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A STUDY TO EVALUATE ASSESSMENT CENTER EXERCISES AND
TO DEVELOP A SET OF EXERCISES SPECIFICALLY
DESIGNED TO IDENTIFY MANAGERIAL POTENTIAL AMONG
PROFESSIONAL EMPLOYEES IN FORENSIC SCIENCE LABORATORIES

A Project
Presented to the
Faculty of
California State University
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Public Administration

by
Anthony Longhetti

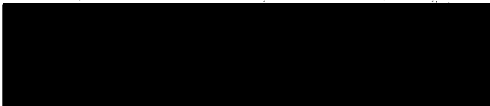
June 1991

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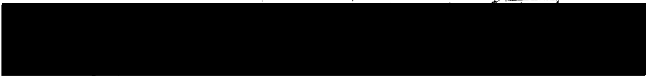
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ABSTRACT

The Assessment Center procedure uses multiple assessment techniques to evaluate employees for a variety of manpower purposes and decisions, including the identification of managerial potential. It has been used to identify managerial potential in the military, among government employees, in the private sector, and in education. To a much lesser extent, it has been used to predict the advancement potential of scientists. In this study directors of crime laboratories (forensic science laboratories) throughout the United States and Canada, and their supervisors, were asked to identify and rank the qualities/attributes they felt were most important in their (the laboratory directors') success. Assessment Center exercises used in criminal justice Assessment Centers were then evaluated on the basis of their ability to elicit behaviors that correspond most closely to the qualities/attributes identified as important by the laboratory directors and their supervisors. Appropriate exercises were then selected and structured for an Assessment Center designed exclusively for forensic science laboratories.

CHAPTER 1

INTRODUCTION

Forensic science has evolved over the past thirty years into an increasingly significant element of the criminal justice system. Most felony investigations, as well as a large percentage of misdemeanor investigations, require the collection, preservation, and laboratory examination of physical evidence. The expert testimony of a forensic scientist is often a crucial factor in a jury's decision whether to convict or acquit. The application of new techniques, such as DNA analysis as a positive means of personal identification, is causing increasing dependence on forensic science to "solve" the crime. As crime laboratories grow in size and stature, so does the need for effective management of professional and support personnel become a more serious concern.

In the author's opinion, based on over 25 years as a director of a crime laboratory, management selection procedures in forensic science laboratories are a mixture of traditional methods that include (1) evaluations of job performance and promotional potential by supervisors, (2) a variety of paper-and-pencil measurements, (3) oral interviews, and (4) clinical evaluations. The usual placement of the crime laboratory is in a parent agency (police-sheriff's department) that is quasi-military in structure.

Consequently, the traditional methods are very likely to be imposed by law enforcement superiors who are often "cops first....managers second" and tend to view managers as enforcers.¹ Further confusion is added by the continuing self perception of most crime laboratory scientists, as observed by the author in personal conversations and at meetings of professional societies, that they are "forensic scientists first....managers second", even when they become part of the management team. The result is often a forensic science facility managed by a scientist selected because of seniority, or through an informal oral interview, or by virtue of being able to convince the promoting powers of his/her assertiveness, decisiveness, energy and other qualities more suitable in a police officer. Concern about this situation led the author, together with other crime laboratory managers, to the recent formation of such organizations as the American Society of Crime Laboratory Directors (ASCLD) and the California Association of Crime Laboratory Directors (CACLD). The principle purpose of both groups is the improvement of management practices, including promotional procedures.

The Assessment Center method for selection of management personnel, though frequently used in the police and fire

¹ T. Gee, "Are you a Management Cop?" Police Chief, 57 (1990): 151-152.

services, has rarely been applied to the identification of managerial potential in forensic science laboratories.² Though often relatively time-consuming and expensive, it has the capability of being specifically designed so as to permit the measurement of qualities or attributes (termed "dimensions" in Assessment Center language) that have been identified as important in the particular position for which the candidates are being tested.³

Research Methodology

The end purpose of this research project was to evaluate the exercises commonly used in the Assessment Center process for the purpose of developing a set of exercises that can be recommended for the identification of managerial potential among professional employees in forensic science laboratories.

The first subproblem was to identify, through questionnaires distributed to crime laboratory directors and their immediate supervisors, the dimensions that were felt to correlate most clearly with successful

² Personal communications.

³ C. Stevens, "Assessment Centres: The British Experience," Personnel Management (July, 1985): 28-31.

leadership. The second subproblem was to review and evaluate the exercises used in law enforcement and scientist Assessment Centers on the basis of their ability to elicit behaviors that correspond most closely to the dimensions listed in the questionnaire responses. The third subproblem was to select and structure exercises for Assessment Centers designed exclusively for forensic science laboratory management.

The first hypothesis to be tested was that directors of forensic science laboratories possess qualities/attributes (dimensions) that are particularly suited for their positions. The second hypothesis to be tested was that Assessment Center exercises could be constructed that are specifically designed for the identification of managerial potential in forensic science laboratories.

Three assumptions were made in this research project: (1) there is a need to develop a better method of identifying forensic managerial potential; (2) the Assessment Center process is an excellent method for identifying that managerial potential; and (3) existing Assessment Center exercises are inadequate for use in identifying managerial potential among forensic science professionals.

Criteria for the Admissibility of the Data

In order to be used in this study, the forensic science laboratories that responded to the questionnaires (see Chapter 5) had to meet the following criteria:

- * the forensic science laboratory must be accredited, employ at least 10 full-time scientists, and have employed the same director continuously for at least the past five years;
- * the immediate supervisor of the laboratory director must have occupied that position for at least two years;
- * the respondent must have stated specific reasons or examples for the correlation between each quality identified and the managerial success of the director.

Furthermore, only those Assessment Center exercises applicable to the identification of managerial potential (more specifically, in law enforcement) were reviewed and evaluated.

CHAPTER 2

REVIEW OF PROMOTIONAL TESTING PROCEDURES

Evaluations of Job Performance and Promotional Potential

Low cost, ease of operation, and organizational acceptance are the major reasons for the use of performance on the present job and potential for success at a higher level position, as criteria for promotion. The value of this method generally correlates directly with the development and use of a sound performance appraisal system.⁴ However, such a system requires the expenditure of considerable time on the part of managers and, especially, supervisors. The latter should not simply do a cursory annual review without pre-planning and follow-up. Rather, a performance appraisal program would include such steps as:

- * determination of organizational goals and objectives
- * delineation of performance standards for each person's performance
- * comparison of each person's actual performance against the expected standards of performance
- * communication of the results of the performance appraisals to each person

⁴ J. P. Campbell, M. D. Durnett, E. E. Lawler, III, and K. E. Weick, Managerial Behavior, Performance and Effectiveness (New York: McGraw-Hill, 1970), 2.

