important factor in obtaining information. One study (Silver, Abramson, & Anderson, 1986) found that the tendency of respondents to give socially approved answers to voting survey items is not influenced by the presence of other people during an interview. This

suggests that presence of others may not affect responses to less sensitive topics.

Instructions

Schuman and Kalton (1986) suggested that survey instructions can affect the precision of responses offered. These authors advised investigators to write clear instructions which stress the desired degree of accuracy and completeness of answers to survey questions.

Motivation

Cannell, Miller, and Oksenberg (1981) asked survey respondents to sign a form promising to give complete and accurate information in response to a health behavior survey. They found that signing this form increased the number of health events reported by respondents. They also found that when interviewers only provided positive feedback in response to appropriate answers, the number of health events reported in a health behavior survey increased.

Question Characteristics

In this section, we examine research that has examined the effects of various characteristics of interview questions. Characteristics discussed below include wording, open-endedness, behavior content, context effects, and question order.

Wording. A number of issues stemming from the survey interview process, such as those surrounding the design and ordering of survey questions and wording of instructions given to survey respondents have relevance for the investigative interview. Schuman and Kalton (1986) in a review of survey methods in social psychology, emphasized that questions often do not mean the same thing to respondents that they do to those designing questions. For example, when the word "you" is used in survey questions it is often unclear to respondents whether the question concerns the respondent alone or the both the respondent and his or her family. They advise practitioners to extensively pretest questions.

Petty, Rennier, and Cacioppo (1987) found that the use of an interrogation format in an opinion survey resulted in more polarized opinions than the use of an assertion format. They suggest that response polarization stemming from the use of an interrogation format is caused by greater cognitive processing in response to interrogative items.

Open-Ended vs. Closed-Ended Questions. Several studies comparing open-ended vs. closed-ended questions have been conducted by survey researchers. The findings from those studies having relevance to the investigative interview are briefly discussed.

Some research has indicated that open questions tend to produce more accurate responses than closed questions when the questions deal with sensitive issues or disapproved behavior (Converse & Presser, 1986; Bradburn & Sudman, 1979). For example, Bradburn and Sudman (1979) compared open and closed questions about alcohol consumption and sexual behavior and

found that reported behavioral frequencies were higher for open than for closed questions.

Schuman and Presser (1981) conducted a series of studies comparing open and closed questions. They found that differences between survey results obtained with open vs. closed questions can be minimized by asking open questions to large samples, and using the answers to these open questions as a basis for formulating response alternatives for closed questions. However, they did not find strong support for the superiority of open-ended questions.

Researchers examining eyewitness testimony (e.g., Lipton, 1977) have compared narrative formats (in which subjects were asked general questions such as "Tell me what happened?") with interrogatory formats in which subjects were asked specific questions). The results indicated that narrative formats tend to produce very accurate, but incomplete information. Interrogatory formats, on the other hand, tend to produce more complete but less accurate information. Loftus (1982) suggested that a narrative format should be used first, followed by specific questions (interrogatory format) to ensure that complete information is obtained.

Behavior-Based Questions. Researchers in the employment interview field have found that structured, job-related, behavior-based questions yield promising results in predicting subsequent employee performance (e.g., Janz, 1982; Janz, Hellervik, & Gilmore, 1986; Orpen, 1985; Latham, Saari, Pursell, & Campion, 1980; Latham & Saari, 1984; Weekly & Gier, 1987). Two types of behavior-based interviews, the patterned behavior description interview and the situational interview, have been recently studied.

The patterned behavior description interview (Janz, 1982; Janz et al. 1986) is based on the assumption that the best predictor of future behavior is past behavior in similar circumstances. In this method, interview questions are developed on the basis of a careful job analysis (usually via critical incident methodology). These questions are designed to obtain information about a person's past experiences that are relevant to the constructs of interest. A small number of questions (e.g., two to seven) are then developed for each topic area, along with possible probing questions. Research has has shown criterion-related validities in the .30s to .50s (Janz, 1982; Orpen, 1985), although the sample sizes in these studies were small.

A second type of behavioral interview used in employment settings is the situational interview (Latham et al. 1980; Latham & Saari, 1984). This procedure is also based on critical incident job analysis methodology. Here critical incidents are converted into interview questions in which applicants are asked how they would respond to various job-related situations. The applicants' answers are then scored using carefully developed behavior rating scales. Research by Latham and his colleagues and (Latham et al. 1980; Latham & Saari, 1984) and by Weekly and Gier (1987) has shown criterion-related validities in the .30s and .40s.

Context Effects. Tourangeau and Rasinski (1988) provided a thorough discussion of context effects in the measurement of attitudes and the cognitive processes underlying these effects. Carry-over effects occur when

prior items "influence respondents to give consistent answers later on" (Tourangeau and Raskinski, 1988, p. 301). Backfire effects occur when prior items influence respondents to give inconsistent answers to later questions. Both carryover and backfire effects can come about as a result of cognitive processes underlying the interpretation of questions, information retrieval and response formulation, and response selection. Assertions made by Tourangeau and Raskinski (1988) to reduce context effects include administering interviews at a slow pace and making the context obvious.

Tourangeau and Raskinski (1988) suggested that interviews can be considered as specialized forms of conversation which follow many of the same principles guiding other forms of conversation. One of these guiding principles is that people should avoid redundancy and be informative in conversation. According to these authors "This principle may lead respondents to give apparently inconsistent answers when in fact the respondents are merely interpreting later questions as calling for new, nonredundant information" (p. 302).

Question Order. The order in which information is uncovered can influence both the specific questions asked later in interviews, and the outcomes of interviews. For example, studies have shown that early interview impressions can have a strong influence on interview outcomes (e.g., Webster, 1964; Webster, 1982).

Listening

Matarazzo and Wiens (1972) reported an extensive series of studies examining speech characteristics (e.g., latency and frequency of utterances) during psychiatric and employment interviews. Two of the topics they examined have direct relevance to the investigative interview. First, they found that increases in interviewer speaking time result in increases in interviewee speaking time. Second, they reported that positive reinforcement by the interviewer in the form of head nodding and verbalizations such as "Mm-Hmm" result in increases in interviewee speaking time.

Observation

Gifford, Fan Ng, and Wilkinson (1985) employed the lens model (Brunswick, 1956) as a conceptual framework in a study designed to examine the effect of nonverbal cues on interview judgments. These researchers found that social skill was "reasonably accurately inferred" (p. 735) through the formality of the interviewees' dress, the rate of gesturing, and the amount of time the interviewee spent talking. In contrast, judges were poor at evaluating self-reported applicant motivation to work, and there was little correspondence between nonverbal cues actually related to applicant self-reported motivation and those believed by judges to be related to applicant self-reported motivation. Differences in accuracy between judges were not examined in this study.

Documentation

Note taking by the interviewer is an important component of most employment interviews. A few researchers have examined the influence of

note taking on interviewers' later recall of interview details. The Life Insurance Marketing and Research Association (LIMRA, 1974) found that note taking increased agency managers' recall of details of a taped interview with a prospective insurance agent.

Schuh (1973) examined the impact of note taking and interruptions on applicant suitability ratings and scores on a multiple-choice listening accuracy test. The study was based on a videotaped employment interview using a sample of employment interviewers and bank managers. The results indicated that neither note taking nor interruptions influenced suitability ratings. However, note taking led to an increase in listening accuracy test scores and interruptions led to a decrease in scores on a listening accuracy test taken after the interview. Schuh concluded that "the positive effects of concurrent note taking, which psychologically is the process of encoding with brief rehearsal, outweighed the added drain on primary memory of the sensory motor task of writing the encoded material" (p 244). Thus, in addition to the obvious importance of taking notes so that both the interviewer and adjudicator can refer to them later, note taking appears to offer the additional advantage of increasing memory of interview details.

No research was located which examined the effects of note-taking on interviewee' behavior and reactions.

Summary: The Interview Process

An examination of the interviewing literature includes a great range of variables, but less depth of insight into the interview process. It is likely that the wide variety of variables studied produce their effect through a few, key underlying variables. Some implications of research on the interview process can be summarized as follows:

- Conduct interviewing in a confidential setting.
- Check and pre-test question wording and order.
- State the degree of accuracy and completeness that you wish to achieve, and then secure a commitment from the interviewee to provide it.
- Behavior-based questions may yield useful information.
- Use active listening techniques (e.g., nod your head) and longer questions to elicit more elaborated answers.
- Provide positive feedback to interviewees when they respond appropriately.
- Take notes to improve your memory of what the interviewee said.

Interviewer Characteristics

There have been few studies examining the effects of interviewer characteristics on the interview process or outcomes. Those studies that

have been carried out have usually considered the effects of interviewer characteristics on interviewee impressions. While interviewee impressions are important in attracting job applicants and promoting the image of government agencies undertaking investigations, other variables, such as the effects of interviewer characteristics on interview reliability and validity, would seem to be of greater importance. With the exception of studies examining the influence of interviewer training on these outcomes, we were unable to find studies examining the effect of interviewer characteristics on interview outcomes such as reliability and validity. Studies were located and are described for interviewer aptitude, personality, status, experience, articulation, sex, and personal constructs.

Interviewer Aptitude

Schuh (1980) examined the relationship between scores on a listening accuracy test taken after viewing a videotaped employment interview and scores on several aptitude, personality, and interest measures. The results indicated that listening accuracy test scores were related to three tests from the Employee Aptitude Survey Battery (Verbal Comprehension, Numerical Reasoning, Verbal Reasoning). No significant relationships between listening accuracy test scores and personality or interest measures were found.

However, there are several limitations for generalizing these findings to the investigative interview. First, the study was based on a very small (N = 29) student sample. Second, only three of 31 predictor scales showed significant effects. Finally, the criterion measure was the score on a multiple choice listening accuracy test, taken after viewing one 12-minute interview.

Personality

Arvey and Campion (1982) reviewed studies (e.g., Schmitt & Coyle, 1976; Keenan & Wedderburn, 1977) showing that interviewer characteristics and behavior, such as the interviewer's use of nonverbal approval cues and perceived interviewer personality, can influence the impressions of interviewees.

Liden and Parsons (1986) examined several variables hypothesized to relate to the reactions of young job applicants to interviews. They found that applicant reactions to the interview were influenced most strongly by the interviewer's personableness.

Status and Age

Rogers and Sincoff (1978) found that a recruiter's title influenced students' impressions of a college recruitment interviewer. Age appeared to affect impressions in a curvilinear manner, with 30-year old interviewers leaving a better impression than either 20 or 50-year old interviewers. These researchers found that students tended not to notice interviewer verbal fluency when the interviewer was fluent, but that a lack of fluency led to negative impressions of the interviewer. They concluded that training should be used to improve interviewer fluency.

Experience

Bernstein, Hakel, and Harlan (1975) reviewed a series of studies comparing the decision-making processes of students and employment interviewers. These researchers concluded that student subjects tend to be more lenient than employment interviewers, but that the judgments of the two groups were similar in other respects (e.g., variances, intercorrelations, interrater agreement, accuracy). Thus, results of studies using student subjects may be more generalizable to professional interviewer populations than is often assumed.

Similarly, Carlson (1967) found that amount of interviewing experience did not influence the inter-rater reliability of interviewers' ratings. Carlson attributed the lack of incremental reliability to an absence of structured feedback to interviewers, and to the fact that interviewers do not share identical or even similar experiences.

Articulation

Research examining the effects of interviewer's voice intonation on survey responses has produced mixed results. Barath and Cannell (1976) found that rising voice intonation in asking a series of "yes-no" questions led to higher reporting of symptoms and health conditions in a health survey than did dropping voice intonation. Conversely, Blair (1977) found that rising voice intonations do not effect responses to "yes-no" questions. Oksenberg, Coleman, and Cannell (1986) found that interviewers with relatively low rates of refusal to participate in telephone interviews tend to have higher pitched and louder voices, faster rates of speaking, greater range of variation in pitch, and clearer pronunciation.

Sex of the Interviewer

Several studies (e.g., Raza & Carpenter, 1987; London & Poplawski, 1976; Muchinsky & Harris, 1977) have examined the influence of the sex of the interviewer on interview ratings. These studies found that female interviewers tend to give higher interview ratings than male interviewers.

Personal Constructs, Impression Formation, and Stereotypes

A few researchers have examined the interview from the perspective of social cognition, exploring the influence of the interviewer's conceptual structure on the employment interview process and interview outcomes. After reviewing the literature on interviewer stereotypes, Schmitt (1976) concluded that interviewers often have an "ideal" applicant in mind against which interviewees are evaluated. The extent to which the characteristics of this ideal applicant schema generalize across interviewers was unclear.

Arvey (1979) discussed three "lines of speculation" (p.742) among researchers regarding the manner in which stereotypes operate to produce differential evaluations of interviewees. First, negative stereotypes of certain groups may underlie negative attitudes and opinions, resulting in lower interview evaluations of members of those groups. Second, interviewers may be affected by the process of matching stereotypic traits with job requirements. Third, stereotypes may operate by shaping the expectations of interviewers and the criteria against which interviewees

are judged. Hakel (1982) suggested a fourth alternative--that interviewers use stereotypes to "fill in the gaps" instead of probing for more complete information.

A series of studies conducted at McGill University (Webster, 1964; 1982) found that early interview impressions can have a strong influence on interview outcomes. Haccoun (1970) reported that the best way to minimize the influence of negative information in interviews is to present such information in the middle of an interview.

Research examining impression formation has shown that, when interviewing others in a laboratory setting, people tend to seek evidence to confirm preconceptions of others (e.g., Snyder & Swann, 1978) and that people act in ways that lead to the confirmation of stereotypes (e.g., Snyder, Tanke, & Swann, 1977).

Similar studies in the employment context have shown mixed results. No support was found for interviewer use of confirmatory questioning strategies when interviewers selected questions from an experimenter provided list (Sackett, 1982; McDonald & Hakel, 1985). However, when questions were generated by the interviewer, evidence for the use of confirmatory hypothesis testing was generally found (Binning, Goldstein, Garcia, & Scatteregia, 1988). That is, subjects planned to ask more questions seeking negative information from low-suitability than high-suitability applicants. When the subject and applicant were of the same sex, subjects also planned to ask more questions seeking positive information from high-suitability than low-suitability applicants. However, when the subject and applicant were of the opposite sex, subjects planned to ask more positive questions of low-suitability than high-suitability applicants. Binning et al. (1988) suggested that the use of a disconfirmatory strategy in asking positive questions of opposite sex applicants may stem from either an attempt at impression management or an attempt to reduce social discomfort.

Initial impressions and recent impressions could influence investigative interviews in several ways. First, information presented early in the interview may guide the nature of later questions, and may affect the tone and direction of the entire investigation. Second, interviewers may fail to stress the importance of negative information that is presented in the middle of an interview when documenting the information gleaned through the interview, thus influencing the decisions of adjudicators.

Summary: Interviewer Characteristics

Arvey and Campion (1982) stated: "It is obvious that research investigating the characteristics of the interviewer and the subsequent impact on interviewee behavior is sorely lacking." Unfortunately, this situation has not changed since Arvey and Campion's (1982) review. The research does suggest that interviewers' behaviors and decisions are to some extent directed by their cognitive 'model' of the ideal applicant. To the extent that the model is inaccurate, biases and distortions are more likely to occur.