* corrective action or commendatory action, as appropriate⁵

Further, ratings or performance appraisals should be careful to distinguish between job performance and promotional potential. An employee's ability to perform satisfactorily at one level is no guarantee of the ability to do so at a promoted level.⁶

The additional time required for training of managers and supervisors in the proper use of performance appraisals, together with the time necessary for their actual administration, can increase significantly the cost of such a program. In addition, the job performance and promotional potential method for identifying future managers also suffers from at least two other drawbacks. First, supervisors see each of their subordinates for varying periods of time and while they are often performing different tasks about which it may be difficult to generalize.

⁵ O. J. Harris, Jr., Managing People at Work (Santa Barbara: John Wiley and Sons, Inc., 1976), 273.

⁶ J. Tiffin and E. J. McCormick, Industrial Psychology 5th ed. (Englewood Cliffs, N. J.: Prentice-Hall, 1965), 224-225.

Secondly, in those situations when performance and potential ratings are presented verbally by supervisors to the managers, who will make the ultimate decision, the outcome is often skewed in favor of those employees whose "case" is presented by the more forceful and articulate supervisors.

Paper and Pencil Measurements

Paper and pencil measurements in this context are defined as a series of written psychological tests that purport to measure factors essential to managerial performance.⁷ Most research findings suggest that such tests are usually valid and certainly more objective than supervisor's evaluation of job performance.^{8, 9,10} They are also easy to administer, although the scores may be difficult to interpret.

⁷ G. C. Thornton, III, and W. C. Byham, Assessment Centers and Managerial Performance (Orlando, Fla.: Academic Press, Inc., 1982), 70.

⁸ V. J. Bentz, Measuring Executive Effectiveness, ed. F. R. Wickert and D. E. McFarland, (New York: Appleton-Century-Crofts, 1967), 147.

⁹ H. Laurent, "Cross-cultural Cross-validation of Empirically Validated Tests," Journal of Applied Psychology, 54 (1970): 417-423.

¹⁰ Campbell, Managerial Behavior, Performance and Effectiveness 54-60.

The major objection to written psychological tests is the difficulty in constructing the tests so that they actually do measure the important aspects of "real life" work situations. For example, most tests are designed in great part to measure intelligence and personality characteristics, both of which are but a small part of successful management.

Legal concerns abound when paper and pencil measurements are used (whether for promotional testing or for applicant testing). They are often considered to be race and/or gender discriminatory and are not always acceptable to governmental agencies such as the Equal Employment Opportunity Commission (EEOC).¹¹

Without any explanation, Cohen states that psychological testing is usually not appropriate for professional personnel.¹²

¹¹ Thornton, Assessment Centers and Managerial Performance, 71-72.

¹² W. A. Cohen, Principles of Technical Management (New York: Amacom, 1980), 62-63.

Oral Interviews

No candidate for promotion would consider it appropriate to undergo testing procedures designed to identify managerial potential without the inclusion of an interview process, even though the criteria used for making promotion decisions may not be understood. Supervisors like the interview because, as with the job performance and promotional potential method, it allows them to maintain a high degree of control over the process. When low cost and ease of implementation and operation are considered, oral interviews become an integral part of most promotional procedures.

If the interviews are structured (i.e., all candidates are asked the same questions), and the interviewers are properly trained, the process is reasonably objective.¹³ The interviewer(s), after reviewing background information on the candidate, should cover education, previous work experience and assignment, and other biographical material. Following these preliminary questions, the interviewer may ask specific

¹³ F. J. Landy, "The Validity of the Interview in Police Officer Selection," Journal of Applied Psychology, 61 (1976): 193-198.

questions about career goals, job satisfaction or dissatisfaction, and preferences for particular assignments. At this point, the questions can be targeted to selected aspects of the managerial position for which the candidates are vying. Especially significant are questions designed to probe intelligence, personal relations skills, and motivation.¹⁴

The major drawback to the oral interview as a means of identifying managerial potential is the inability of the interviewer to measure significant dimensions such as planning/organizing, delegation, judgment and tenacity. The interview is not a job simulation; therefore, it cannot readily, if at all, measure some of the important managerial dimensions. Appropriately, its use should be limited to the evaluation of limited and selected dimensions of job performance.¹⁵

¹⁴ O. R. Wright, Summary of Research on the Selection Interview Since 1964," Personal Psychology, 22 (May, 1969): 391-413.

¹⁵ Thornton, Assessment Centers and Managerial Performance, 79.

Clinical Evaluations

Clinical evaluations may be used in the promotional process in an effort to look more at the person and less at the job when deciding who to promote. Consulting psychologists are generally employed for this purpose. Their role is normally centered around an attempt to describe the person's modes of behavior, significant personality traits, value system(s), and methods of adjusting to stressful situations. The psychologist's report will usually describe the types of behavior that might be expected of the candidate under the different conditions that would exist on the new job.

Both participants and manager view the clinical evaluation by a psychologist with suspicion. The former are wary of a procedure that requires a visit to a psychologist, while the latter view the person in a white coat as intruding on their "prerogative" of making the recommendation (or decision) on whom to promote. Furthermore, some studies have suggested that psychologists may be less accurate than laymen in predicting success or non-success for promotional candidates.¹⁶

¹⁶ R. E. Fancher, "Accuracy Versus Validity in Person Perception," Journal of Consulting Psychology, 31 (March, 1967): 264-269.

Assessment Centers

The Assessment Center process, as an alternative or supplemental method for identifying managerial potential, has been used in the private sector (and later in the public sector) since shortly after World War II. Several studies have focused on establishing its predictive validity and acceptance.^{17,18,19,20,21} The consensus clearly supports Assessment Centers as viable alternatives to the more conventional methods previously discussed.

Promotional candidates in an Assessment Center are required to go through selected individual and group exercises over a period of two or three days.

17 A. Howard, "An Assessment of Assessment Centers," Academy of Management Journal, 17 (March, 1974): 115-134.

18 J. O. Mitchel, "Assessment Center Validity: a Longitudinal Study," Journal of Applied Psychology, 60 (1975): 573-579.

19 R. J. Klimoski and W. J. Strickland, "Assessment Center - Valid or Merely Prescient," Personnel Psychology, 30 (1977): 353-361.

20 R. D. Neidig and P. J. Neidig, "Multiple Assessment Center Exercises and Job Relatedness," Journal of Applied Psychology 69 (1984), 182-186.

21 K. O'Hara and K. G. Love, "Accurate Selection of Police Officials Within Small Municipalities: Et tu Assessment Center," Public Personnel Management, 16 (1987), 9-14.

They are continuously graded and evaluated by trained assessors, who rate each candidate's performance in each of the exercises.²²

The main strength of the Assessment Center method is its use of exercises designed to simulate, as much as practical, actual work conditions. It is thus possible to evaluate such dimensions as planning and organization, delegation, judgment, and initiative, most of which are not easily judged by other methods. Not surprisingly, detailed job analysis is required in order to relate job content to assessment dimensions (qualities/attributes) and to design exercises (job simulations) that permit measurement of the dimensions.²³

Assessment Centers are usually well accepted by candidates for promotion, who see it as both more objective and more job-related than the more commonly used supervisor's evaluations or oral interviews. Budgetary considerations, however, often preclude comprehensive Assessment Centers, as the time necessary to properly train the assessors and consolidate the scoring is often viewed as prohibitive.