The research also implies that general cognitive ability, personableness, and verbal fluency are key variables of the successful interviewer. Experience alone appears to have little effect on interviewer effectiveness. The research suggests that interviewers should speak clearly and use a wide range of pitch.

Interviewee Characteristics

A number of studies have examined the influence of personal characteristics of interviewees on interview outcomes. Research examining the influence of interviewee verbal and nonverbal behaviors, sex, physical appearance, age, and race on interview observations and outcomes will be briefly discussed.

Verbal Behavior

Several researchers have examined the influence of articulative and paralinguistic behaviors on interview outcomes. Parsons and Liden (1984) found that speech characteristics (such as articulation and appropriate pauses before giving answers to questions) were relatively important and that personal appearance variables (such as personal cleanliness and appropriate clothing) were relatively unimportant in predicting interviewer ratings of applicant quality when these variables were considered together.

Hollandsworth, Kazelskis, Stevens, and Dressel (1979) examined the relative importance of verbal, articulative and nonverbal factors in determining employment decisions in an interview context. The variables having an influence on employment decisions, in order of importance from most to least important, were: appropriateness of content, fluency of speech, composure, eye contact, body posture, loudness of voice, and personal appearance.

Non-verbal Behavior

After reviewing research examining the influence of non-verbal behavior on employment interview evaluations, Arvey and Campion (1982) concluded that the nonverbal behavior of interviewees does affect the ratings given by interviewers. The magnitude of this effect, however, is smaller than the influence of the interviewee's verbal behavior.

Personality

Gudjonsson (1986) found a positive relationship between acquiescence and interrogative suggestibility. This relationship was stronger after negative feedback was given during an interrogation. Singh and Gudjonsson (1984) found self-esteem was negatively related to interrogative suggestibility. Both of these studies were based on very small samples (Ns = 30).

Sex of the Interviewee

Arvey (1979) reviewed 17 published studies examining the influence of sex on employment interview ratings. He concluded that females are generally given lower interview evaluations than males with similar qualifications.

Raza and Carpenter (1987) examined the relationship between several individual difference variables and interview ratings in actual employment interviews. In contrast to previous studies, these researchers found that female applicants received higher ratings than male applicants for intelligence, attractiveness, and skill. Applicant employability and likeability ratings did not differ for males and females. (It should be noted, however, that this study used actual employment interviews and that applicant characteristics were uncontrolled. Thus, there may have been true differences on rated variables between male and female applicants.)

Arvey and Campion (1982) suggested that contextual variables and other individual differences variables need to be considered in combination with sex. A few studies have done this. For example, Cash, Gillen, and Burns (1977) asked professional personnel consultants to rate the suitability of job applicants on the basis of a resume and photograph. They found that applicants received more favorable evaluations for sex-congruent jobs (i.e., males for "masculine" jobs and females for "feminine" jobs.)

Attractiveness

Studies examining the influence of attractiveness on social perception have found that desirable qualities tend to be attributed to attractive persons. For example, Dion, Bersheid and Walster (1972) found that attractive persons are assumed to have more desirable personality traits than unattractive persons. Landy and Sigall (1974) found that perceived quality of written material was related to the attractiveness of the author. Cash et al. (1977) found that attractive applicants were rated as more qualified than unattractive applicants when considered for sex-congruent jobs. Ratings of expectancy of success did not differ for attractive and unattractive applicants.

Heilman and Saruwatari (1979) examined the effects of both physical appearance and sex on evaluations of hypothetical job applicants in a laboratory setting. They found that physical attractiveness was advantageous for male applicants regardless of the job for which they were applying. Physical attractiveness was found to help female applicants applying for nonmanagerial positions, but hindered female applicants seeking managerial positions. These authors concluded that the effects of appearance are mediated by the perceived fit between applicant characteristics and job requirements.

Age and Race of the Interviewee

The influence of race and age on interview outcomes has also been examined. Arvey (1979) reviewed three studies (Wexley & Nemeroff, 1974; Haefner, 1977; Rand & Wexley, 1975) that examined the effects of race on employment interview ratings and two studies (Haefner, 1977; Rosen & Jerdee, 1976) that examined the effects of age on interview ratings. The

results suggest that interviewers do not give less favorable evaluations to black than to white candidates. However, a strong age effect was found, with older applicants being given less favorable evaluations than younger applicants. Arvey and Campion (1982) reviewed studies (e.g., McIntyre, Moberg, & Posner, 1980; Mullins, 1978) showing that black job applicants were, in some cases, given preferential treatment over white applicants.

Raza and Carpenter (1987), using actual employment interviews, found that while older applicants and younger applicants were rated similarly for likeability, skill, and employability, male interviewers gave older applicants lower intelligence ratings and lower hiring recommendations, while female interviewers gave older applicants lower attractiveness ratings.

Interactive Effects of the Interviewer and Interviewee

Schmitt (1976) reviewed studies examining the effects of attitudinal and racial similarity of the interviewee and the interviewer on employment interview evaluations. Several of these studies (e.g., Rand & Wexley, 1975; Wexley & Nemeroff, 1974) found that attitudinal and racial similarity can influence evaluations of job applicants. Specifically, interviewees more similar to the interviewer received higher evaluations. However, some studies (e.g., Shepard & Hallinan, 1980) have found interviewer-interviewee similarity does not influence evaluations. Other studies have found an effect for some types of evaluation but not for others. For example, Baskett (1973) found that similar applicants were rated as being more competent, but were not more likely to be recommended for a job.

A number of studies examining the effect of interviewee and interviewer race on survey responses (e.g., Hatchett & Schuman, 1975, 1976; Cotter, Cohen, & Coulter, 1982; Weeks & Moore, 1981; Campbell, 1981) have found that survey responses to racial issues are influenced by whether respondents are interviewed by a member of their own race or another race. Specifically, respondents appear to avoid responses that might be offensive to persons of another race. Cotter et al. (1982) found similar results with telephone interviews.

Simas and McCarrey (1979) found that personnel officers high in authoritarianism (both male and female) tend to give male job applicants higher ratings than female applicants, after viewing videotaped simulated interviews. This effect was not found among those moderate or low in authoritarianism. Simas and McCarrey (1979) found that persons high in authoritarianism tended to evaluate males more favorably than persons lower on authoritarianism, but did not evaluate females less favorably.

Summary: Interviewee Characteristics

The research on the interviewee confirms that the content of what is said is of primary importance for interview decisions. Research has shown that verbal behavior has a greater influence on interview outcomes than nonverbal behavior. The similarity of interviewer and interviewee characteristics (e.g., attitudes, race) can influence interviewer evaluations, sometimes creating a bias and sometimes providing more accurate information. Finally, research suggests that evaluations can be affected by verbal fluency, attractiveness, age, and sex-role congruence.

Conclusions

It is evident that interviews are complex interpersonal processes, influenced by a broad host of factors. While there has been little research examining investigative interviews, there is a large research literature examining employment interviews and survey interviews. In this chapter, we discussed research from the employment and survey interview areas which has relevance to the investigative interview. Among the most pressing research needs are:

- Research examining interview process variables (e.g., feedback during the interview, wording of instructions, etc.) to determine how to maximize the amount and quality of information gathered during investigative interviews;

- Studies examining the effects of feedback and accountability on interviewer quality and quantity of performance;

- Research to identify the characteristics and processes of expert interviewer performance;

- Development of a theoretical framework to explain and integrate research on interviewee performance.

While the summaries of each section provide prescriptions for interviewing practice, it is important to note the limitations of generalizing this research to the investigative interview setting. There are four major limitations.

First, the dependent variables of employment research are different than those for the investigative interview. Decision outcomes are the principal focus of most employment research studies. Since data combination and decisions are not made by the investigative interviewer, studies on impression formation, etc. may not generalize to this setting.

Second, employment interviews focus on somewhat different constructs than investigative interviews. A theme of this report is that the interview is fundamentally a method of data collection that can be used to assess a wide variety of behaviors, traits, or facts. The employment interview generally emphasizes cognitive abilities, motivation, and interpersonal skills. The investigative interview focuses on biographical facts and suitability areas.

Third, the base rates for the behaviors of interest in employment selection and for security screening are very different. Even if validity or accuracy were found to be similar for assessment of the same psychological constructs in the two settings, the utilities would not be the same due to the differing base rates.

Although there is no research in this area, a fourth limitation on the generalizability of results is the reasonable hypothesis that the motivational set of interviewees in the two settings is very different. In the employment interview the focus is on the applicant's accomplishments

and qualifications. In the investigative interview, the focus is a search for derogatory information. How this different orientation affects interviewee motivation, recall, and behaviors is not known. Nor is it known if or how the effects of interviewing techniques would differ due to the differences in interviewee motivational set between the two settings.

For these reasons, the inferential leap from empirical research on employment interviews to applied techniques for investigative interviews is a large one. The need for research on the investigative interview is compelling.

CHAPTER 6. RELATED RESEARCH--THE DETECTION OF DECEPTION

Research reviewed earlier in this report suggested that subject interview information is sometimes distorted. In this chapter we review techniques that are commonly used in detecting deception. The primary focus of the chapter will be on identifying those aspects of other deception detection methods that might be incorporated into the investigative interview. The methods discussed will include: (1) obtaining background information from non-subject sources, (2) verbal and nonverbal indicators of deception, (3) polygraph examination techniques, and (4) paper-and-pencil "honesty" or "integrity" measures.

Before reviewing research on the detection of deception, one point should be made. Detection of deception is not the same as detection of the underlying affect. That is, detection of lying is not the same as detection of one's true emotions. Although much of the research on physiological, verbal, and nonverbal methods of lie detection rests on the assumption that greater emotional arousal to target questions indicates deception, this assumption is often questionable (Lykken, 1981). Persons may attempt to hide their true emotions (e.g., due to embarrassment) yet still be truthful when responding. Detecting the underlying affect is important, however, to the extent it provides clues that deception is occurring.

Obtaining Background Information From Non-Subject Sources

One method for detecting deception is to gather background information from sources other than the subject under consideration. This is done by interviewing persons who know the subject (e.g., references, past employers). If one or more other sources confirm what the subject reports, then one can be more confident that the information is truthful. Conversely, when other sources contradict the information provided by the subject, the responses of the subject must be viewed with caution.

Use of Reference Checking

Reference checking for personnel selection is widely used. A number of surveys (e.g., Levine & Rudolph, 1977; Beason & Belt, 1976; Dudley & French, 1964; Nash & Carroll, 1970; Mosel & Goheen, 1958; Pyron, 1970; Sohn, 1970) have shown that reference checks are used by a majority of the firms surveyed, with estimates ranging from 51 to 100 percent.

Mode of Information Gathering

Several modes of information gathering (e.g., telephone, written questionnaire, personal interview, private investigator) have been used. Previous surveys (e.g., Pyron, 1970; Dudley & French, 1964; Beason & Belt, 1976; Levine & Rudolph, 1977) indicate that the telephone is the most frequent mode of information gathering, followed by written (e.g., letter, form) requests. In-person reference interviews and private investigators are rarely used.

Only one published study was located which compared the effectiveness of different reference information gathering methods. Goheen and Mosel (1959) obtained reference information on 109 applicants for government jobs using both mailed questionnaires and U.S. Civil Service investigators. They found the questionnaire did not conclusively detect incidence of serious derogatory information for seven persons, and recommended that the field investigation was a more productive information gathering technique than the questionnaire survey.

Information about the relative usefulness of different information gathering methods is largely based on personal experiences. Mailed questionnaires are probably least expensive, but often have low response rates, lead to delays in data collection, and yield little specific negative behavior. Telephone interviews are more expensive than questionnaires, but obtain higher response rates. In-person interviews are less expensive than telephone interviews, but yield slightly lower response rates (see Chapter 5). Background investigations by trained professionals are probably more thorough, but are also more costly.

Topics Covered

In a survey of 78 public and private organizations, Levine and Rudolph (1977) identified several areas that are typically covered in reference checks. These included general employment history, reason for leaving, eligibility for rehire, length of employment, performance record, job duties, college education, absence record, character or person reference, military record, vocational training, and salary. Other less common topics were job title, high school education, driving record, alcohol and/or drug use, occupational licenses, work safety record, credit references, family background, wage garnishment, and union memberships.

Who Should Be Contacted

Deland (1983) and Levine and Rudolph (1977) suggested that employment references, especially persons with a close, lengthy exposure to the applicant's behavior are better sources of information than personal friends. LoPresto, Mitcham, and Ripley (1986) suggested that the most important information that can be obtained from the listed references is access to additional (second-level) references.

Mosel and Goheen (1959) examined the value of information obtained from different reference sources. They found ratings by supervisors and acquaintances had some value in predicting job performance, whereas references by personnel officers and coworkers had little value.

In the military screening context, Flyer (1986) reported results of two Department of Defense studies in the 1970s. These studies concluded that listed references, neighborhood checks, and educational interviews were both costly and non-productive, whereas employment checks were of some value. Flyer also noted a 1973 study by the General Accounting Office found listed references, educational checks, and neighborhood checks were less productive sources of derogatory information than developed references.

Results of a small, informal survey conducted by one of the DIS officials interviewed for this report supported these suggestions and findings. The results indicated that employment references yielded the most derogatory information. The next most productive sources were developed character references and neighbors. Listed character references were the least productive sources.

Characteristics of the Good References

Surprisingly, little research was located regarding the characteristics of good reference sources. Levine and Rudolph (1977) suggested that information is likely to be more dependable when the source is assured confidentiality. Nash and Carroll (1970) found the usefulness of a reference's information increased when the sex and race the applicant and reference giver are similar. They also found that reference information was more valuable when the references (employers) had observed the applicant's behavior for more than two months.

Process of Disclosing Negative Information by References

Derlega and Chaikin (1975) discussed the general process of disclosing negative information about others. They note that much of the negative behavior that people engage is not seen by or provided to others. When persons do provide such information to others, they tend to limit their discussions to sources who would not disclose it later. During the process of discussing negative activities, the requester of information will often offer disclosures in return. This reciprocity process protects the subject from information disclosure by the confidant.

When sources do make disclosures, it is likely that these disclosures will be made to persons of equal or higher status than the discloser. Derlega and Chaikin suggest that the source is more likely to disclose information if assured of confidentiality and if given positive reinforcement in return for disclosing information (e.g., being told that disclosure provides something good for society).

Additional factors further limit the disclosure of negative information about others. Social norms operate which discourage information disclosure. Many sources are reluctant to volunteer negative information for fear of legal recourse or retaliation. Human memory and perception limitations restrict the value of information provided by references. In sum, a number of factors suggest that reference sources will not disclose everything that they may know about the person and will resist efforts to disclose negative information.

Reliability of Reference Information

Empirical research on the reliability of reference information is both limited and mixed. Mosel and Goheen (1959) found that employers, subordinates, coworkers, teachers, and acquaintances of the applicant often disagreed in written evaluations of applicants. Mosel and Goheen (1952) examined 2800 employment recommendation questionnaires on 904 applicants and found 80 percent of the reliability coefficients were less than 0.40. In contrast, Bartlett and Goldstein (1976) found a correlation of 0.93 between positive/negative evaluations made by personnel staff and

researchers.

Validity of Reference Information

Meta-analyses by Hunter and Hunter (1984) showed reference checks had an average validity of 0.26 (10 correlations) for predicting supervisory performance ratings and an average validity of 0.27 (2 studies) for predicting tenure.