²² Howard, 115-134.

²³ P. R. Sackett, "Assessment Centers and Content Validity: Some Neglected Issues," Personnel Psychology, 40 (January, 1987): 13-25.

Two longitudinal studies comparing the Assessment Center process to supervisor's evaluations are especially noteworthy.^{24, 25} The results indicated that Assessment Centers used to select promotional candidates identified a different group than supervisory ratings would have identified. Furthermore, supervisory ranking did not provide as much discrimination among candidates as did the Assessment Centers. Correlation between the two methods was significantly lower than correlation between different Assessment Center exercises. It should be noted, however, that one of the studies showed that ratings by subordinates demonstrated some predictive success over the short term.²⁶

Assessment Centers also have been used with increasing frequency since about 1980 for purposes other than selection of management and supervisory personnel. They have been used to predict the advancement of scientists and to select police recruits.^{27, 28} The Naval Weapons Center at China Lake,

²⁴ H. A. Alexander, J. A. Buck and R. J. McCarthy, "Usefulness of the Assessment Center Process for Selection to Upward Mobility Programs," Human Resource Management (Spring, 1975): 10-13.

²⁵ G. M. McEvoy and R. W. Beatty, "Assessment Centers and Subordinate Appraisals of Managers: a Seven-year Examination of Predictive Validity," Personnel Psychology, 4 (1989): 37-52.

²⁶ Ibid, 37-52.

²⁷ L. Pederson. "Managerial Success for a Group of Professionals via the In-basket," Symposium Presented at the 8th International Congress on the Assessment Center Method. (Toronto, 1980).

²⁸ Thornton. Assessment Centers and Managerial Performance, 361.

California, used the Assessment Center process to determine the advancement potential of 137 employees for non-managerial positions.²⁹

²⁹ B. Perrine, The Assessment Center Process: Selection of Non-Managerial Talent in the Public Sector (Master's Degree Thesis, California State College, San Bernardino, 1980), 13.

CHAPTER 3

THE ASSESSMENT CENTER

Historical Development

The Assessment Center process, based on performance tests of the early 1900's, sprang into prominence immediately before, during and after World War II.³⁰ German military psychologists used it to assist in the selection of future officers. The British Army used it for identifying potential officers, and a similar program was adopted by Australian and Canadian officer selection groups.³¹ The United States Office of Strategic Services used the Assessment Center approach to select intelligence agents based on their performance in simulations of practical exercises.³²

³⁰ P. H. Dubois, A History of Psychological Testing (Boston: Allyn and Bacon, 1970).

³¹ Thornton, Assessment Centers and Managerial Performance, 23-34.

³² Office of Strategic Services (OSS) Assessment Staff, Assessment of Men (New York: Rinehard, 1948).

The first postwar industrial application was that of the American Telephone and Telegraph Company's Management Progress Study (MPS), which traced the development of more than 400 managers over a four-year period.³³ MPS results showed that the actual progress made by the managers was accurately predicted by the Assessment Center process which they had undergone.³⁴ Subsequent use of Assessment Center by Sears Roebuck, IBM, General Electric, and Standard Oil of Ohio also established a positive relationship between success in the testing process and later success as managers.³⁵

Law enforcement agencies began using Assessment Centers in the early 1970's, followed closely by fire services.³⁶ Other public sector agencies have been less enthusiastic about the method, most likely because of its military and quasi-military origins.

³³ Thornton, 55-59.

³⁴ Ibid.

³⁵ Sacramento County Employment Office, What is an Assessment Center? (1985), 1.

³⁶ Personnel and Organization Development Consultants, Inc., Assessor Training Manual for Public Sector Assessment Centers (1984), 4-5.

Assessment Center Defined

The accelerated growth in the application of the Assessment Center process in police and fire service segments of the public sector has called attention to the need to follow standardized procedures. First proposed and endorsed by the Third International Congress on the Assessment Center Method in 1975, the standards have been revised and renamed as the Guidelines and Ethical Consideration for Assessment Center Operations.³⁷ They now include expanded explanations and definitions of such matters as assessor qualifications and training and the requirements for documentation and validation, as well as a change in title from "standards" to "guidelines", reflecting an attitude of allowing greater flexibility in the use of "true" Assessment Centers.³⁸ It should be noted that the guidelines distinguish between an Assessment Center (capitalized) and "assessment center process". The latter may use some features of the Assessment Center but does not meet all of its requirements.

³⁷ D. A. Joiner and J. Clancy, "Guidelines and Ethical Considerations for Assessment Center Operations," Journal of California Law Enforcement, 24 (July-August, 1990): 123-130.

³⁸ Ibid.

The guidelines identify the following elements as necessary for a process to be considered an Assessment Center:³⁹

1. a job analysis of relevant behaviors to determine the dimensions, attributes, characteristics, qualities, skills, abilities, motivation, knowledge, or tasks necessary for effective job performance.
2. the assignment of behaviors observed by the assessors into meaningful and relevant categories (such as listed in number 1 above).
3. the design and selection of techniques (e.g., simulation exercises) that can provide information for evaluating the dimensions, etc., identified in the job analysis.
4. the use of multiple assessment techniques.
5. the selection of assessment techniques that include sufficient job-related simulations to allow many opportunities to observe each candidate's behavior.
6. the use of multiple assessors, representing a diversity of ethnicity, age, gender, and functional work area, for each candidate.
7. thorough training of, and demonstrated competency by, the assessors.
8. accurate and systematized recording by assessors of the observed behaviors.
9. the preparation of a report by each assessor prior to the integration discussion.
10. the pooling of information from the assessors so as to arrive at an integration of behaviors by consensus or other method of arriving at a joint decision.

³⁹ Guidelines and Ethical Considerations for Assessment Center Operations (May 17, 1989; repr., Las Palmas, Calif.: Personnel and Organization Development Consultants, Inc.): 4-6.

Validity of Assessment Centers

Acceptance of the Assessment Center as a method for evaluating managerial potential, because of the time and expense necessary to carry out the process properly, is especially dependent on validity studies. The historical record of its validity is not necessarily sufficient; new Assessment Centers need to be individually validated. It is important to document carefully the selection of the dimensions, attributes, or qualities, as well as the relationship of the assessment exercises to the dimensions, etc.⁴⁰

One significant public sector study investigated the validity of an Assessment Center designed to select police officers for an accelerated promotional track called the "Special Course".⁴¹ A total of 380 successful candidates were followed up over a period of one to nineteen years. Supervisory ratings, taking from performance appraisals, were regressed on a variety of Assessment Center exercises and later were factor analyzed. The conclusion reached was that the Assessment Center selection decisions were valid.

⁴⁰ R. Feltham, "Validity of a Police Assessment Centre: A 1-19-year Follow-up," Journal of Occupational Psychology, 61 (January, 1988): 129-144.

⁴¹ Ibid.