Utility of Reference Information

One method of examining the usefulness of reference checking information is to determine the frequency with which negative reference information resulted in applicant rejection. Bartlett and Goldstein (1976), in a study of reference checks involving 7427 applicants for staff jobs in a national scientific organization, found negative reference information on only about 1 percent of the applicants, about half of whom were rejected. A small survey reported by Levine and Rudolph (1977) found 5 percent of applicants in five large corporations and 1 percent of applicants for jobs in five municipalities were rejected because of negative references. Mosel and Goheen (1958), in a survey of 325 users of a written employment reference questionnaire form, found 16.3 percent of 1400 applicants were rejected on the basis of the questionnaire information.

Although no research was located that compared the usefulness of various reference checking topic areas, respondents in a survey by Levine and Rudolph (1977) indicated which topics they felt were predictive of four criteria: dependability, performance, trustworthiness, and turnover risk. For predicting dependability, survey respondents felt the best questions involved general employment history, performance record, absenteeism, duties and responsibilities, length of employment, health history, reason for leaving, eligibility for rehire, and personal habits--use of drugs or alcohol. Regarding trustworthiness, the respondents thought questions regarding performance record, duties and responsibilities, and conviction records were the best indicators.

Interestingly, respondents in the Levine and Rudolph (1977) survey often used informal, casual conversations with sources in which no record was kept as a method of reference checking. Several survey respondents noted this method often led to more candid and accurate information because the information was obtained off the record and was not subject to legal scrutiny.

Reference Checking Procedures

Based on their review of the reference checking literature, Levine and Rudolph (1977) provided general guidelines for obtaining information from non-subject sources. These are described below.

The reference receiver should contact the respondent in writing to notify the respondent that the reference receiver will be telephoning within a specified time. This notice should provide information about the position the applicant has applied for and the organization. This notice should also mention that: (a) the reference receiver will maintain

confidentiality, if requested; (b) the applicant has provided consent; and (c) the information is an important element in the screening procedure.

During the follow-up contact with the respondent, the reference receiver should provide additional information about the position for which the applicant is being considered. This information should be as specific as possible to enable the reference to provide more relevant information. In order to encourage the respondent's cooperation, the reference receiver should offer confidentiality. In addition, the reference receiver should inform the respondent of any applicable laws (e.g., Privacy Act) that apply to reference giving.

The interview should be planned in advance and carefully structured. Good interviewing practices should be followed. During questioning, reference receivers should restrict their inquiries to descriptive, factual information about the subject's past behavior. Questions seeking evaluative comments or psychological assessments about the subject should be avoided.

For employment checks, the reference receiver should obtain all relevant employment information. Former employers should be questioned about whether they would be willing to rehire the applicant and the basis for their answers. The reference receiver should arrange for certain employment information (e.g., performance appraisal information, absences) to be released to the subject's most recent supervisor. The reference receiver should then contact and later interview the supervisor. Using this procedure should refresh the supervisor's memory of the applicant's performance in relevant areas.

Levine and Rudolph (1977) recommend checking as many references as possible before making an employment hiring decision about a subject. The types of references that should be obtained, in their general order of priority, are: (1) employment (verify employers, salary, tenure, duties, disciplinary actions, reason for termination, eligibility for rehire, absenteeism, job performance, dependability, trustworthiness), (2) education (verify education, licenses, certifications), (3) physical health (verify health history, drug use, alcohol use), (4) criminal record (check rap sheet and convictions), (5) credit checks, polygraph examinations, neighborhood checks, personal reference checks, and teacher checks. These priorities are based on the reliability, validity, job-relatedness, and accessibility of the topics listed.

Summary

In summary, some of the major findings of research on non-subject interviews are:

- Little research has been conducted regarding the utility of different modes of collecting non-subject information.

- The telephone may be a viable medium for conducting non-subject interviews.

- Field investigations using trained investigators provide more useful information than mail-out reference questionnaires.

- Sources who are more familiar with the subject's behavior provide more useful information.

- Sources who are of the same sex and race as the subject tend to provide more useful information than personal friends.

- Information from the listed references is probably less useful than other sources.

- Information from sources is likely to be more dependable when the source is assured confidentiality.

- Several factors operate that limit the amount of information that sources will disclose about the subject.

- Different sources often show low agreement in their judgments about a subject.

- Reference checks have been shown to have modest validity in the employment context.

Verbal and Nonverbal Deception

A second method for detecting deception involves the observation of verbal and nonverbal behavior. We will review this literature in some detail since it relates directly to the investigative interview situation. Our discussion will be organized into five sections: (1) verbal cues to deception, (2) nonverbal cues (e.g., body gestures, facial expressions, paralinguistic cues) to deception, (3) human skill as deceivers, (4) human ability to detect deception, and (5) problems and limitations of this research.

Verbal Cues to Deception

Several studies of detection of deception have included a condition in which the verbal content of the truthful/deceptive message was also available. Kalbfleisch (1985) conducted a meta-analysis of studies which asked subjects to make a dichotomous truthful/deceptive judgment under various conditions. The results indicated that detection accuracy was highest when only transcript information was available (61 percent), second highest when only audio information was available (58 percent), third highest when both audio and visual information was available (57 percent) and lowest when only visual information was available (51 percent). These accuracy figures are based on samples of 1,018 to 1,676 observers with a chance accuracy level of 50 percent. Overall, these results suggest that many of the valid cues to deception must come from the verbal content of the message since the transcript-only and audio-only condition yielded the highest accuracy levels.

Several studies have examined the objective characteristics of the message content that indicate deception. We will list those message content indicators that have been shown to differentiate deceptive from truthful responses in at least one study. In comparison to truthful communications, deceptive communications are characterized by:

- less plausibility (Kraut, 1978; Riggio & Friedman, 1983);
- fewer past tense verbs (Watson, 1981; Dulaney, 1982; Knapp, Hart & Dennis, 1974);
- more first-person pronouns (Watson, 1981);
- fewer unique words (Dulaney, 1982; Knapp et al. 1974);
- fewer references to specific groups or persons (Watson, 1981);
- less emphasis on the negative aspects of people or situations (Watson, 1981); and,
- vaguer responses (Knapp et al. 1974).

Ekman (1985) described three ways in which a lie may be detected from the content of a message. The first way occurs when liars are careless (e.g., forgetting their story, forgetting whom they lie to). The second way verbal deception may be detected occurs when a slip-of-the-tongue mistake is made. The third way of detecting lies occurs when the liar goes on a tirade, which differs from a slip-of-the-tongue because it involves more than a word or two.

In summary, the verbal content of a message appears to be an important source of information about the presence of deception. Characteristics of the message content that have been shown experimentally to indicate deception include less plausible content, fewer past tense verbs, more first-person pronouns, fewer unique words, fewer references to specific groups or persons, less emphasis on the negative aspects of people or situations, and vaguer responses. Such characteristics are more likely to be detected when liars are careless, have slip-of-the-tongue mistakes, or go on a verbal tirade.

Nonverbal cues to deception

Ekman and Friesen (1969, 1974) and Ekman (1985) postulated that deception cues are most likely to occur in those aspects of communication which we are least likely to control. These authors suggest that liars are more adept at controlling some aspects of communication (e.g., verbal content, facial expressions) than others (e.g., body movements) for physical reasons (some muscles are more controllable than others) and for experiential reasons (we have more practice controlling some aspects than others). The theory does not suggest that no deception cues come from words or facial expressions; rather it suggests that they are less likely to occur in those aspects of communication than in body movements. Ekman (1985) suggested there is no single indicator of deception. He recommended that observers look for groups of behaviors, rather than isolated indicators, and for the consistency between verbal and nonverbal behavior.

Kalbfleisch's (1985) meta-analysis provides some evidence regarding Ekman's hypotheses. Contrary to Ekman's suggestions, Kalbfleisch found that knowledge of the verbal content of the message (transcript-only, audio-only conditions) led to higher detection accuracy than when such knowledge was not available (i.e., visual-only condition). However, in support of Ekman's hypothesis, detection accuracy was greater when viewing the body only (54 percent) than when viewing the face only (51 percent).

Several researchers have coded the frequency of nonverbal behaviors (e.g., body gestures, facial expressions) emitted by deceptive and truthful communicators to identify which are the valid cues to deception. Much of this research has been reviewed by Zuckerman, DePaulo and Rosenthal (1981). Rather than describe each individual study, we will describe nonverbal behaviors that have been shown to differentiate deceptive from truthful responses in at least one study. The research will be organized according to body gestures and facial expressions.

Research has shown that the body gestures of deceptive communicators, as compared to truthful communicators, are characterized by:

- more posture shifts (McClintock & Hunt, 1975; Ekman & Friesen, 1974), or less posture shifts (Hocking & Leathers, 1980);

- increased self-manipulation (e.g., touching parts of the body or scratching) (McClintock & Hunt, 1975; Riggio & Friedman, 1983), or no difference in the amount of self-manipulation (Heilveil & Muehleman, 1981);

- increased shrugs (Ekman & Friesen, 1972; O'Hair, Cody & McLaughlin, 1981);

- fewer illustrating hand gestures (Ekman, Friesen, & Scherer, 1976);

- less leg/foot movement (Mehrabian, 1972), or more leg/foot movement (Hocking & Feathers, 1980).

Facial expressions that have been shown more characteristic of deceptive communicators than truthful communicators in at least one study include:

- longer eye contact (at least for female interviewees) (Riggio & Friedman, 1983; Sitton & Griffin, 1981), or no difference in the amount of eye contact (Heilveil & Muehleman, 1981);

- less smiling (McClintock & Hunt, 1975), or no difference in the amount of smiling (Heilveil & Muehleman, 1981; Kraut, 1978), or more smiling (Mehrabian, 1971).

Paralinguistic cues (i.e., speech patterns and voice inflection) are a final type of nonverbal indicator that has been studied. Research has shown that such cues are more accurate indicators of deception than either body gestures or facial expressions (e.g., Kalbfleishch, 1985; Zuckerman et al. 1981; Littlepage and Pineault, 1981). Zuckerman et al.'s (1981) review of the nonverbal deception literature suggested that nonfluent speech

(e.g., grammatical errors) was the primary variable in differentiating deceptive and truthful respondents. Specific paralinguistic cues that have been shown to be more characteristic of deceptive (vs. truthful) communicators in at least one study include:

- longer hesitation before responding (Harrison, Hwalek, Raney, & Fritz, 1978; Heilveil & Muehleman, 1981; Kraut, 1978), or, shorter hesitation (when persons know they are to lie and are prepared to lie) (O'Hair et al. 1981);

- more speech errors (Heilveil & Muehleman, 1981; Mehrabian, 1971; Miller, deTurch, & Kalbfleisch, 1983);

- more frequent pauses (Miller et al. 1983);

- shorter duration of response (Heilveil & Muehleman, 1981; Kraut, 1978; Mehrabian, 1971), or longer duration of response (however, the measure of duration may have included the hesitation period before responding) (Harrison et al. 1978); and,

- higher voice pitch (Streeter, Krauss, Geller, Olson, & Apple, 1977; Ekman et al. 1976).

The findings on nonverbal indicators of deception (e.g., body gestures, facial expressions, paralinguistic cues) indicate there are inconsistent findings for several variables. There are at least two reasons for this. First, there may be no single set of cues which consistently indicates deception for all persons in all situations. For example, Riggio and Friedman (1983) found that persons with different personality characteristics displayed significantly different behaviors. Cody and O'Hair (1983) found communicator dominance and sex influenced deception behaviors.

A second reason for the inconsistent research findings is that individual differences exist both in deceiving others as well as in detecting deception. This research will be discussed in the next two sections. Overall, these findings suggest that cues to deception will probably depend at least partially on the characteristics of the liar, the observer, and the situation.

In summary, three types of nonverbal cues have been shown to have some validity in detecting deception. Paralinguistic indicators tend to be the best nonverbal indicators. Specific paralinguistic cues that may indicate deception include longer hesitation before responding (under most conditions), more speech errors, more frequent pauses, and higher voice pitch. Certain body gestures have also been shown to indicate deception. These include more posture shifts (under most conditions), increased shrugs, and fewer illustrating hand gestures. Finally, various facial expressions (e.g., eye contact, smiling) have been studied as indicators of deception. These indicators have generally shown the least validity in detecting deception. Several other nonverbal behavioral cues which may indicate deception, but for which the research evidence is mixed, include duration of responses, postural shifts, self-manipulation (such as scratching or touching other parts of the body with the hand), leg/foot movement, length of eye contact, and smiling. The inconsistent results for

these variables suggest that cues to deception depend at least partially on the characteristics of the liar, the observer, and the situation. The results also underscore the importance of Ekman's (1985) suggestion that observers look for groups of deception cues and the consistency of verbal and nonverbal behavior.

Humans as Deceivers

There seems to be a fairly general ability to lie successfully. Studies typically do not report the success level of individual liars so it is impossible to describe quantitatively what "successful" means. It is not clear whether persons who are good liars are almost always successful or if they are just more successful than chance. Several studies found that some communicators were harder to detect when they lied than others (Bond, Kahler, & Paolicelli, 1985; DePaulo & Rosenthal, 1979; Geis & Moon, 1981; Kraut, 1978; Miller et al. 1983; Riggio & Friedman, 1983; Sakai, 1981; Zuckerman, DeFrank, Hall, Lawrence, & Rosenthal, 1979). These researchers found that successful liars tend to be rated as more "honest-looking" (Bond et al. 1985; Zuckerman et al. 1979), score higher on the machiavellianism scale (DePaulo & Rosenthal, 1979; Geis & Moon, 1981), score higher on the self-monitoring scale[3] (Miller et al. 1983), and score higher on dominance, exhibition, and emotional sending skill (Riggio & Friedman, 1983). In addition, some research has shown that persons lie more successfully if they have a chance to rehearse or plan their lie (Littlepage & Pineault, 1985) but only if they are high in self-monitoring (Miller et al. 1983). However, Kraut and Poe (1980) found that level of self-monitoring had no effect on deception success.

Motivation for lying is another variable that has been studied. Hocking and Leathers (1980) suggested that deceptive communicators try to suppress stereotypical lying behaviors (e.g., reducing leg movements, foot movements, head movements, hand gestures). Cody and O'Hair (1983) found support for this. DePaulo, Lanier, and Davis (1983) found that more highly motivated communicators were more successful controlling the verbal aspects of their messages than the nonverbal aspects but were generally no more successful at hiding deception than truthful subjects. Koper (1985) found a moderate positive relationship between motivation and deception success in a poker game. One limitation with these studies is the generalizability of the "high motivation" research conditions to the investigative interview setting.

In summary, these findings suggest that it may be helpful for an investigative interviewer to know something about the personality characteristics of the interviewee. If the interviewer had such information, he or she might watch more closely for cues to that the interviewee is "honest-looking", scores high on machiavellianism, self-monitoring, dominance, exhibition, emotional sending skill. Successful deception may also be reduced if the interviewee has little opportunity to plan or rehearse any lies. Finally, communicators who are highly motivated to lie may alter their typical nonverbal behavior, although research on the detectability of highly motivated liars is mixed.

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[3] Self-monitoring is the tendency to be aware of situational constraints and to adjust oneself to "fit in".