Another researcher contends that there are some issues not generally considered when the validity of Assessment Centers is studied.⁴² The contention is that most validity studies center on the construction of job analysis-based exercises and the selection of appropriate dimensions to be measured, but neglect such issues as how the exercises are presented to the candidates and how the responses are evaluated.

Arguably, the most cogent assertion may be that, both intuitively and on evidence of predictive validity, Assessment Centers seem to work, but no one seems to understand clearly how they work.^{43,44}

⁴² Sackett, "Assessment Centers and Content Validity: Some Neglected Issues": 13-25.

⁴³ R. Klimoski and M. Brickner, "Why do Assessment Centers Work? The Puzzle of Assessment Center Validity," Personnel Psychology 40 (January, 1987): 243-260.

⁴⁴ B. B. Gaugler, D. B. Rosenthal, G. C. Thornton, III, and C. Bentson, "Meta-analysis of Assessment Center Validity", Journal of Applied Psychology, 72 (1987): 493-511.

CHAPTER 4

DIRECTOR OF FORENSIC SCIENCE LABORATORY:

A JOB ANALYSIS

Introduction

All the previously discussed methods for identifying managerial potential depend on some form of job analysis. It may be informal; i.e., based on personal knowledge and experience, as in evaluations of job performance and promotional potential by supervisors. It may also be a more formal method that relies on observation, interview, job checklists, activity profiles, questionnaires, written source material, and training manuals.^{45,46,47} The more formal approach is a necessary prelude to the Assessment Center method. First, the job analysis must identify the clusters of job activities that make up the most

⁴⁵ B. M. Bass and G. V. Barrett, Man, Work, and Organization (Boston: Allyn and Bacon, 1972)

⁴⁶ E. J. McCormick and J. Tiffin, Industrial Psychology, 6th ed. (Englewood Cliffs, N. J.: Prentice-Hall, 1974).

⁴⁷ L. R. O'Leary, Interviewing for the Decisionmaker, (Chicago: Nelson-Hall, 1976), 11-15.

important aspects of the manager's job and rank them in order of relative importance and frequency. Secondly, it must determine the dimensions that are required of the manager in order to carry out the job activities successfully. In this way, the Assessment Center exercises can be designed so as to be specific for the responsibilities entailed in the managerial position for which the candidates are being tested, and "generic" exercises can be avoided.^{48,49}

Assessment Center exercises are designed to elicit the behaviors, and from them, the dimensions that relate to the job for which the candidates for promotion are being tested. The behaviors exhibited by the candidates are their specific responses to various stimuli during the exercises. They are descriptions, noted by the assessors, of what transpired during the simulations that serve as the bases for formulating or passing judgments and inferences. The behaviors are then categorized into dimensions (qualities/attributes), which are the knowledges, skills, abilities,

⁴⁸ W. S. Booth, "Strategies for Enhancing Your Assessment Center Performance," The Police Chief (February, 1989): 41-45.

⁴⁹ J. S. Schippman, E. P. Prien and J. A. Katz, "Reliability and Validity of In-Basket Performance Measures" Personnel Psychology, 43 (1990): 161-184.

and personal and other characteristics necessary to perform the work effectively.⁵⁰ In the personnel field, they are most commonly referred to as KSA's (knowledges/skills/abilities). An Assessment Center, not unlike any other selection process, must measure the extent to which candidates for promotion possess those dimensions required for the job.

Job Analysis

The director/manager of a forensic science laboratory faces many of the same tasks as the manager of any organization employing a significant number of scientists and ancillary personnel: i.e., planning, organizing, directing and controlling. A management seminar identified the principal functions of the manager of a chemical analysis laboratory as (1) selection of personnel with desirable personal characteristics, (2) staffing for peak load and minimum load periods, (3) selection and justification of capital equipment, and (4) establishment of a quality assurance

⁵⁰ Personnel and Organization Development Consultants, Inc., Assessor Training Manual for Public Sector Assessment Centers, 31-36.

program.⁵¹ Only the latter can be considered somewhat unique among the usual management tasks.

The job specifications for the Forensic Scientist VI position (defined as the direction of a crime laboratory employing at least five scientists) in the Crime Laboratory Division of the Washington State Patrol are a good example of the typical functions of a crime laboratory director.⁵² They include:

- * determination of laboratory needs in regard to personnel, equipment and supplies;
- * peer and administration review of technical reports;
- * determination of training needs and the training of forensic scientists and law enforcement officers;
- * prioritization of requests for laboratory examinations;
- * management of an assigned budget;
- * coordination of laboratory activities/services with other segments of the criminal justice system;
- * oral and written communication with laboratory personnel/users of laboratory services/vendors;
- * direction of a proficiency testing program;

⁵¹ J. P. Dux, "Improved Management of the Chemical Analysis Laboratory," Chemical Week seminar (1979).

⁵² Washington State Department of Personnel, Job Specifications for Forensic Scientist VI (Olympia, Wash., 1989).

- * examination and analysis of physical evidence, reporting of results and testifying as an expert witness.

The performance standards that comprise part of the laboratory accreditation program of the American Society of Crime Laboratory Directors (ASCLD) include the following as responsibilities of the laboratory manager:⁵³

- * communication of laboratory objectives to all personnel;
- * preparation/administration of a formal written budget;
- * delegation of authority;
- * establishment of performance criteria for laboratory personnel;
- * ensuring constructive discussion between manager, supervisors and subordinates;
- * direction of a training program;
- * establishment of an employee development program.

The author's experience as a crime laboratory director suggests the addition and/or restatement of the following job specifications:

- * assignment, prioritization and monitoring of case work;
- * serving as an advocate for forensic science within the parent agency;

⁵³ American Society of Crime Laboratory Directors, Laboratory Accreditation Board Accreditation Manual (1990): 13-26.

- * establishment and maintenance of an atmosphere of scrupulous honesty and integrity;
- * interview and selection of applicants for professional positions within the laboratory;
- * establishment and administration of a quality assurance program;
- * creation of an environment that favors high morale and enthusiasm.

The qualities or attributes required to carry out the above-listed activities of a forensic laboratory director include, as expected, most of the same dimensions that any manager must possess. They include oral and written communication, leadership, planning and organization, judgment, and initiative. The differences (or, more accurately stated, the emphasis required) lie principally in (1) the need to communicate effectively with many segments of the criminal justice system, (2) the management of collegially-oriented scientists that are usually in a hierarchical parent agency, and (3) the establishment and maintenance of a quality assurance program that fosters totally honest and accurate examinations and comparisons of physical evidence.

CHAPTER 5

SURVEY AND FINDINGS OF CRIME LABORATORY DIRECTORS AND SUPERVISORS OF CRIME LABORATORY DIRECTORS

Design of Survey Instrument and Criteria for Use of Responses

A survey instrument was designed in order to ascertain from crime laboratory directors and their supervisors those personal qualities or attributes most important to the success of the forensic science laboratory. The questionnaire (Appendix A) asked laboratory directors to identify and rank the qualities/attributes (dimensions) most responsible for the perceived success of the forensic science laboratory. It also asked for the reasons behind the selection of the particular dimensions and for examples of positive applications of the dimensions to the job. It concluded with questions that asked for a statement of the major managerial strengths and weaknesses of the laboratory director.

There are more than 200 forensic science laboratories in the United States and Canada. Considered geographically, the population that was surveyed is

composed of separate homogeneous layers (federal, state and local) differing in size (from 2 employees to 200+ employees) and in the number of units (laboratories) in each layer. Only those crime laboratories that have been accredited by The American Society of Crime Laboratory Directors or employ at least 10 full-time scientists were included in the compilation of responses. The following data, therefore, was tabulated from 30 laboratory director responses and 12 supervisor of laboratory director responses, or a total of 42 questionnaires.

Analysis of Questionnaire Responses

Question Number 1

The first question asked the respondents to rank the following qualities/attributes from most important (1) to least important (8) to their (or their laboratory director's) success as a laboratory manager:

- | | |
|------------------------------|--------------------------|
| * initiative | * ability to communicate |
| * judgment | * leadership |
| * decisiveness | * planning/organization |
| * organizational sensitivity | * energy |

The qualities/attributes listed above were selected because they are the most commonly measured dimensions in Assessment Centers and were identified in the job

analyses. The order of listing of the qualities/attributes on the questionnaires was varied so as to minimize any bias that the order might instill in the respondents. Three of the "leadership listed first" questionnaires and eight of the "planning/organization listed first" questionnaires represent the range of sequences returned. Table 1 shows the number of responses from both laboratory directors and supervisors of laboratory directors in each of the "quality/attribute listed first" categories.

TABLE 1

NUMBER OF RESPONSES RECEIVED WITH THE QUALITY/ATTRIBUTE
LISTED IN FIRST POSITION

Quality/ Attribute	Laboratory Directors	Supervisors of Laboratory Directors	Total
Ability to communicate	4	1	5
Decisiveness	5	0	5
Energy	2	2	4
Initiative	3	3	6
Judgment	4	2	6
Leadership	3	0	3
Organizational sensitivity	4	1	5
Planning/ organization	<u>5</u>	<u>3</u>	<u>8</u>
Total	30	12	42

Ability to communicate and judgment were rated by both groups of respondents as most important for successful management of a forensic science laboratory. Planning/organization and leadership were ranked next. Decisiveness, energy, initiative, and organizational sensitivity were rated clearly as least important. Table 2 illustrates the relative rankings of each quality/attribute. The numbers represent the sums of the rankings (1 through 8) of each category; the

lower the sum, the higher the ranking. Multiplying, instead of adding, ratings resulted in the same rankings.

TABLE 2
RELATIVE RANKINGS OF EACH QUALITY/ATTRIBUTE

Quality/ Attribute	Laboratory Directors	Supervisors of Laboratory Directors	Total
Ability to communicate	88	35	123
Judgment	92	35	127
Planning/ organization	110	38	148
Leadership	127	38	165
Initiative	157	48	205
Decisiveness	169	54	223
Organizational sensitivity	156	71	227
Energy	181	75	256

Question Number 2

The second question required the respondents to list any qualities/attributes not included among those in the first question that they felt were significant enough to affect the managerial success of the crime laboratory director. Ability to delegate, integrity, persistence/patience, knowledge (knowledge

both of forensic science and management practices) and skills (forensic science, management, and interpersonal) were identified by at least four of the respondents. Knowledge and skills were listed much more frequently than the other qualities/attributes by 13 and 22 of the respondents, respectively.

It may reasonably be surmised that the dimensions identified in answer to this question, which was open-ended, may be especially significant to the respondents. They were not listed among the eight qualities/attributes in Question No 1; however, they are occasionally the subject of measurement in Assessment Centers exercises and should be included in at least some of the simulations designed to test forensic science laboratory managers.

Question Number 3

The respondents were asked to cite reasons why they considered their three top-ranked qualities/attributes especially significant. Following are some of the comments.

Ability to Communicate

- * allows the manager to give and receive orders and to understand the concepts, problems, and people he/she works with;

- * enables the laboratory director to convince his/her staff of priorities, relay problems and needs to supervisors, and carry out good public relations;
- * the laboratory director is the connection between the police administrator and forensic science;
- * good interpersonal skills depend on the ability to communicate;
- * problems can often be avoided or solved if communication can help understand why things are as they are;
- * communication can help people understand why it is important and why they are important.

Judgment

- * required for effective decision-making skills, juggling many and competing needs, and weighing many factors to arrive at the optimum decision;
- * permits quality decisions based on in-depth knowledge and experience;
- * requires balancing the needs of the parent agency against those of the employee, the submitting agency, and the merits of a particular case.

Planning/Organization

- * accomplishes the goals that stem from good judgment;
- * necessary to meet immediate changes and to carry out budgeting/organization for future needs;
- * enables the manager to keep the users of laboratory services reasonably satisfied with prompt attention without undue pressure on the laboratory staff;

- * with so many projects and assignments to juggle, it is essential to be able to prioritize and re-prioritize those projects and assignments;
- * ensures that the important things happen in the sequence desired.

Leadership

- * means getting others to do what you want accomplished;
- * enables the laboratory director to steer subordinates in the same direction while allowing them sufficient latitude to run their own operations;
- * sets an example by a reputation for quality case work, professional organization responsibilities, etc.;
- * allows the laboratory director to work through others in order to accomplish organizational goals;
- * means doing the things necessary, and providing the resources, so as to move the organization toward its goal.

Initiative

- * defined as seizing opportunities and turning them into assets; aggressively going after things and becoming a change agent;
- * required in order to make the changes to meet constantly changing demands.

Decisiveness

- * allows the laboratory director to make choices that often must be made quickly without time to wait for data or supporting information.

Organizational Sensitivity

- * often enables problems to be attacked before they become crises.

Energy

- * required because of the need to keep pace with the constant change and flux of science, coupled with the dearth of set procedures in forensic science.

Question Number 4

The forensic science laboratory directors and their supervisors were also asked to cite at least one example of a positive application of the dimensions that they listed as most important. A summary of the actual, or specific, examples given for ability to communicate and judgment follows:

Ability to communicate

- * testimony before governmental committees and public speaking appearances before many groups (were instrumental) in the successful passage of a bond increase to fund the forensic science laboratory;
- * timely counseling and directing of a "problem" employee enabled the person to become a productive member of the laboratory staff;
- * the use of a laboratory newsletter and roll call video briefings for the benefit of the users of the laboratory services greatly improved the cooperation and quality of the services provided;
- * on-going communication with employees that were not promoted succeeded in keeping them motivated.

Judgment

- * the laboratory procedure is for all findings to be included in the written report; a judgment as to whether or not to oblige when an agency requests omission of some findings must be made;
- * when an employee was having performance

problems (because of personal reasons), a decision had to be made regarding whether to discipline, counsel, or allow change and time to deal with the problems;

- * judgments are made in the shifting of personnel from one section to another to cover the changing needs of the users of laboratory services;
- * it was necessary to recommend a cause of action which met the needs of the department, laboratory, law enforcement, district attorney's office, and the courts in response to having to curtail part of the drug analysis program.