Humans as Deception Detectors

Research suggests that humans can often detect deception at better than chance levels but not much better. In her meta-analysis, Kalbfleisch (1985) found that accuracy at detecting deception ranged from 45 percent to 70 percent (chance level of accuracy was 50 percent). A meta-analysis by Zuckerman et al. (1981) reported accuracy in standard deviation form which cannot be translated into an absolute accuracy level. They found, however, that in all but one condition (where only the face was seen), accuracy was higher than chance level. Kraut (1980) averaged detection of deception accuracy across 10 studies and found that detection accuracy was 57 percent (chance level of accuracy was 50 percent).

Mullaney (1977), in a study involving 60 police investigators, had 30 police investigators provide both truthful and deceptive messages to their partners in simulated, yet realistic situations. The results indicated that on the basis of their partners verbal and nonverbal behavior, interviewers identified 70 percent of the deceptive responses and 55 percent of the truthful responses. A second group of 27 investigators observed these interactions (which had been videotaped) and correctly identified 67 percent of the deceptive responses and 56 percent of the truthful responses.

DePaulo, Tang, and Stone (1987) found that detection of deception may depend on the characteristics of both the communicator and the observer. They found that observers were better able to detect lies when dealing with persons of similar physical attractiveness than when interacting with persons of different attractiveness levels.

There is evidence that certain persons are more skilled at detecting lies than others. Kalbfleisch (1985) found that female judges were slightly more accurate than male judges in detecting deception (61 percent vs. 59 percent), although some studies showed no differences between females and males in detecting deception (Parker, 1978; Atmiyuanandana, 1976).

DePaulo et al. (1980) reviewed studies which examined the relationship between human characteristics and success at detecting deception. They found that persons who scored high on measures of social participation, perceived complexity of human nature, social anxiety, and self-monitoring were generally better at detecting lies than persons who score low on these measures. One interesting finding was that persons who are good at lying are not necessarily good at detecting when someone else is lying (DePaulo & Rosenthal, 1979).

Some research has studied whether simply warning the observer that the communicator may lie improves detection of deception. Toris and DePaulo (1985) found that warning the observers that communicators might be lying caused them to be less certain about their judgments, more suspicious of communicators, but no more accurate at detecting deception. Zuckerman, Spiegel, DePaulo, and Rosenthal (1982) found that informing observers that the communicator sometimes or often lied led observers to more accurately recognize discrepant messages, but less accurately recognize consistent messages.

Some researchers have studied whether familiarity with a communicator's usual truthful behavior improves accuracy in detecting deception. (Physiological methods of lie detection are based on this premise). Kalbfleisch's (1985) meta-analysis found that detection accuracy was lower than chance when judges had no familiarity with the communicator's nonverbal behavior outside of the message they were asked to judge (42 percent) and that detection accuracy increased as the number of exposures to the communicator's honest behavior increased--up to a point. Detection accuracy improved from 42 percent to 51 percent after seeing the familiarity sample once, to 56 percent after seeing the familiarity sample twice, to 64 percent after three times, but dropped to only 44 percent after 6 exposures to the familiarity sample (this last group was based on a single sample of 50 observers).

Zuckerman, Koestner, and Alton (1984) found that detection accuracy increased when subjects were given more than one opportunity to judge the truthfulness of messages from the same set of communicators. Overall, these findings suggest that it is helpful for an observer to have some familiarity with a communicator's behavior before judgments about deception are made. The need for familiarity with a communicator's non-deceptive behavior becomes even more important when viewed in conjunction with research which shows that the valid cues to deception may vary depending on the personality and appearance of the communicator.

Efforts to develop a measure of deception detection ability have been disappointing. Rosenthal, Hall, DiMatteo, Rogers, and Archer (1979) developed the Profile of Nonverbal Sensitivity to measure the ability to interpret nonverbal behavior. However, Littlepage, McKinnie, and Pineault (1983) found no relationship between scores on the Profile of Nonverbal Sensitivity and accuracy at detecting deception. DePaulo, Rosenthal, Eisenstat, Rogers, and Finkelstein (1978) developed the Nonverbal Discrepancy Test, which is designed to measure the ability to detect discrepant auditory and visual nonverbal messages. However, Littlepage, Maddox, and Pineault (1985) found no relationship between scores on this test and accuracy at detecting deception. Development of a measure of deception detection ability is a potential area for further research.

If it is not possible to select persons with the natural ability to detect deception, perhaps it is possible to train this skill. Some research has examined whether interviewers who have training or experience are good at detecting lies. As noted above, Zuckerman et al. (1984) found that detection accuracy increased when subjects were given more than one opportunity to judge the truthfulness of messages from the same set of communicators. They also found detection accuracy improved when feedback was given to each judge about which of their judgments were correct. The highest level of detection accuracy achieved was 70 percent (chance level of accuracy was 50 percent) which was obtained when both practice and feedback were provided. However, the improvements were not maintained when judges were asked to detect deception in a new set of communicators.

Some researchers have examined whether experience alone improves accuracy in detecting deception. DePaulo and Pfeifer (1986) had experienced Federal law enforcement officers, new Federal law enforcement agency recruits, and college undergraduates listen to a taped interview

with a college undergraduate who lied on some questions about attitudes and opinions. The results indicated the law officer groups were more confident about their truthfulness judgments, but were no more accurate than the college students.

Kraut and Poe (1980) had U.S. Customs inspectors and lay persons view videotapes of travelers (who were either carrying or not carrying "contraband") as they went through a mock customs inspection in which only upper portion of the traveler's body was visible. The results indicated that both groups were unsuccessful at judging when a traveler was carrying contraband and both groups used similar cues in making judgments.

Ekman and Friesen (1974) compared persons with hundreds of hours of experience using a technique for objectively coding facial affect to college undergraduates. The trained facial analysts achieved a higher level of detection accuracy than college undergraduates on a task which involved watching videotapes of the face (no sound) of a student nurse who was watching a film about burn victims and either showing her true emotions or hiding them.

Thus, research studying the effects of training and/or experience on detecting deception has produced mixed research. These discrepant findings may be partially reconciled by the finding that skill in detecting deception does not generalize (Zuckerman et al. 1984) and because of differences in the research tasks and actual job tasks. Furthermore, the finding that experience alone does not lead to greater skill in the studies involving law enforcement and customs officials is not surprising given the limited feedback such groups receive about their actual deception judgments on the job.

In summary, available research suggests that humans can often detect deception at better than chance levels, but not much better. Even trained police investigators made correct truth/deceptive judgments only 55 to 70 percent of the time in one study (Mullaney, 1977). Some research suggests that accuracy in detecting deception depends on the characteristics of both the communicator and the observers. Other research has found that some persons are better at detecting deception than others. Preliminary research indicates that females, and persons scoring high on measures of social participation, perceived complexity of human nature, social anxiety, and self-monitoring tend to be more skilled at detecting lies than others. Observers may detect lies more accurately when dealing with persons of similar physical attractiveness. Familiarity with the communicator and observer training (with feedback) also improves the ability to detect deception. Interestingly, experience alone does not necessarily translate into improved skill in detecting deception. Finally, little success has been achieved in efforts to develop a measure of deception detection ability.

Problems in and Limitations of Existing Research

In this section we briefly discuss five problems and limitations in the existing nonverbal deception research. One limitation of this research is that the base rate for deception in the research studies reviewed is probably higher than in the investigative interview situation. Typically, 50 to 100 percent of the communicators are lying at least part of the time

in the studies reviewed. This problem is exacerbated by the fact that in many studies, the person making the judgments about truthfulness knows what proportion of messages are going to be deceptive. Such knowledge may lead observers to modify their expectations about who is lying.

A second limitation of nonverbal deception research is the generality of the research setting to the investigative interview setting. In almost all research studies, the research subjects simply observe a communicator and make judgments about truthfulness of communicators in recorded (visual and/or audio) mock interviews. Observers do not take notes, formulate questions, or maintain control of the interview as in the investigative interview. On the other hand, in contrast to the investigative interview situation, observers have little control over the interview.

A third limitation of nonverbal deception research is that no studies were found that examined the reliability or validity of the simulated research interviews.

A fourth limitation of the nonverbal deception literature is that some researchers equate detection of deception with detection of underlying affect. As discussed earlier, the two kinds of accuracy are not directly comparable.

Finally, in the research studies reviewed, subjects were not given a choice about when (or even if) they will lie. During actual investigative interviews, it is likely that some people are more prone to lying than others (due to past success/failure at lying, personality, opportunities to lie, or other reasons). Research has not taken this into account. It may be that there are reliable and valid behavioral differences between truthful and deceptive responses, but only for persons who are more (or less) likely to attempt deception.

Physiological Measures

A third method for detecting deception is to measure a subject's physiological responses (e.g., pulse rate, heart rate, galvanic skin response, breathing rate) to carefully developed questions related to a topic of interest. These physiological reactions are recorded using a polygraph. In studies of deception, the subject's pattern of responses to different types of questions is examined to infer a subject's truthfulness. The method is based on the assumption that subjects will demonstrate greater physiological reactions when lying.

Although the extensive debate on the accuracy of the polygraph is outside the scope of this report (see Office of Technology Assessment, 1983; Saxe, Dougherty, & Cross, 1985; Iacono & Patrick, 1987; Lykken, 1981; and Sackett & Decker, 1979 for excellent reviews), two aspects of the polygraph method--the pre-examination method[4] and the questioning technique--are relevant to the investigative interview.[4] Each topic is discussed below.

Pre-Examination procedure

One aspect of the polygraph examination that is relevant to the investigative interview is the pre-examination procedure. The pre-examination procedure is used to provide subjects with information about the polygraph process, to obtain the subject's consent, and to develop an appropriate "climate" for testing. One objective of the pre-examination procedure is to persuade the subject that any deception will be detected. This is accomplished in two ways. First, the examiner uses carefully worded instructions that are designed to increase the anxiety in subjects who plan to be deceptive and put honest subjects at ease. Following this, the examiner typically conducts a trial polygraph test (known as a stimulation, or "stim," test) which is intended to persuade the subject of the infallibility of the polygraph. In this test, the subject is asked to choose one card from a deck of numbered or lettered cards, look at the card, and then put it back in the deck without letting the polygraph examiner see it. The examiner then asks the subject a series of questions and uses the subject's physiological responses to determine the number or letter the examinee saw. Limited research on the usefulness of stimulation tests suggests they may improve the accuracy of polygraph examinations (Senese, 1976; Bradley & Janisse, 1981). Thus, persuading subjects that deception will be detected may be an important factor in minimizing deception.

A similar manipulation of subject beliefs could be attempted in the investigative interview. During the introduction to the interview, the interviewer might attempt to persuade the interviewee that any deception will be detected. This would be accomplished through carefully worded instructions and/or reminders that the subject's answers will be verified using independent sources. These steps may reduce the likelihood that the interviewee will attempt to deceive the interviewer by instilling a belief that deception will be detected.

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[4] It should be noted that in an extensive review of the polygraph literature (Office of Technology Assessment, 1983), only two field studies were found that are relevant to personnel security screening. One study (Edel & Jacoby, 1975) found high reliability in polygraph examiner readings but presented no validity data. The second study, a survey of the effectiveness of background screening methods by the Central Intelligence Agency (1980), suggested that the polygraph was the most useful background screening method used by the CIA. Based on this limited research, the U.S. Office of Technology Assessment report concluded that "available research evidence does not establish the scientific validity of the polygraph test for personnel security screening" (p.4).

Polygraph questioning technique

A second aspect of the polygraph examination that is relevant to the investigative interview is the polygraph questioning technique. Three commonly used questioning techniques are described below.

The Control Question technique mixes relevant questions which ask for information pertinent to an investigation (e.g., "Did you steal the $50?") with control questions which are designed to cause discomfort for innocent persons (e.g., "Before the age of 20, did you ever take any money that was not yours?"). These control questions are usually about misdeeds and cover a long time period so that virtually everyone will have committed them. The rationale is that innocent persons will experience less discomfort in response to the relevant questions than to the control questions while guilty persons will experience the opposite.

A second polygraph questioning technique, the Guilty Knowledge Test, involves asking questions about things only the guilty person would know (e.g., "Did the bank teller you robbed look like this?").

A third polygraph questioning technique, the Positive Control Test, involves asking the same relevant question twice, telling the examinee to answer honestly the first time and dishonestly the second time. For example, the examiner might ask "Tell the truth, did you steal the $50?" and then "Tell a lie, did you steal the $50?". An innocent person should experience greater discomfort the second time the question is asked because he or she is lying. Conversely, a guilty person should experience greater discomfort the first time the question is asked because that is when he or she is really lying.

Surprisingly, only one study was found that directly compared the validity of different questioning techniques using the same sample.[5] Forman and McCauley (1986) compared three questioning techniques (Positive Control Test, Control Question technique, and Guilty Knowledge Test) using a sample of 38 college undergraduates. They found that the Positive Control Test technique correctly identified 68 percent of the guilty and 77 percent of the innocent persons. The Control Question technique correctly identified 82 percent of the guilty and 47 percent of the innocent persons. The Guilty Knowledge Test technique correctly identified 45 percent of the guilty and 100 percent of the innocent persons. A combination of the Positive Control Test, followed by the Control Question technique, correctly identified 100 percent of the guilty and 68 percent of the innocent persons. Based on these results, the authors concluded that use of multiple questioning formats may be an effective technique for polygraph examinations.

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[5] It should be noted that some researchers (e.g., Bersh, 1969; Bradley & Ainsworth, 1984) have compared the accuracy of different questioning methods using different samples. However, no definitive conclusions regarding question effectiveness are available from these studies.

It should be noted that there are important differences between the polygraph "interview" and the investigative interview. The polygraph interview typically uses only "yes/no" response questions, whereas the investigative interview includes open-ended answers as well as "yes/no" response questions. In addition, the investigative interview is intended to gather information, not just to ascertain whether or not the interviewee is lying. Finally, as noted by Sackett and Decker (1979), much of the polygraph research has been conducted in the criminal investigation context rather than for prescreening or periodic rescreening, and several factors limit the generalizability of the polygraph across settings.

Do these questioning techniques have any implications for the investigative interview? Although there is no empirical basis for selecting one questioning method in the personnel security screening context, these general questioning methods may be useful when probing subjects about issues that arise during the investigative interview. The research by Foreman and McCauley (1986) suggests that combinations of these questioning techniques may improve the detection of deception.

Paper-and-Pencil Honesty Tests

A fourth technique for detecting deception, most often used in pre-employment screening, is measurement of an "honesty" trait using paper-and-pencil tests. In this method, persons who receive low scores on "honesty" or who fail to show a negative attitude toward criminal or other antisocial activities are removed from consideration in the hiring process. Such tests are not usually designed to detect deception per se, instead they are designed to identify persons who are likely to engage in anti-social activities.

There has been a tremendous increase in research and use of paper-and-pencil honesty tests in recent years, partially because of federal and state restrictions on the use of polygraph examinations. A recent bibliography on honesty testing (London House, 1988) listed nearly 100 citations, with about two-thirds of these dated 1980 or later. Summaries of research on honesty testing can be found in Sackett (1987), Sackett and Harris (1984), and Baumer and Rosenbaum (1984).