Questions Number 5 and 6

The final two questions, again open-ended, asked each respondent for the laboratory director's major managerial strength and major managerial weakness. The most frequently occurring strengths listed are below, grouped into similar categories as much as possible.

- * ability to communicate, also identified more specifically by one respondent as "the ability to interface between science and law enforcement";
- * ability to delegate;
- * interpersonal skills; also identified as "caring" and "concerned about people";
- * ability to organize (and plan); i.e., planning and organization;
- * initiative;
- * leadership

- * vision; also identified as the ability to think "out of the box" and to conceptualize.

Other descriptions of managerial strength that were mentioned more than once are: diligence/tenacity, honesty, ability to listen, fairness, ability to get things done, and a willingness to accept responsibility.

The managerial weaknesses most often identified, again grouped into similar categories, were:

- * time management;
- * impatience;
- * planning/organization;
- * inability to integrate laboratory operations into the paramilitary structure of law enforcement; also identified as the inability to overcome laboratory-line officer "conflicts";
- * indecision; also identified as avoiding unpopular decisions.

Summary and Conclusions

The qualities/attributes that were identified as having a marked effect on the managerial success (or lack of success) of a forensic science laboratory director can be summarized as follows:

- * Ability to communicate
Oral communication, specifically, is essential for the laboratory director's interaction with superiors, peers, and subordinates. Effective expression, including gestures and other non-verbal forms of communication, is required in both individual and group situations. Communication skills are also important for "bridging the gap (of understanding) between forensic science and law enforcement".
- * Judgment
Making the right decisions, based on logical assumptions that reflect factual information, and developing alternative, viable courses of action are all matters of sound judgment inherent in good management practice.
- * Planning/Organization
Planning/organization ability is reflected in budget preparation, schedules of work assignments, and rotation of personnel to keep up with the requirement for timely services.
- * Leadership
The laboratory director must lead the way in advocacy for forensic science within his/her parent agency and within the criminal justice system.
- * Delegation
Making use of subordinates to carry out the goals and objectives of the laboratory requires the ability to delegate.

* Knowledge/Skills

The laboratory director cannot manage effectively without the knowledge and skills in at least three areas; 1) forensic science, 2) management, 3) interpersonal relations. Especially important in the latter area is the use of appropriate interpersonal styles and methods in guiding the laboratory toward its goals.

* Integrity

Honesty and ethical behavior are especially important qualities for a manager of personnel whose decisions can seriously affect the lives and liberty of people.

Each of the qualities/attributes listed above (again, termed "dimensions" in the Assessment Centers process) can be identified in behaviors that would be elicited by appropriately designed exercises (simulations). It is important to avoid the use of too many shelf products and, instead, to construct exercises that are as specific as possible for the tasks of the position being tested.⁵⁴ The survey instrument identified the dimensions that should permit the "individualization" of commonly used Assessment Centers exercises, for use in testing candidates for promotion within a forensic science laboratory. As evidenced by the qualities/attributes identified as most important by the survey respondents, the exercises should elicit behaviors that can be translated by the assessors

⁵⁴ Thornton, 181-186.

into dimensions that represent ability to communicate, judgment, planning/organization, leadership, delegation, knowledge/skills, and integrity.

CHAPTER 6

EVALUATION OF ASSESSMENT CENTER EXERCISES COMMONLY USED IN LAW ENFORCEMENT TO IDENTIFY MANAGERIAL POTENTIAL OF CANDIDATES FOR THE RANKS OF LIEUTENANT AND ABOVE

Introduction

The first hypothesis to be tested in this research project was that directors of crime laboratories possess qualities/attributes (dimensions) that are particularly suited for their positions. The dimensions thus identified, and summarized in the previous chapter, are not necessarily going to be measured accurately by using the "generic" exercises available and in use by law enforcement. The latter tend to place more emphasis on such qualities/attributes as initiative, decisiveness, energy, and organizational sensitivity, based upon the experience of the author in serving as an organizer and/or assessor in such Assessment Centers. Nonetheless, an understanding of the exercises most often used for law enforcement purposes is necessary before proceeding to test the second hypothesis; i. e., that Assessment Centers

can be specifically designed for use in the identification of managerial potential among forensic science personnel. (It should be noted at this point that no such specially constructed exercises appear in the literature, nor are any known to exist by the author.)

As previously stated, a "true" Assessment Center must follow several guidelines as set forth by the International Congress on the Assessment Center Method.⁵⁵ The guidelines that refer to Assessment Center exercises require the use of multiple exercises that provide information for evaluating the dimensions identified in the job analysis and that include sufficient job-related simulations to allow many opportunities to observe each candidate's behavior.

Two exercises that, with rare exception, are used as Assessment Center simulation exercises for personnel in the criminal justice system (especially by law enforcement agencies testing candidates for the rank of lieutenant or above) are the leaderless group discussion and the in-basket simulation. If others are used, they normally are selected from among problem employee counseling, budget presentation, press conference, and background interview simulations.

⁵⁵ Guidelines and Ethical Considerations for Assessment Center Operations, 4-6.

Leaderless Group Discussion

The leaderless group discussion consists of a group of six to eight participants who are given a problem to solve and are required to arrive at a decision within a specified period of time, usually 40 to 60 minutes. The participants may be assigned roles, in which case the discussion is similar to decision-making meetings in which, for example, (1) limited resources must be divided equitably, (2) a specific training program must be selected from among several options, or (3) a decision must be reached as to what use should be made of additional office space. The leaderless group discussion can also be used with no roles assigned, which then generally resembles an ad hoc committee formed to implement a new regulation, generate ideas for fund raising, develop new safety procedures, or many other similar purposes.⁵⁶ The dimensions measured include oral communication ability, interpersonal relations, judgment, leadership, planning/organization, and initiative.

⁵⁶ Booth, "Strategies for Enhancing Your Assessment Center Performance", 42.

The leaderless group discussion is subject to some criticism, principally because it can be argued that it represents a situation that seldom exists in a work setting, where a leader is usually known or quickly identified. Furthermore, it is often difficult for the assessors to evaluate accurately the performance of the candidates. The candidate who quietly monitors the group's interactions, for example, may be the person who emerges as the group leader in a real-life situation. On the other hand, the candidate who dominates the group decision making could very easily be leading it in the wrong direction.⁵⁷

A typical leaderless group discussion, as used by the San Bernardino County Sheriff's Department in an Assessment Center for the position of Sheriff's Lieutenant, used an assigned-role scenario (Appendix B). Each member of the group was assigned a different training program proposal to present to the group in a five-minute period. After all the presentations were completed, the group had 48 minutes to discuss the proposals and reach a consensus regarding which one should be recommended to the Sheriff.

⁵⁷ H. H. Meyer, "The Validity of the In-basket Test as a Measure of Managerial Performance," Personnel Psychology, 23 (1970): 297-307.

In-Basket Exercise

The in-basket exercise attempts to simulate the administrative tasks of a manager by requiring the candidates to read letters, reports, memoranda, notes, and telephone messages; decide how to deal with each item (some of which may be related); and then write responses, schedule meetings, and delegate tasks. Generally, the scenario is set so as to require notes and instructions rather than using the telephone. Time pressure is simulated by requiring the candidates to complete the in-basket in two or three hours.

In-basket exercises have a high degree of validity, if properly designed, and acceptance by the participants.⁵⁸ They measure dimensions such as planning/organization, ability to delegate, interpersonal skills, and judgment. A typical in-basket exercise used by the San Bernardino County Sheriff's Department in an Assessment Center for the position of Sheriff's Lieutenant used a two-hour scenario that required the newly assigned lieutenant in the station to act as the station commander and take care of the materials in the latter's in-basket (Appendix C).

⁵⁸ H. H. Meyer, 297-307.

Other Exercises

In addition to the leaderless group discussion and in-basket techniques, two other types of exercises are often used. Interview simulations can be designed to cover a variety of situations such as interviewing a subordinate for a disciplinary matter or a performance evaluation, interviewing an applicant for a vacant position in the department, or interviewing a "customer" with a complaint about the poor services provided by the agency. Interviews require volunteers to play the role of the person being interviewed and thus are somewhat more difficult to organize and time-consuming to use. They are most useful for measuring dimensions such as interpersonal skills, judgment, ability to communicate, organizational sensitivity, and leadership. Oral presentation exercises, such as making a detailed presentation to a group or holding a press conference, are most valuable for measuring oral communication. Depending on how they are structured, they can also be indicators of interpersonal skills and planning/organization.

Summary

In the author's experience, a common tendency, when a decision has been made to use the Assessment Center process as part of the promotional testing, is simply to look in the personnel department's file for standardized exercises generally used for that particular discipline.⁵⁹ As stated previously, most forensic science laboratories are attached to a law enforcement agency, either at the local or state level. Consequently, and especially because no expressly designed forensic laboratory management exercises exist, if the parent agency decides to try the Assessment Center process for the selection of, for example, the director of its crime laboratory; the expected and expedient procedure would be to use existing law enforcement exercises. (In addition, Assessment Center exercises for other laboratory management positions are rarely available.)

⁵⁹ Personnel and Organization Development Consultants, Inc., 5.

Existing exercises for law enforcement are designed for sworn officer ranks, usually lieutenant and above. The simulations are set up so as to bring out the qualities/attributes more suited to police officers (perceived to be so, even at the management level) rather than the qualities/attributes rated as more important by the survey respondents. Furthermore, the leaderless group discussion is highly prized by law enforcement agency personnel divisions. It can reflect a not uncommon real-life situation in which, for example, a group of captains will be assigned the responsibility for meeting in an essentially leaderless group in order to arrive at recommendations for the top executive staff as to a particular project, policy, direction, etc. The captains, during their career, will have served in almost every division or unit and will be at least partially knowledgeable on almost any issue.

The crime laboratory personnel, however, will not have that broad-based background and will rarely be involved in such a department-wide group. The leaderless group simulation, as part of the Assessment Center to identify managerial potential for the forensic science laboratory, would not represent a real-life situation. More appropriate exercises should be designed to elicit the dimensions of oral communication,

judgment, planning/organization, leadership, delegation,
knowledge/skills and integrity.

CHAPTER 7

PROPOSED ASSESSMENT CENTER EXERCISES FOR MANAGERIAL POSITIONS IN FORENSIC SCIENCE LABORATORIES

Introduction

Despite the physical and organizational placement of a large majority of forensic science laboratories within a hierarchical parent agency, the scientists within the laboratory perceive themselves as operating more favorably within a collegial framework. As an example of this perception, the respondents to the questionnaire listed decisiveness, energy, and organizational sensitivity as the qualities/attributes least important to a laboratory manager's success. The author's experience suggests that this is most likely due to the feeling that loyalty to the profession (forensic science) supersedes loyalty to the organization and that high energy and decisiveness seem diametrically opposed to the careful approach required of the scientific method. Rather, the respondents selected ability to communicate (oral communication) and judgment as the two most important qualities/attributes, followed by planning/organization, leadership, interpersonal skills, and delegation.

An in-basket exercise, counseling interview, and some form(s) of a presentation exercise, are the most likely choices for enabling the Assessment Center participants to demonstrate the above-listed highly rated dimensions.⁶⁰ Judgment, planning/organization, and delegation are measured by the in-basket and, in part, by the interview and presentation; ability to communicate, judgment and interpersonal skills, by the interview; and ability to communicate, planning/organization, and leadership by the presentation. Following are descriptions and justifications for sample exercises as developed by the author for this research project.

In-basket Exercise

The in-basket exercise is made up of a variety of documents that might be found in the in-basket of a newly promoted or reassigned manager, who must deal appropriately with the myriad of telephone mes-

⁶⁰ Thornton, Assessment Centers and Managerial Performance, 164-170, 184-190.

sages, interoffice memos, notes, reports and other items. The items usually vary in urgency and complexity, and many of them are interrelated. The candidate usually is given only a limited amount of time, often on some pretext built into the simulation that, for example, he/she must shortly catch a flight for a professional meeting several hundred miles away. The in-basket exercise measures a number of administrative skills, requiring some planning/organizing, judgment, and skillful delegating on the part of the assessee. Its principal limitations are the need to train the assessors thoroughly in the grading process and the subsequent extensive time required for the evaluation (2-5 hours per in-basket).

Appendix D is an in-basket exercise designed by the author. It is intended for an Assessment Center that is testing candidates for an assistant director of a crime laboratory with 40-60 employees. In addition to the dimensions previously cited, the exercise can also include some measure of knowledge and skills.

Counseling Interview

A counseling interview, especially one that involves a problem employee, is often a confrontational situation. It is usually viewed by the supervisor or manager as an unpleasant and stressful task. This is especially true of a scientist who is now a manager. However, such one-to-one encounters, difficult as they may be, are one of the most characteristic features of managerial responsibility. A recommended interview simulation reflecting a problem employee who is being counseled regarding a possible violation of ethics is outlined in Appendix E. Leadership, ability to communicate, judgment, integrity, and interpersonal skills are the major dimensions it is intended to measure. Interview simulations generally require an "outside" role player.

Presentation Exercises

The director of a forensic science laboratory, as well as other top management in the laboratory, is often required to make an oral presentation. It may be a short 10-minute update to a group of prosecuting attorneys on the state-of-the-art of DNA analysis, or it may be a 20-30-minute detailed budget presentation before the Sheriff/Police Chief and the

executive staff of the parent agency. The latter exercise would require relatively extensive preparation. The candidates are given detailed information about the budget request and provided with enough time to review and outline the presentation, which is then normally given before the assessors. Oral communication and planning/organization are the principal dimensions assessed (see Appendix F).