Sackett (1987) identified two general types of honesty tests: overt honesty tests and "clear purpose" personality-based measures.[6] Overt honesty tests (e.g., Personnel Selection Inventory, Reid Report, Stanton Survey) normally include at least two sections: (a) attitudes toward theft and honesty and (b) self-admissions of illegal activities (e.g., theft, drug use, gambling). Personality-based measures (e.g, Hogan Personality Series Reliability Scale, PDI Employment Inventory, Personnel Reaction Blank) include items that are intended to measure constructs such as conscientiousness, hostility, and conformity.

[6] Sackett (1987) lists publishers of seven overt integrity tests and three personality-based measures.

Sackett and Harris (1984) summarized the reliability, validity, and adverse of impact of honesty tests. In general, honesty tests have shown good reliabilities. Reliability estimates of 0.91 to 0.95 were found in three studies using internal consistency estimates and 0.76 to 0.95 in two studies using test-retest estimates.

Sackett and Harris (1984) summarized validity of paper-and-pencil honesty measures according to five types of criteria. Their findings indicated: (a) correlations between honesty test scores and polygraph judgments or admissions made during the polygraph ranged from 0.27 to 0.86 (14 studies). (b) correlations of honesty test scores with admissions of past theft ranged from 0.07 to 0.81 (16 studies), (c) correlations between honesty test scores and measures of subsequent job behavior (e.g., discharge for theft) ranged from 0.06 to 0.86 (7 studies), (d) company loss measures were reduced by more than one-half after the introduction of the honesty test (1 study), and (e) comparisons of honesty test scores for general population with known dishonest groups have shown large and significant differences in the expected direction (3 studies).

Sackett (1987) summarized results of several meta-analyses studies (e.g., Kpo & Harris, 1986; McDaniel & Jones, 1986, 1988) which examined the validity of individual honesty tests. Kpo and Harris (1986) reported a mean observed correlation of 0.70 between theft admissions and scores on the Stanton Survey attitude and admissions sections across 34 samples (total $\underline{N}$ = 3482). McDaniel and Jones (1988) found a mean correlation of 0.50 between scores on the Personnel Selection Inventory honesty scale and measures of employee theft across 23 studies (total $\underline{N}$ = 1806). Finally, McDaniel and Jones (1986) reported mean observed correlations ranging from 0.31 to 0.47 for various Employee Attitude Inventory Theft scales (admissions, attitudes, theft knowledge, composite).

Although validity results for honesty tests are consistently positive, Sackett and Harris (1984) noted several methodological limitations that have been raised regarding these studies: (a) studies using polygraph judgments as a criterion may be inappropriate because polygraph judgments are not accepted by the scientific community; (b) studies using

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[7] It should be noted that standard personality measures (e.g., Minnesota Multiphasic Personality Inventory, California Psychological Inventory) have also been used to predict honesty criteria. Research has generally shown these measures are less effective in predicting honesty criteria (e.g., subsequent theft on the job) than "clear purpose" personality tests (Ash, 1988). Another paper-and-pencil measure that has been used to predict theft criteria is the weighted biographical information form. The limited research suggests that scores on these measures have low to moderate correlations with theft or suitability criteria (cf. Rosenbaum, 1976; Haymaker, 1986; Flyer, 1986).

admissions of past theft have inflated validities because social desirability effects increase honesty test scores and decrease admissions; (c) results of pre vs. post honesty test interventions have not included control groups or controlled for other factors that could have affected the results; (d) group difference studies comparing the general population and known dishonest groups have not directly addressed the validity of honesty measures; and (e) studies using subsequent employee theft have had small sample sizes. One additional limitation is that the "ground truth" criterion level is almost never known in real life settings.

In summary, paper-and-pencil honesty or integrity tests have shown relatively high validities, although several limitations of this research have been noted. This research does suggest, however, that attitudinal questions toward unsuitable activities may be useful in the investigative interview context. Inclusion of such questions might provide useful information for identifying persons who are likely to engage in aberrant activities. These tests might also be used to direct the scope of investigations or as a cost effective supplemental predictor of security related behavior.

CHAPTER 7. INTERVIEWER TRAINING AND BURNOUT

This chapter discusses two topics that are related to the effective performance of investigative interviewers--interviewer training and interviewer burnout. Each topic is discussed separately below.

Interviewer Training

In this section we review current investigative interview practice and empirical research on interviewer training. The section begins with a summary of the investigative interviewer training procedures followed at five government agencies. We then describe the results of a survey of investigative interview training procedures sponsored by OPM. Finally, we briefly review empirical research on interviewer training.

Descriptions of Investigative Interviewer Training Programs at Five Government Agencies

The following subsections briefly describe the investigator interviewer training procedures followed at DIS, OPM, FBI, CIA, and DIA. These descriptions are based on information gathered during the site visits described in Chapter 2.

Defense Investigative Service. New DIS investigators receive at least three weeks of field training during which they read the investigator's manual and accompany experienced agents on cases. They also participate in four weeks of training at the Defense Security Institute. Here agents receive classroom instruction in all aspects of the background investigation process. Topics covered include the DIS organization, interviewing theory and practice, listening skills, recordkeeping, report writing, issue resolution, confidential sources, and counterintelligence awareness. As part of the training program, investigators are videotaped performing various practical exercises and are critiqued by their instructors.

Following completion of formal training, investigators are assigned to a field office for additional on-the-job training. Here investigators are observed by a supervising agent anywhere from one day to several weeks, depending on the agent's progress and experience.

Office of Personnel Management. OPM investigators participate in two to three weeks of classroom training. This classroom training includes two to two-and-one-half days of interview training (using videotapes and practice interviews) and one day of nonverbal observation training (using the Kinesic course).

Most of the training is done on the job. Initial on-the-job training involves reading the investigator's manual and discussing techniques with the supervisor for three to four days. The agent then accompanies a senior investigator on cases for one week as an observer. Following this, the investigator conducts simple cases for two to three weeks. Throughout this process, the investigator's work is carefully monitored by his or her

supervisor. Overall, according to the OPM representative interviewed, it takes six months to one year for an investigator to reach a proficient level of performance.

Federal Bureau of Investigation. New FBI investigators receive both classroom and on-the-job training. Investigators receive 44 hours of classroom training on communication techniques and topics related to the background investigation process (e.g., interview preparation, interview questioning techniques, persuasion techniques, personality types, interview topic areas, nonverbal and verbal detection of deception, documentation). The primary training methods used are lecture, textbook study (there is a three-volume interviewer manual), and role playing. Trainees also participate in a quasi-realistic investigative interview that is videotaped and then critiqued by training instructors. In addition to this training, new investigators participate in a 13 week course which covers various topics related to work at the FBI (e.g., white collar and other types of crime). This course includes additional interviewing training.

Upon completion of classroom training, investigators are assigned to a field office where they participate in on-the-job training. The extent and type of on-the-job training varies depending on the field office.

Central Intelligence Agency. New investigators at the CIA attend a nine week investigator training program. During the first four weeks, they learn about the operation of the CIA. During the last five weeks, agents participate in interviewer/investigation training. Here trainees learn about interviewing style and techniques for note taking, teletyping, dictation, report writing, and other aspects of the investigation process. As part of the training, investigators participate in role playing exercises, and are critiqued by instructors on their demeanor, attitude, and questioning ability.

Upon completion of formal training, each agent is assigned to a field office. Here the on-the-job training procedures will vary according to the office, but investigators typically work with an experienced supervisor for a short period of time before working independently on background investigations. According to the CIA respondents interviewed, it takes up to five years to become a fully proficient investigator.

Defense Intelligence Agency. DIA investigator training includes several training programs. First, new agents participate in a University of Delaware interviewer training course called Kinesic, which emphasizes nonverbal communication. Second, investigators complete the Reid and Associates interviewing training course. Third, new agents attend a course in verbal skills deception which involves analyzing the frequency of personal pronouns such as "I" or "we".

Upon completion of formal training, new investigators accompany experienced DIA interviewers on investigations before working independently on cases. These experienced investigators act as observers and critique the new agent's performance.

The DIA officials interviewed mentioned that most new DIA investigators have prior investigative interviewing experience. Several of these investigators are graduates of a 15-week DoD investigator's course.

This course covers topics such as criminal investigation, fraud investigation, counterintelligence investigation, forensics, and the legal aspects of these areas.

Summary: Government Agency Investigative Interviewer Training Programs. Results of site visits to five government agencies indicates that all five agencies use both classroom and on-the-job training. The FBI and CIA have the most extensive classroom training programs. In many respects, the classroom training programs are similar across agencies. All cover the various aspects of the investigation process, interviewing methods, and nonverbal communication. In addition, all of these agencies include both classroom and some type of exercise based training (usually videotapes and/or role playing). The on-the-job training programs are more varied, even within an agency. Most of the on-the-job training programs involve working with experienced investigators for a period of time, with the time period varying according to the field office.

Office of Personnel Management--Office of Personnel Investigations Study (1986)

A report sponsored by the Office of Personnel Management--Office of Personnel Investigations (1986) reviewed the subject interview training programs used by several organizations, including the Defense Security Institute, Federal Bureau of Investigation, Federal Law Enforcement Training Center, Internal Revenue Service, New York City Police Department, Interrotec, and Reid Employment Services. Each training program was examined according to the specific topics taught in five areas: (1) behavioral signs of deception, (2) asking questions, (3) interviewer demeanor/style, (4) handling hostile subjects, and (5) interview site decor. A summary of the training program coverage for each organization is shown in Table 4.

The results shown in Table 4 indicate the topics covered in federal agency subject interview training courses are quite similar. In the area of detecting deception, almost all programs cover proxemics, kinesics, verbal behaviors, logical inconsistencies, and word choice. In the area of questioning, all programs include question strategies and phrasing. Regarding interviewer demeanor, most programs stress professionalism as the key element. Only four of the seven programs address handling hostile subjects, with three recommending that interviewers advise interviewees of the need for questioning and then discontinue the interview if necessary. Finally, in terms of interview setting, most programs emphasize privacy and settings that facilitate observation of nonverbal behavior.

After reviewing the various training programs and topics covered, the authors of this report recommended that classroom training be implemented in the areas of detecting deception, asking interview questions, and taking statements. Unfortunately, no information was reported regarding the effectiveness of these training programs.

Table 4: Training Program Coverage of Subject Interview Topics

(from Office of Personnel Management - Office of Personnel Investigations Study, 1986)

Source of Course	Behavioral Signs of Deception/ Openness	Asking Questions	Interviewer Demeanor/Style	Handling Hostile Subjects	Interview Site Decor
Defense Security Institute	o Proxemics o Kinesics (facial expressions, gestures, body movement) o Verbal behaviors o Logical inconsistencies	o Question strategies o Question phrasing	o Professional image	o Advise as to need; discontinue if necessary	o Private o Neutral grounds o Facilitate proxemics
FBI	o Proxemics o Kinesics o Verbal behavior o Logical inconsistencies o Word choice o Recognition of mental conflicts	o Question phrasing o Reasoning, persuasion and argument	o Courteous, confident, patient, persistent, fair	o Advise as to need; discontinue if necessary	o Private o Facilitate proxemics
Federal Law Enforcement Training Center	o Proxemics o Kinesics o Verbal behaviors o Logical inconsistencies o Word choice	o Question strategies o Question phrasing	o Professional	o No difference from cooperative	o Private o Facilitate proxemics
IRS	o Kinesics o Verbal behavior o Logical inconsistencies o Word choice	o Question strategies o Question phrasing	o Professional, but with own style	o Advise as to need; discontinue if necessary	o Private o Facilitate kinesics

Table 4: Training Program Coverage of Subject Interview Topics
(Continued)

(from Office of Personnel Management -
Office of Personnel Investigations Study, 1986)

Source of Course	Behavioral Signs of Deception/ Openness	Asking Questions	Interviewer Demeanor/Style	Handling Hostile Subjects	Interview Site Decor
New York City Police Department	o Proxemics o Kinesics o Verbal behavior o Logical inconsistencies	o Question strategies o Question phrasing o Paraphrasing to lead subject	o Professional and courteous	o Not addressed; Does not exist in application process	o Private
Interrotec	o Proxemics o Kinesics o Verbal behavior o Logical inconsistencies o Word choice o Structured questions o Analysis of written statements	o Question strategies o Question phrasing	o Control of interviewee	o Not addressed	o Facilitate kinesics
Reid Employment Services	o Kinesics o Verbal behavior o Logical inconsistencies o Word choice o Structured questions	o Question strategies o Question phrasing o Occupational questions	o Professional appearance	o Not addressed	o Facilitate kinesics

Research on Interviewer Training

Spool (1978) reviewed 27 studies examining training programs for observers of behavior which used observer accuracy as a dependent variable. He categorized this literature into four areas: (1) interviewer training, (2) training designed to reduce performance appraisal rating bias, (3) training designed to improve interpersonal perception, and (4) training of observers in research settings. Based on his review of the literature, Spool concluded: "...training interviewers as observers of behavior has been found to be generally effective in reducing rating errors, increasing recognition of various behaviors (or symptoms) and increasing interviewing performance (e.g., field work competence)" (p. 857). It should be noted, however, only eight of the studies reviewed examined interviewer training and included interviewer accuracy as a dependent variable. In studies that compared more than one training program, Spool found that most studies reported that some method of training beyond the lecture or cognitive learning alone was necessary to improve the accuracy of interviewer observations.

Spool (1978) discussed the training programs reviewed in terms of the four training activities making up Goldstein and Sorcher's (1974) behavior modeling approach: modeling, practice, social reinforcement, and transfer of training. He concluded that each component contributes to the success of behavior observation training programs.

Smith (1986) reviewed 24 studies examining the efficacy of performance appraisal training programs. These studies were categorized according to the method of presentation (e.g., lecture, group discussion, practice and feedback) and content (e.g., rater error training, training designed to familiarize raters with the dimensions on which performance will be rated, and training designed to provide raters with a common frame of reference for making performance evaluations). Smith found that, in general, rater training programs which actively involve trainees using participation, practice, and feedback produce larger effects. He suggested that the best way to increase rater accuracy is to combine training designed to familiarize raters with ratings dimensions with training designed to ensure raters have a common frame of reference.

In other research, Dougherty et al. (1986) found that interview validities increased after interviewer training. Keenan (1978) examined the effects of interviewer training and experience on employment recruitment interviews and found that both training and experience were positively related to interviewers' confidence in the accuracy of their judgments. Research results on rater training to control rating errors (e.g., halo, contrast, leniency) has shown mixed results (e.g., Vance, Kuhnert, & Farr, 1978; Maurer & Fay, 1988; Wexley, Sanders, & Yukl, 1973).

Summary: Research on Interviewer Training. Little is known about the most appropriate content for subject interview investigator training. Although the types of investigator training and topics covered during training are relatively similar across the five federal agencies visited and in an OPM-sponsored study of seven organizations, no research studies were located which evaluated the effectiveness of these investigator training programs or identified the most critical content areas. Research that defines the training content in terms of job requirements (e.g.,

Bownas, Bosshardt, & Donnelly, 1985) would be useful.

The empirical research suggests that interviewer training is useful in reducing rating errors, increasing recognition of relevant behaviors, and increasing interviewing performance. Important variables for increasing training effectiveness include active trainee involvement, practice, and feedback. In terms of training mode, some form of training beyond the lecture or cognitive learning alone appears to be necessary to significantly improve the accuracy of observations.

Interviewer Burnout

One of the questions in the statement of work for this project asked, "How do you avoid burnout phenomenon among interviewers or 'rotedrill' behavior and maintain peak performance?". We chose to focus on burnout to answer this question. "Rotedrill" behavior can be seen as one symptom of burnout and maintaining peak performance can be seen as avoidance of burnout.

Government Agency Sample

Officials from four government agencies (DIS, OPM, FBI, CIA) suggested that interviewer burnout was not a widespread problem within their respective agencies (see Chapter 2). Only one organization, DIA, suggested that investigator burnout was a problem.

Empirical Research

Although interviewer burnout does not currently appear to be a pervasive problem among the agencies visited, it could become a more serious problem in the future as investigator caseload increases. In this section, we review the empirical literature on burnout to learn what is known about the burnout phenomenon and to determine what steps might be taken to minimize it in the future.

The concept of burnout developed out of research on the causes and consequences of job stress and has been defined as a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that often occurs among individuals who do "people-work" of some kind (Maslach and Jackson, 1985). Professionals who work in such contexts, "are often required to spend considerable time in intense involvement with troubled people, and these exchanges commonly become charged with feelings of anger, embarrassment, frustration, fear or despair" (Maslach & Jackson, 1981b).

The primary focus of research on burnout has been to develop and validate an instrument to measure this construct. The most frequently researched instrument is the Maslach Burnout Inventory, or MBI (Maslach & Jackson, 1981a). The MBI assesses three components of burnout--emotional exhaustion, depersonalization, and personal accomplishment. This inventory has shown acceptable levels of internal consistency reliability and has been validated by correlating MBI scores with: (a) behavioral ratings made by spouses and coworkers, (b) job characteristics (e.g., caseload, feedback) expected to contribute to experienced burnout, and (c) measures of various outcomes (e.g., intention to quit, job satisfaction, turnover)

(Jackson, Schwab, & Schuler, 1986; Maslach & Jackson, 1981a, 1981b).

The role of sex and social support have also been studied in relation to burnout. Maslach and Jackson (1985) found small differences between females and males in experienced burnout with females experiencing less burnout. They also found persons who are married and who have families experience less burnout. Russell, Altmaier, and Van Velzen (1987) found teachers who reported having a supportive supervisor and receiving positive feedback about their skills and abilities from others experienced less burnout.

Other studies have examined the effects of organizationally-controlled variables on experienced burnout. Golembiewski, Hilles, and Daly (1987) found that burnout levels decreased in response to Organizational Development interventions (e.g., team building, interpersonal confrontations, stress management workshops). Gaines and Jermier (1983) found that persons who rated their job and workplace as having fewer opportunities for promotion, less task motivating potential, and greater rule inflexibility received higher MBI emotional exhaustion scores. They also found that several variables interacted with type of work in a police department. Investigation officers experienced higher levels of emotional exhaustion than support and clerical persons in response to low group cohesiveness, increases in physical danger, perceived pay inequities, and rule inflexibility. Brown (1986) reviewed research which suggests that among probation officers reduction of burnout is related to less bureaucratic structure, supportive supervision, greater and more positive staff interaction, and the availability of a physical wellness program.

Whitehead (1985) reported that burnout usually occurs in the period six months to three years after a person begins a job (at least in the helping professions). This study found less burnout among more senior probation and parole officers than among persons who had been on the job for shorter periods of time (except for the newly hired who also reported low levels of burnout). Whitehead recommended using senior officers as mentors to officers with less time on the job.

Glogow (1986) found that personnel specialists reporting high levels of burnout generally thought the organization should be responsible for preventing burnout, whereas personnel specialists with low self-reported burnout typically felt that individuals should be responsible for preventing their own burnout. The author hypothesized that persons who have an internal locus of control (i.e., they tend to believe that rewards are contingent on their own behavior rather than external factors) will take responsibility for preventing their own burnout and do so successfully, while individuals with an external locus of control will not take responsibility for preventing burnout and so will are more likely to become burned out.

Recommendations for Controlling Interviewer Burnout

What can be done to prevent burnout among interviewers? There are a number of books and articles available (e.g., Brown, 1986; Cherniss, 1980; Paine, 1982) which suggest ways to prevent or deal with burnout. Some of these suggestions may be valuable but most have not been substantiated with research. From the research reviewed, the following suggestions can be

made.

- Provide a supportive atmosphere for interviewers from both coworkers and supervisors.

- Use senior investigators as mentors or role models for interviewers who exhibit or are likely to show symptoms of burnout.

- Establish and/or maintain an organizational climate which allows/encourages interaction and participation by workers.

- To the extent possible, limit rigid adherence to administrative policies and procedures.

- Use the MBI to identify interviewers who are in the early stages of burnout and intervene before the later stages of burnout are reached.

- Help interviewers to understand that effective prevention of burnout is the responsibility of both the individual and the organization.

CHAPTER 8. A SCENARIO OF AN EXPERT INTERVIEW

In this chapter, we provide a "scenario", or guide, to how an expert interviewer might perform his/her duties. This scenario is not a definitive guide on how expert interviewers should perform nor is it descriptive of how experts do perform. At this time, there is almost no research available on the investigative interviewing process upon which to build a scenario of expert performance. Neither is there any research on the reliability, validity, or utility of interviewing techniques in the background investigation context. The research that does exist uses methodologies, goals, and conditions that permit only cautious generalizations to the investigative interview context.

The materials reviewed do, however, provide a rich source of what ideas might work in an investigative interview and why. The scenario is based directly upon or inferred from ideas drawn from the full range of topics covered in this report. Given the different contexts from which they were drawn, some of the ideas presented may not be practical or fruitful. However, it is useful to examine basic assumptions of the investigative interview and consider the range of possible approaches and techniques. To the extent that the scenario provokes useful discussion and stimulates new ideas for investigative interviewing methods, it will have achieved its purpose. Therefore, this scenario is best viewed as a source of interesting hypotheses for future research.

The scenario is presented in Table 5, in the form of an interview guide. A discussion and rationale for these procedures is described in the following text. This discussion is organized into seven sections: interview evaluation criteria, interviewer characteristics, interviewing procedures, the interview process, post interview activities, the non-subject interview, and some additional issues on the approach to investigative interviewing.

Interview Evaluation Criteria

The first step in developing a scenario of expert investigative interviewing performance is to describe the criteria that could be used to assess it. There are four major criteria that we propose for evaluating the success of an investigative interview and the expertise with which it is conducted: (1) accuracy of information, (2) completeness of information, (3) efficiency (e.g., time, cost) and utility of gathering the information, and (4) the reactions of the interview subject. The first two criteria assess the adequacy of the data collection product. Expertise in interviewing is evaluated by these criteria against a standard of accuracy or "ground truth".

Table 5

INVESTIGATIVE INTERVIEW SCENARIO

Interviewer Characteristics

Abilities and Skills

Important abilities and skills for investigators include: skill in interpersonal communications (including the ability to be non-judgmental and the ability to handle criticism); skill in selecting the appropriate techniques for motivating and probing subjects; skill in listening to and observing their responses; high verbal ability, good memory; ability to work independently; verbal reasoning ability; good judgment; and writing ability.

Knowledges

Important knowledges for investigators include: knowledge of interviewing goals, strategies, tactics and techniques; experience in applying them effectively; knowledge of interviewer biases, and observational errors and how to avoid them; knowledge of security classification purposes, methods and procedures; knowledge of investigative criteria and issues, adjudication procedures; and knowledge of legal and ethical considerations that protect individual privacy.

Personality and Interests

Important personality characteristics and interests include: sociability, sincerity, conscientiousness, high motivation, attention to detail, self-control, persistence, adaptability, and a social service orientation. The interviewer, where possible, should be similar to the interviewee with respect to values, education, age, etc.

Interviewing Procedures

Motivation Techniques

Establish and maintain an atmosphere of professionalism, respect, courtesy, confidentiality, and personableness.

Dress in a businesslike manner to convey a sense of professionalism.

Introduce yourself in a professional, yet personable manner. Names are important--find out and use the subject's preferred form of address.

Inform the interviewee of the purpose, format, and procedures (i.e., content) of the interview.

Table 5 (Continued)

Advise the interviewee of privacy rights (and confidentiality rights, if sources are interviewed).

Make sure the interviewee is comfortable and understands the purpose of the interview.

Establish control of the interview by describing the interview purpose, justification and format. The interviewer can remind and return the subject to this structure if the subject strays during the interview.

Maintain a sense of fairness, respect the interviewee's rights, show empathy, and remain nonjudgmental throughout the interview (especially when issue-oriented information arises).

Explain the "whole person" concept of adjudication.

Begin and end the interview with questions on less sensitive material.

Identify, comment on, and probe a few points indicating the subject's positive qualifications (e.g., honesty, education, loyalty, motivation) early in the interview.

Secure a commitment to complete and truthful responses during the interview. Explain the importance of this information for national security and for their personal security. Explain the consequences of deceptive, inaccurate, or incomplete information.

Overcome objections to answering by clearly identifying and articulating the nature of the concern. Then address the concern directly and follow-up by repeating the question.

Adapt questioning techniques to the subject's sensitivities.

Observe nonverbal behaviors and paralinguistic cues (e.g., pauses and intonation changes) in responses to identify sensitive areas. Use indirect questions to allow the subject to disclose sensitive information. After probing sufficiently to obtain complete information, obtain closure on the topic, and subject commitment to the responses by using a verifying question. For example, "And this is all the drugs you have used?"

Use techniques such as restatement, echoing, or paraphrasing to encourage elaboration. This is especially effective as a method of acknowledging sensitive admissions while eliciting additional information.

Remind the subject of the purpose, importance, and consequences of inaccurate information as needed. Explain that refusals to answer are noted in the record and communicated to the requesting agency.

Table 5 (Continued)

Questioning Techniques

Pursue two concurrent strategies during the interview:

- *confirm the accuracy of subject's claims on the background form; and,*
- *seek to obtain information about the subject's activities in various relevant criterion areas (e.g., trustworthiness, dependability).*

Obtain lead information for further investigation as well as substantive information during the interview.

Begin each topic area with structured, clearly stated, open-ended questions.

Use "assumptive" questions to put the subject at ease by demonstrating that the conduct is not shocking. For example, "What was the strongest drug you ever used?" can be effective if spoken with a tone that conveys that such behaviors are not unexpected. However, it is also important to not convey a sense that the interviewer agrees with or approves such behavior.

Use direct questions for obtaining background information, or for other content that is not unduly sensitive. Use more subtle, indirect questions (i.e., that permit a greater latitude in responding) for sensitive areas.

Direct questions: *Where did you work while with Acme Company? (Requires a precise answer)*

Indirect questions: *Why were you fired from ACME? (Permits wide latitude of response)*

Follow up general, introductory questions with specific probes to elaborate the details of the issues that emerge and to address other others of the topic area that were not covered. Phrase the follow-up questions using any details or language that will assist the subject in accurately recalling the information (e.g., provide the temporal and/or emotional context that will assist memory retrieval).

Use a structured summary question for each content area to allow the subject to amplify, correct, and verify what has been said.

If a subject fails or refuses to answer a question, explain the purpose for the question. If the subject persists in not answering, learn the reason for the refusal, note this, and move on to the next question.

Obtain a signed statement when significant negative information surfaces.

Table 5 (Continued)

Restrictions on Questioning

Limit questions to personnel security standards. Do not discuss the subject's religious or political beliefs.

Respect the subject's privacy and civil rights.

Do not disclose classified information, confidential sources, or any information that could damage a subject's mental of physical health.

Listening Techniques

Listen to the whole response for its substance--for plausibility, inconsistencies, omissions, inferences, and qualifications. This is especially true for the response to open-ended and indirect questions, since these provide the material for the follow-up questions.

Elicit open, frank discussion from the subject by being an active listener. Show respect and approval of the person, if not the behavior discussed, through verbal and nonverbal behavior (e.g., say "yes," "um-hum," "right,", nod your head, lean forward).

Follow-up vague responses with questions that draw out details and more concrete meanings. Vague answers such as "probably," "that's about right," "I don't remember exactly," are unacceptable and can be elaborated by using follow-up probes such as "You do remember something, don't you?"

Note the subject's pattern of verbal behavior during the introduction and background form review phases. This will provide a baseline of behavior for evaluating possible deception. Possible verbal content indicators of deception include vague or less plausible responses. Paralinguistic indicators of possible deception include more speech errors, frequent pauses, shorter responses, and longer hesitations before responding.

Observing Techniques

Observe and mentally note the subject's patterns of nonverbal behavior during the introduction and background review sections of the interview. This will serve as a baseline for comparison of nonverbal behavior during the other content areas.

Compare changes in the subject's gestures, body movements, and facial expressions during the interview to the response patterns exhibited during the introduction and background review phases. Changes in these nonverbal behaviors may indicate possible deception and the need to probe for additional information or to change the questioning tactics to elicit especially sensitive material. Patterns of behavior, not isolated behaviors, are the best indicators of possible deception or withholding or negative information.

Table 5 (Continued)

The Interview Process

Preparation

Review all available documents and carefully note any discrepancies, omissions, or issues, and formulate a picture of the subject. Develop specific questions to address any discrepancies, omissions or issues.

Obtain all required and anticipated forms and releases.

Arrange a meeting time and place with the interviewee. Explain the general purpose of the interview and request the interviewee bring documents that verify significant claims (e.g., licenses, address books).

Memorize a standard set of interview topics, a standard set of questions for each topic area, and a set of specific questions adapted to each interviewee's situation.

Setting

Arrange the chairs so that interviewer sits about four feet from the interviewee, with the chairs turned at a slight angle to each other. Use straight backed chairs, with wheels on the interviewer's chair.

Schedule the interview in a private, distraction free, comfortable location. Government office settings are preferred. The subject's office or residence are not recommended locations..

Take appropriate precautions to protect yourself. For example, a second investigator should be present when interviewing hostile subjects or when highly sensitive matters will be discussed.

Introduction

Greet the interviewee personably and professionally.

Introduce yourself, present your credentials, positively identify the subject, tell the interviewee what to call you and ask the subject for his/her preferred form of address.

Explain the general purpose of the interview, emphasizing its importance to both national security and to the subject's personal security.

Explain the procedures for passing security clearance (i.e., the whole person concept).

Advise the subject on the privacy act.

Advise the subject of the importance of honesty and the consequences of inaccurate or dishonest responses.

Table 5 (Continued)

Mention that others will be contacted as part of the background investigation process.

Secure a commitment to provide truthful and complete information. If the subject is reluctant to cooperate, then re-state the purpose of the interview.

Describe fully the purpose of the interview and the interview format.

Mention that notes will be taken and explain the purpose of taking notes (to ensure accuracy).

Build rapport with the subject by commenting on or discussing items in the background questionnaire (e.g., "I also went to U.C.L.A.!").

Review of Background Information and Issue Development

Begin questioning with the background form and less sensitive topics. Emphasize items identified during the preparation phase. An item by item review of the background form is not recommended.

During the initial part of this phase, elicit and acknowledge positive information about the candidate with respect to the interview purpose, and to observe baseline behaviors in terms of verbal behavior, voice modulation, body gestures, and facial expressions.

Start each topic area with a carefully structured, general question, then follow-up with specific direct questions. End each topic area with a summarizing question.

Move into the more sensitive areas after rapport has been established.

Ask the most sensitive questions towards the end of the issues phase of the interview.

End this phase of the interview with a few questions that are easier and less sensitive to answer.

Utilize the four types of interviewing techniques as needed: motivational, questioning, listening, and observing.

Conclusion

Answer any concerns that the subject may have.

Explain the next steps and procedures of the security clearance process.

Acknowledge the interviewee's time and participation in the process.

Documentation

Complete a behavioral checklist form regarding the subject's behavior in each area.

Note taking is recommended. Notes should be limited to important information so that the note taking process does not distract the interviewee or detract significantly from the observation of the subject.

Expand the interview notes at the end of the interview to preserve important details.

Prepare the interview report. Provide additional details, note the key areas that need follow-up, and mark the key points for the report. Attach the interview notes and behavioral checklist as additional supporting documentation.

Post Interview Activities

Interviewers should receive feedback from adjudication personnel regarding the quality and results of the investigation.

Interviewers should be accountable for the quality of the information gathered. They should meet in groups with their supervisors, adjudicators, and peers to discuss their results.

The Non-Subject Interview

Selection of Sources

Former work associates, ex-spouses, and neighbors generally provide good information. Listed references are often best used to obtain developed references. Select sources who are most familiar with the subject. Sources who are of the same sex and race as the subject also tend to be more productive.

Setting

Conduct the interview in a setting convenient to the interviewee, or conduct it by phone.

Demeanor

Dress and act professionally.

Display a nonjudgmental attitude, show courtesy, and respect the respondent's privacy.

Conduct the interview in a comfortable, as opposed to dominant, manner.

Table 5 (Continued)

Introduction

Introduce yourself and present your credentials.

Identify the subject and the purpose of the interview.

Establish rapport with the interviewee, using casual conversation as necessary.

Obtain basic information concerning the interviewee's name, address, occupation, and the type, frequency, and length of association with subject.

Issue Development

Maintain a conversational tone to the interview.

Use structured open-ended questions to obtain information on potential subject unsuitability.

Follow up relevant information with specific probes, especially to establish the basis of any negative opinions.

When issues develop, obtain the names of others who can verify the information.

Ask about the subject's efforts to rehabilitate.

Attend to verbal and nonverbal indications of deception.

When deception is suspected, state that being forthright is in the subject's best interest by preventing more serious consequences at a later time.

Do not ask about the interviewee's religious, political, or racial beliefs.

Conclusion

Ask the interviewee whether the subject should be recommended for a clearance.

Inform the interviewee of the subject's Privacy Act rights.

Inform the interviewee of his/her confidentiality rights.

If unfavorable information is obtained, ask the interviewee to provide a written statement.

Ask if there is anything else that the respondent might like to mention that is relevant to the investigation.

Thank them for their time and effort.

The last two criteria are concerned with the effectiveness of the data collection process. That is, expertise can also be assessed in terms of how quickly and cost effectively the necessary information was collected and in terms of how the data collection process affected the participant--the interviewee. For this last criterion, we might ask whether the interview and other data collection processes had positive, neutral, or negative effects upon potentially important interviewee attitudes. For example, the interview process will affect a subject's reactions and subsequent discussions with peers which might in turn affect the peers' approach in responding when they are interviewed. Thus, it is also proposed as a criterion for expert performance.

Interviewer Characteristics

Table 5 presents a list of characteristics that are important for investigative interviewers. A key factor in successful interviewing is effective interpersonal communication skills. Establishing rapport with the subject is important for eliciting disclosure of sensitive information. Another key factor is the interviewer's knowledge--of the interviewee, of adjudication criteria, and of interview methods. It is important in guiding interviewer performance (e.g., in identifying issues and discrepancies, in selecting and timing the use of interviewing techniques, and in retention and documentation of significant details). Several personality and interest variables important for interviewer effectiveness are also listed.

Interviewing Procedures

The success of the investigative interview is contingent upon the accuracy and completeness of interviewee responses. Interviewee responses are in turn affected by two important psychological factors: motivation and recall. The effectiveness of an interview procedure can be assessed based upon its impact upon the interviewee's ability to accurately recall and motivation to fully report what s/he knows.

Recall is optimum under three conditions. First, the subject needs to be mentally relaxed and alert. Second, the subject needs to be committed to the goal of accurately and completely recalling information. Third, the questions asked must serve as a useful aid to recall.

A subject's motivation to frankly disclose sensitive information about himself is influenced by many factors. Some components of the subject's motivational state include: ease/anxiety with the situation, the perception of the consequences of (not) reporting, and the perception of equity in how the responses are evaluated.

The research and practitioner literatures provide innumerable techniques that can be used to query and motivate the interviewee. These techniques can be organized into four classes: motivation, questioning, listening, and observing. Motivation techniques are those procedures which have a positive effect upon the interviewee's commitment and response to the interview. These include techniques to establish the motivational set, to maintain commitment, and to reduce obstacles to full disclosure.

Questioning techniques are utilized to direct and assist the recall of the requested information. Listening and observation techniques are of primary use in directing the selection and timing of the appropriate motivational or questioning technique to use. The flow of the interview is organized around cycles of establishing the subject's motivation to disclose, and then assisting the subject with accurate recall.

Table 5 lists several motivation, questioning, listening, and observation techniques that should be used in the investigative interview. The successful interviewer possesses a knowledge of many techniques in each of these four categories and is skilled in their use. These methods are adapted for use to each interviewee and interviewing situation.

Motivation Techniques

The goals of the motivational techniques are to put the subject at ease, to secure a commitment to complete and accurate reporting, and to reduce any obstacles or difficulties the subject might have with respect to the interview. Across a variety of interview settings, the personableness of the interviewer seems to be the key variable in establishing a sense of rapport with the subject and for putting the subject at ease. This encompasses verbal and nonverbal displays of personal warmth and attending to common courtesies (e.g., addressing him by his preferred name, engaging in small talk as needed). A second consideration for maintaining the comfort of the interviewee is to ensure that s/he is well informed. This includes explaining the purpose of the interview, explaining applicable privacy laws and policies, creating clear expectations of what is to occur, and explaining how the security clearance process will proceed after the interview.

Once the subject is at ease, it is important to secure the subject's commitment to full and accurate reporting of information. This is usually accomplished by informing the interviewee of the "whole person" approach to adjudication, the consequences of inaccurate or incomplete reporting or the failure to comply at all, and finally, by asking directly for the commitment to full disclosure of information.

As the interview proceeds, it is important to anticipate and overcome any difficulties that might arise. This usually takes the form of adapting the interview pace and question phrasings to the interviewee's sensitivities. It also involves monitoring the subject's nonverbal behavior (see "Observing Techniques" section) for signs of discomfort or deception. As difficulties arise, they are identified and directly addressed.

Questioning Techniques

The flow of questioning within each general topic area proceeds from carefully structured general open-ended questions to more specific, direct questions, and then to summarizing questions.

The initial open-ended question for each topic area covers a range of subtopics. This improves topic coverage by obtaining information that might not be obtained using a small defined set of specific, direct questions. Open-ended initial questions also permit the interviewee a

wider latitude of response and keep the interviewee more involved in the interview and committed to full disclosure of information (it is easier to be deceptive with a simple "no" answer). This can also be more efficient in the sense that it allows the subject to divulge any occurrences or issues in each topic area so that the interviewer can direct the follow-up questions to the subtopics of greater interest. This improves interview time management. Furthermore, responses to open-ended questions are more evocative of nonverbal behaviors that would indicate discomfort or deception. In situations where negative information is known or suspected about a topic, these general questions might be stated with an assumption that there is information to report (e.g., Which substances do you most frequently use?). The tone of the question should indicate that substance use is not unusual or unexpected.

Based on the interviewee's responses (both verbal and nonverbal) to the open-ended questions, the interviewer can quickly and appropriately adapt specific direct, follow-up questions. These questions would both amplify issue-oriented information and probe into topic areas that have not been covered.

Finally, summarizing questions are used to allow the interviewee to verify, and to clarify information while also committing the interviewee to the answers.

In general, questions should be carefully structured, clear, concise, and evocative of the appropriate memories (e.g., expressed in the subject's terminology--"speed" or "uppers", instead of amphetamines).

Listening Techniques

The goals of active listening are to help the interviewee elaborate his responses, to gather clues for directing follow-up questions, and to identify inconsistent information requiring follow-up questioning. The key to effective listening is excellent preparation. Thorough knowledge of investigative criteria and of the interviewee are prerequisites for the efficient identification of implications and qualifications, and clarification of vague responses through follow-up queries. Active listening also involves using verbal and nonverbal behaviors (e.g., leaning forward, smiling, nodding) to encourage elaboration of important points. The interviewer also listens for a pattern of pauses to questions, numerous grammatical errors and logical inconsistencies in order to detect possible deception on the part of the respondent.

Observing Techniques

Deception and interviewee discomfort can be detected through observation of facial expressions, gestures, and body movements. The most important use for this information is in adapting questioning techniques to the interviewee. Signs of discomfort may indicate objection to the substance, style, or purpose of a question, embarrassment about an answer, or possible deception. The interviewer can adapt the interview to ease the interviewee's feeling. For example, by a non-judgmental attitude, by the use of assumptive questions, and by reminding the interviewee of the "whole

person" concept, the revealing of embarrassing information can be eased. When deception is suspected, the interviewer uses indirect questions, reminds the interviewee of the consequences of negative information, and uses summarizing questions to encourage more honest responses.

The Interview Process

The interview process includes preparation, setting considerations, the introduction, review of background information, issue development, conclusion, and documentation. Each of these topics are discussed below.

Preparation

Thoroughly review the applicant's background. Note any discrepancies, omissions or ambiguities that are found and write specific questions to address these issues.

Setting

The two key ingredients of maintaining interviewee motivation are confidentiality and respect. Providing a private, quiet, distraction free environment reduces the influences that might inhibit interviewee motivation.

Introduction

The introduction sets the motivational tone of the interview. Therefore, setting the subject at ease is the objective of this phase of the interview. This can be accomplished by exhibiting warmth, attending to common courtesies (e.g., using the preferred name, taking their coat), and thoroughly explaining the interview purpose and procedures. It is important to identify and address any general objections or discomfort that the interviewee may have. If not addressed directly, these objections will only be compounded as the interview proceeds.

Since generating plausible answers often takes less effort than actually remembering specific events, subjects need to be specifically instructed that complete and accurate information is desired. This can be done by simply requesting and securing the commitment.

A structured format improves the reliability and quality of the interview information. It reduces the cognitive demands on the interviewer by providing a consistent framework of interviewing tasks. It also gives the interviewer control of the interview by providing a framework to direct the interview.

Review of the Background Form and Issue Development

Content development should include two phases of information gathering. The first phase involves the review of relevant background information. The second phase involves questioning on various topics areas related to the investigative criteria.

The interview should be sequenced so that the most sensitive questions occur during the latter portion of the issue development phase. This is suggested for two reasons. First, it permits the interviewee to gradually habituate to the anxiety and discomfort s/he might experience owing to the sensitivity of the questions. Second, in case the subject becomes reticent after disclosing some derogatory information, most of the questions will already have been asked. To further ease any strain the subject may feel at answering these questions, break up the use of summarizing questions by providing the opportunity to clarify or add any additional information at the end of each topic area, rather than at the end of the interview. It is important for the subjects' comfort to ease them out of the sensitive phase of the interview and to provide closure by the end of the interview.

When interviewees are hesitant or object to answering, use an appropriate motivational technique to deal with this obstacle. For example, remind them of the importance of complete disclosure.

Conclusion of the Interview

The close of the interview, similar to the introduction, is oriented towards the interviewee's attitudes and motivation. Since peer networks may be a major source of information on the interview and may also provide a norm for interviewing behaviors, it is important to "debrief" the subject. Any anxiety experienced during the interview can be soothed by ending the content development phase of the interview with less sensitive questions. The closing phase of the interview can be devoted to explaining the next steps in the security clearance process and to answering any questions or concerns that have arisen. Finally, the interview should be ended with an acknowledgment of the interviewee's time and participation.

Documentation

Information and observations during the interview should be unobtrusively recorded on a form developed expressly for that purpose. This form should contain an objectively developed behavior checklist to assist accurate coding of information. However, the process of taking notes should be secondary to interacting with the interviewee and attending to the responses. Note-taking should not be allowed to disrupt the interview or create undue discomfort for the interviewee. Notes taken during the interview need to be expanded immediately following the interview to ensure accurate preservation of details.

Post Interview Activities

In order to improve the investigator's effectiveness, two suggestions are provided. First, interviewers should receive feedback from adjudication personnel regarding the quality and results of the investigation. This feedback should help improve their subsequent data collection efforts. Second, interviewers should be accountable for the quality of the information gathered. They should meet in groups with their supervisors, adjudicators, and peers to discuss their results.

The Non-Subject Interview

The non-subject interview differs from the subject interview in several ways. The interviewee is advised of his/her confidentiality rights and of the subject's privacy rights. The interview has a more conversational tone. Open-ended questions are used to allow the interviewee a large latitude of response. Specific and follow-up questions are then used. Also, more effort is directed towards verifying subject information, identifying additional sources, and when issue-oriented information arises, seeking information about the subject's motives and rehabilitation efforts.

Attention must also be devoted to identifying the most appropriate sources to interview. Existing practice and limited evidence suggest that employers, developed character references, ex-spouses, and neighbors are more productive sources than listed character references. Familiarity with the subject and similarity to the subject on demographic variables also are key determinants in selecting sources.

Some Additional Issues

The procedures specified in the Defense Investigative Service (DIS) Manual are generally consistent with practice and with the inferences that might be made from the scientific literature from areas related to the investigative interview. Owing to this consistency, the scenario just outlined is quite similar to the DIS interview, although it was developed from numerous sources in addition to DIS.

Since one purpose for the scenario is to generate hypotheses for research, it is useful to expand the scenario to include topics that, although they are outside of the scope of this report, nevertheless do impact interview procedures. There are four such topics to include in the scenario as interesting hypotheses: (1) conducting a job analysis of security related behaviors, (2) using interview information for selecting in vs. screening out, (3) using supplementary selection devices, and (4) using telephone rather than in-person interviews in some circumstances.

Job Analyses

Conduct thorough job analyses of security-related behaviors. Reviews of the employment interview literature (McDaniel et al. 1987; Cronshaw & Weisner, 1988) indicate that this is a key factor in developing reliable and valid interviews. Such information can also be used in other important ways:

- to identify the constructs that the screening system should predict;
- to devise optimum weights for combining screening information;
- to develop behavioral checklists or rating scales for evaluating interviewee interview information; and,
- to develop a realistic job preview for the professional and personal demands that security classifications require.

Selecting In vs Screening Out

The selection procedure can be oriented towards selecting reliable and trustworthy people into sensitive positions. There are several advantages to this "positive" orientation. First, this approach makes optimum use of existing investigation information. The current procedure dichotomizes the criterion and screens out only those who are potentially unsuitable applicants. Information concerning differential performance for security effectiveness is not currently utilized. Second, this orientation expands predictor information that would be considered to include the full range of the criterion. Selecting for reliability, dependability, conscientiousness may improve the quality of performance with respect to the integrity of classified information. The current approach screens out those who are likely to be dismissed on unsuitability grounds but does not predict performance with respect to integrity. Third, this orientation rewards integrity by implying that those selected have the highest integrity. Screening out high risks by implication labels those rejected as high security risks. In addition to the negative impact upon those disqualified, the serious consequences of the denial of security clearance upon a subject's career and reputation, might discourage reliable and complete interviewee' reports. Fifth, the base rate for high behavioral reliability is probably much closer to the optimum of 50 percent than the less than 5 percent rate for personnel unsuitability. Given more optimum conditions of base rate and selection ratio, the utility of a given selection measure increases proportionately.

Supplementary Screening Measures

Collect behavioral and trait information in addition to the factual biographical information contained in the Statement of Personal History, Personnel Security Questionnaire, or Interview Oriented Background Investigation. Information from personality inventories, honesty tests, peer ratings, and supervisory performance ratings on work dimensions related to security provide a rich source of information on behavioral reliability. In many cases, this information can be collected at much less expense than full background investigations. Also, the interview lends itself to collection of behavioral information (e.g., Latham et al. 1980; Orphen, 1985).

Telephone Interviews As a Data Collection Mode

Research from the reference checking literature suggested that the telephone interview is the most common method of obtaining background information from sources other than the subject. Empirical studies from the survey research field suggested that the quality of data obtained via telephone is similar to that obtained by in-person interviews, and at about half the cost. Additionally, studies of nonverbal deception have shown that most persons are not skilled at detecting deception through observation of body gestures and facial expressions. This suggests that telephone interviews might be a feasible method of data collection--especially for non-subject sources.

Summary

The focus of this report is on interview procedures. While these four recommendations concern the interview context rather than interview procedures, they are relevant to this report. The selection of the best interview procedure often depends upon the topic that is addressed and the interview situation. A job analysis of security related behaviors and an orientation towards selecting applicants in based upon the effectiveness of their security related performance will alter the content of the interview. Using personality inventories and conducting interviews on the phone will change the data collection situation. In each case, the choice of data collection procedures will be directly affected by the content area assessed. Consequently, the issues of interview content and of interview procedures need to be addressed jointly.

CHAPTER 9. RESEARCH RECOMMENDATIONS

Our review of the empirical research literature indicates that few studies have examined the investigative interview. In this chapter we present several ideas for research on the investigative interview. These research ideas are organized into six major themes or topic areas: criterion development, predictor development, utility, interviewer performance, interview methods, and interviewer training.

The central idea of each theme is stated first, followed by a brief rationale for its importance and expected benefits. Then more specific research ideas, related to the theme, are presented. No attempt was made to prioritize the research recommendations. However, many of the themes and ideas suggested with them assume that the first theme, criterion development, has already been completed.

I. Criterion Development

A. Conduct systematic job analyses to specify a complete, precise set of criteria for personnel security.

The primary focus of this research report has been to identify and evaluate methods for possible inclusion into existing investigative interviewing practice. The choice of optimum interviewing methods depends upon the interview content that is used to predict future behavior. The choice of a set of optimum predictors, in turn, depends upon the criteria to be predicted. Conducting a comprehensive job analysis would ensure that the criteria are completely and precisely defined. It is clear from the research literature that this activity would pay off in improved interviewing effectiveness. It is also clear from the research literature that interview quality results from job analysis quality.

- Conduct organizational analyses to identify existing indices and establish new indices of security effectiveness (e.g., turnover, erroneous security clearances, types and numbers security compromises).

- Conduct an analysis of all erroneous security clearances. Develop a taxonomy of the types of decision errors.

- Conduct task-oriented job analyses to determine the dimensions of security-related performance. These analyses should be conducted across jobs and organizational levels to identify both the common and unique dimensions of performance.

- Conduct behaviorally-oriented job analyses to identify effective and ineffective security-related behaviors. This information can be used to develop security-related performance monitoring and appraisal forms. It can also be used to develop a behavior checklist for objectively reporting and scoring interview information.

B. Conduct systematic job and training needs analyses for investigative interviewers.

This research would provide the basic information for improving the selection of interviewers, identifying interviewer training needs, evaluating training results, developing performance standards, identifying behaviors critical to interviewing effectiveness, and establishing performance appraisal systems.

- Conduct behavioral job analysis for investigative interviewers. This information would provide the basis for investigator selection, performance appraisal, training, and development programs.

- Conduct training needs analysis to identify the critical knowledges and skills for effective investigative interviewing.

II. Predictor Development and Evaluation

Define an optimum set of predictor constructs and predictor measures to predict the security-related criteria.

Research is needed to define the type of information that best predicts the criteria. This research should include analyses of the reliability and validity of the content of existing background investigations. It should also include a search for alternate predictor constructs and measurement methods (e.g., paper-and-pencil tests, self-reported behavior descriptions, supervisor ratings of security-related performance).

- Conduct a literature review to identify the constructs that predict the performance dimensions resulting from the research of Theme 1, above.

- Conduct predictive validation studies to assess the effectiveness of new and existing psychological constructs and measures of security-related performance.

- Compare the validity and utility of alternate methods of assessing the predictor constructs (e.g., honesty tests, subject and non-subject interviews, biographical forms) and to determine an optimum set of measures for efficiently predicting the criteria.

- Evaluate the accuracy and statistical reliability of information provided by investigative interviews. This should be studied for each type of information (e.g., credit history, employment, drug use) by each type of source (e.g., subject, former employer, developed reference).

- Conduct concurrent and predictive validation research on existing investigative interview procedures. This can be based upon archival information using relevant criteria such as subsequent security revocations, attrition, etc.

- Investigate the optimum combination of clincial and statistical methods of adjudicating investigative interview information.

III. Utility

Develop and implement a utility framework to evaluate the relative merits of alternate approaches for improving investigative interviews.

In Chapter 5, we discussed the measurement factors that affect the productivity of behavioral intervention programs. These factors included validity, base rate, and selection ratio. This research would determine the values for each of these factors and would establish a metric (e.g., standard deviation of performance in dollars) by which improvements could be valued. This metric permits alternative programs to be compared for their impact on personnel security and provides an estimate of benefits that can be matched to costs.

- Compare the utility of a "screening in" procedure which gathers information on a subject's history of security responsibleness, in addition to negative disqualifying information. Such an approach has been proposed by a U.S. Senate Select Committee on Intelligence (Meeting the Espionage Challenge: A Review of United States Counterintelligence and Security Programs, 1987) and by Flyer (1986). In the interview context, this study would contrast current interviewing procedures with a procedure that also includes questions about a subject's accomplishments. The process of asking for positive information might also lead subjects to disclose more negative information.

- Compare the utility of telephone and in-person interviews. The survey research literature suggests that telephone interviews obtain information similar to that obtained by in-person interviews, and at approximately half the cost. Studies should be undertaken to compare the amount, quality, and efficiency of information obtained from telephone vs. in-person interviews in the background investigation setting.

- Examine the utility of interviewing additional non-subject sources, considering the expected costs and benefits.

IV. Interviewer Effectiveness

Investigate and describe the personal characteristics, behaviors, and cognitive processes that distinguish expert interviewers from journeymen and novices.

There is little research on any type of interview that describes the behaviors of effective interviewers. None exist for investigative interviewers. The study by Dougherty et al. (1986) indicates that there are substantial individual differences in interviewing performance. The information provided by research on the cognitive processes of expert interviewers (their knowledge base, ideal applicant schemas, etc.) would

establish the critical components for effective interviewing. This information would be the foundation for interviewer training and performance management.

- Use process research techniques (e.g., the lens model, policy capturing) to identify the knowledge base, cognitive schemas, and interviewing techniques used by expert interviewers.

- Contrast the personal characteristics (e.g., cognitive abilities, personality, interests) of highly effective and less effective investigators.

- Systematically survey interviewers and their supervisors to obtain their recommendations for improving investigative interviewing techniques, training, and policies.

- Assess the impact on interviewing performance of providing feedback and accountability to interviewers.

V. Interview Methods

Conduct multivariate research to evaluate the unique and joint effects of alternate interview procedures.

Our review of the empirical research and practitioner literatures provided a rich yield of procedures and approaches for investigative interviewing. We also described the reasons for caution in generalizing to the investigative interview context. This research would directly examine the effects of these procedures in a realistic, investigative interviewing setting. It is likely that many of these studies can be combined either through use of the same data sets or through factorial research designs.

- Compare the three step questioning procedure (i.e., general, specific, summarizing) recommended in the scenario (Chapter 8) with existing investigative interview procedures.

- Develop a behavioral checklist form that could be used by investigators for recording information on each interview topic. This form would be developed specifically for this purpose on the basis of several sources of information (e.g., critical incidents, existing adjudication criteria). Such a form would standardize information gathering and assist adjudicators by providing a standard data base for evaluating interview information. Researchers in the employment interviewing field have found that carefully developed structured data gathering forms improve the validity of the interview.

- Determine the productivity of different interview sources. Archival information should be accessed to identify the most productive sources of interview information. This information would provide a basis for identifying the appropriate number and types of sources that should be included in the background investigation interviewing process.

- Determine the characteristics of non-subject sources that lead to productive information. Characteristics of non-subject sources (e.g., relationship to subject, familiarity with subject, demographic characteristics and similarity to those of the subject) should be gathered and examined to identify the characteristics of each type of source that lead to more productive information.

- Conduct debriefings of persons recently interviewed, both granted and denied security clearance, to form additional hypotheses about especially effective and ineffective interview procedures. The critical incident method could be utilized to identify effective interviewer behaviors from the interviewee's point of view.

- Conduct research to assess the impact of investigative interview practices upon subject and non-subject attitudes and behaviors towards the investigative interview, security conscientiousness, and the employing organization. This research would specifically address the extent to which subjects' interviewing behaviors are affected by peer norms and attitudes. It would also address the extent to which the subject's reactions to the investigative interview affected what s/he said to references and how, in turn, this affected the information provided by these references.

- Conduct research to identify reliable behavioral cues for detecting deception and for determining when additional probes are useful (e.g., when subject needs memory prompts or is reticent, defensive, hostile).

- Investigate the effects on the quality, quantity, and accuracy of interviewee responses when interview questions are focused on positive as well as negative content.

- Identify the interview questions which obtain the most productive information. A sample of investigators could provide information about the specific questions that led to significant information. For example, in the DIS investigative interview there are typically four to seven questions asked about a given topic area. Investigators might be asked to identify which question(s) most frequently provided significant information within each topic area.

- Compare structured (using a specified set of questions as well as topic areas) and nonstructured interviewing formats. One of the major findings of the employment interviewing literature is that structured interviews provide more useful information about future behavior than nonstructured interviews. A study comparing the utility of both types of information in the background investigation context would be useful.

- Compare subject interviews that include hypothetical behavioral questions with subject interviews that do not include such questions. Researchers in the employment setting have found that criterion relevant, situational judgment questions predict performance criteria.

- Compare subject interviews that include attitudinal questions with subject interviews that do not include such questions. One major finding of the honesty testing literature was that attitudinal dispositions toward unsuitable or negative activities predict relevant criteria (e.g., theft). While such questions alone might provide an inadequate basis for denying a subject a security clearance, the answers might provide insights into topic areas that require more careful questioning.

- Familiarity with the interviewee is another variable that has been shown important in detecting deception. Results of current interview procedures could be compared to results of a slightly longer experimental interview that devotes more time during the introductory phase to small talk and rapport building activities.

- Compare the effectiveness of information obtained in different settings. Most interviewing practitioners suggest privacy is the principal consideration in obtaining useful information. Studies might be undertaken to evaluate the frequency of significant information obtained when interviews occur in different settings. Settings could be coded on selected variables (e.g., degree of privacy, office vs. non-office setting) and related to amount of significant information obtained.

- Compare the effectiveness of interviews that include or do not include the subject oath at the outset of the interview. The OPM subject interview requires the subject to complete the interview under oath. Such an oath might provide impetus for some to minimize deception. On the other hand, some practitioners suggest that use of an oath is a constant reminder of the importance of what is said and would inhibit some interviewees.

- Conduct research to compare and contrast alternative "motivational sets" of the interviewee for effectiveness in obtaining accurate and complete interview information. In the review of the practitioner and scientific literatures contained in this report, two contrasting approaches to establishing the interviewee set were described. One approach (DIS, OPM) proposed that reminding interviewees of the serious purpose of the interview and the consequences of omissions or distortions was an effective method of eliciting full disclosure. Another approach proposed that such measures are counterproductive because they reminded the subject of the likely negative consequences to them of divulging derogatory information.

- Conduct basic research to develop a theoretical framework of interviewee responses. This research, while providing significant advances to scientific knowledge, provides the practical benefits of prescribing which procedures should work at

which times in the interview, and why. Currently, there is no systematic framework for interpreting research results, applying practitioner rules of thumb, or understanding the purpose and sequence of interview procedures. It is likely that the effects of the broad range of interview procedures can be more simply and intelligibly be accounted for by two classes of psychological variables--motivation and memory. Combining a cognitive motivation model with an information processing model might be one useful approach to achieving this goal.

VI. Interviewer Training

Currently little or no research exists on the adequacy, relevance or effectiveness of investigative interview training programs. This research program would first examine training needs for interviewers, and then the appropriateness of training content. Finally, it would evaluate the effectiveness and utility of existing programs.

- Evaluate the effectiveness of different methods of investigator training. Most investigator training is conducted using a combination of classroom and role playing and/or videotape methods. Other training modes may be more effective.

- Studies should be undertaken to determine the appropriate content of investigator training. The effectiveness of training programs covering different topic areas should be examined.

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APPENDIX A

LITERATURE SEARCH PROCEDURES

LITERATURE SEARCH PROCEDURES

Telephone Survey

We conducted a telephone survey to identify additional research studies, either published or unpublished. Through interviews with senior research psychologists and staff discussions, five categories of potentially useful sources were identified:

1. Academia
2. Industry
3. Associations (non-government)
4. Honesty Test Publishers
5. Government Agencies

Academic sources were selected based upon published research on interviews. Sources for industry were generated according to their perceived need for security classifications (i.e., defense-related work). Relevant professional organizations were placed on our list, including the American Polygraph Association, American Psychological Association, and the International Association of Chiefs of Police. All companies that publish paper and pencil honesty were identified. Finally, a list of government agencies that conduct background investigations was developed.

These lists of relevant organizations and persons within each category were initially generated through staff discussions and interviews with subject matter experts. The list was subsequently extended by referrals from the individuals contacted in the survey. The survey was conducted in successive iterations of three stages. First, calls were made to the targeted organizations and people to identify the proper person to contact, their phone number, etc. Second, the identified person was contacted and queried about research relevant to the project. Third, the contacts were asked to generate additional sources to contact. These resource persons and organizations are identified at the end of this appendix.

Four sources declined to provide any information, two for proprietary reasons (London House and EquiFax), one for security reasons (International Association of Chiefs of Police), and one would not specify a reason for declining to discuss their knowledge (3M).

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HONESTY TEST PUBLISHERS

George Paajanen
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John E. Reid Associates
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212-566-8742

APPENDIX B

PERSONS INTERVIEWED DURING FEDERAL AGENCY SITE VISITS

PERSONS INTERVIEWED DURING FEDERAL AGENCY SITE VISITS

Defense Investigative Service:

Barbara Knox
Larry Green

Office of Personnel Management:

Gary McDaniel

Federal Bureau of Investigation:

John Hess
Richard Ault

Defense Intelligence Agency:

Drew Winneberger
Doug Franklin

Central Intelligence Agency:

(Three agency officials were interviewed)