CHAPTER 8

SUMMARY AND CONCLUSIONS

The first hypothesis in this research project was that directors, as well as other top managers, of forensic science laboratories possess qualities or attributes (termed "dimensions" in the Assessment Center process) that are especially suited to their position. The second hypothesis was that Assessment Center exercises could be constructed that are specifically designed for the identification of managerial potential in forensic science laboratories.

Chapter 5 outlines the survey and findings from the 42 crime laboratory directors and their immediate supervisors who met the criteria for acceptance of their responses; i.e., the laboratory is either accredited or employs at least 10 full-time scientists. The qualities/attributes identified most often from those listed in the questionnaire were ability to communicate (oral communication) and judgment, followed by planning/organization and leadership. Qualities/attributes identified from an open-ended question were knowledge/skills, ability to delegate, and integrity. Interestingly, those qualities/attributes

usually associated with law enforcement officers, such as energy, organizational sensitivity, and initiative, were deemed significantly less important.

Chapter 6 discusses the Assessment Center exercises most commonly used for law enforcement management personnel, especially the leaderless group discussion and the in-basket. The former uses simulations that a crime laboratory director, because of the usual placement of the laboratory in a police or sheriff's department, or state investigative agency, will seldom become involved in. The latter, however, is the type of simulation that is indeed reflective of a crime laboratory manager's responsibilities. In addition, simulated counseling sessions and oral presentations are also outlined in this chapter.

Chapter 7 identifies the in-basket, counseling interview, and oral presentation exercises as the simulations most likely to elicit the behaviors and dimensions that correspond to those identified by the respondents to the survey instrument as important to the success of forensic science laboratory managers. Appendixes D, E and F are exercises designed by the author and proposed for use in such an Assessment Center process.

Both hypotheses are supported: (1) dimensions that are especially important for management personnel in forensic science laboratories were identified by the respondents to the survey, and (2) Assessment Center exercises can be selected and designed so as to be specific for identifying managerial potential in forensic science laboratories.

The Assessment Center process has demonstrated validity in the identification of managerial potential, if the simulation exercises used in the process are appropriate and are designed to enable the accurate assessment of the more important dimensions required for the position. There are limitations that may be imposed because of the additional time and effort required in an Assessment Center. There is also a need for validation studies. Although the most appropriate validation procedure would use a longitudinal design rather than a concurrent design, the former is often difficult to accomplish. Despite limitations inherent in the latter, it is the more practical design. Research in the selection and construction of appropriate exercises is also suggested. Nevertheless, the potential for increased success in selection of management personnel for forensic science laboratories warrants expanded use and refinement of Assessment Centers in place of, or in addition to, the more traditional selection procedures.

APPENDIX A

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

5151 STATE UNIVERSITY DRIVE, LOS ANGELES, CA 90032-8163



DEPARTMENT OF CRIMINAL JUSTICE
(213) 343-4610

August 25, 1989

Dear Sir:

**re: A Study to Evaluate Assessment Center Exercises
and to Develop a Set of Exercises Specifically
Designed to Identify Managerial Potential Among
Employees in Forensic Science Laboratories**

As part of the requirement for a Master's Degree in Public Administration at California State University in San Bernardino, I am carrying out research leading to a thesis on the application of the assessment center method for the selection of management/supervisory personnel in crime laboratories.

One of my hypotheses is that directors of successful crime laboratories possess qualities or attributes that have made them particularly suited for their positions. Accordingly, I am asking those crime laboratory directors, and their immediate supervisors, to identify the qualities and attributes that are important to his/her success.

Please complete the attached questionnaire and return it to me no later than September 25, 1989.

I will send a copy of my survey results to your crime laboratory director when they have been compiled.

Sincerely,

A handwritten signature in cursive script, reading 'Anthony Longhetti'.

Anthony Longhetti,
Associate Professor
Director,
Criminalistics Program

Mail completed questionnaire to:

Anthony Longhetti
P. O. Box 469
San Bernardino, CA 92402

AL/jj

QUESTIONNAIRE (for Supervisor of Laboratory Director)

1. Rank the following qualities/attributes from most important (1) to least important (8) to the success of your crime laboratory director:

() initiative	() ability to com-
() leadership	municate
() decisiveness	() judgment
() organizational sensitivity	() planning/ organization
	() energy
2. What qualities/attributes do you consider important that are not included in the above list?
3. Why did you consider each of your top three choices to be especially important?

continued...

4. Give at least one example of a positive application of the dimensions listed as your top three choices:
5. What do you consider to be the major managerial strength of your laboratory director?
6. What do you consider his/her major managerial weakness?

Number of years you have been supervisor of your laboratory director

APPENDIX B

SHERIFF'S LIEUTENANT LEADERLESS GROUP DISCUSSION INSTRUCTIONS FOR PARTICIPANTS

YOUR SITUATION

Assume that you and the other participants in your group are members of a committee who have been asked to give recommendations to the Sheriff. There is no assigned chairperson and for the purpose of this exercise none will be selected.

Assume that the Sheriff has recently been informed that the State has made available special grant funds for supervisory training programs for the Department. This committee has been authorized to discuss various alternatives available and to reach a consensus decision as to the training program that will be recommended. Also assume that the committee has been asked to review and discuss each of the proposed projects and to reach a consensus to recommend just one to the Sheriff.

THE PROBLEM

Each member of the committee has been given information on a training program and supporting facts. Each committee member has also been given reference information about the county.

For the purpose of this exercise you are to take the stance that your training program has the most merits and should be funded by the grant.

Since each of you are advocating a different project proposal you will each make a 5-minute oral presentation to the other committee members, detailing your proposal. During your presentation, you should do your very best to convince the other committee members that your project should receive their support.

When you make your presentation, do not read it, present it in your own words.

You will have 15 minutes to review your project proposal, and reference material and to prepare for your 5-minute presentation. After all presentations have been made, your group will have 45 minutes to discuss the project proposals and to reach a consensus on which one to recommend to the Sheriff.

REMEMBER, you are expected to support the proposal you have been given, but not to the exclusion of considering the other proposals as well. You will be evaluated on your ability to absorb and present the facts given to you; your ability to support your proposal; and your ability to assist the group in reaching a decision. YOU WILL NOT BE EVALUATED ON WHETHER YOUR PROPOSAL WINS OR LOSES, BUT ON HOW YOU PARTICIPATE.

A FINAL NOTE: Your presentation and arguments for your project proposal should be based on the facts provided in the handouts. However, you may make use of any additional information or knowledge you may have acquired based on your experience as a law enforcement supervisor.

REFERENCE INFORMATION

COUNTY - General

Pop: 1,650,000 Juvenile: 20% (18 & under)
Avg age: 23 Adult: 80%
Size county: 4,130 sq mi Avg education: 12 years
Avg income: \$15,800 Breakdown
by race: Cauc. - 51.2%
Hisp. - 21.0%
Blk. - 14.6%
Asian - 10.0%
Other - 1.2%

Acreage for: Commercial - 340 square miles
Residential - 1,750 square miles
Industrial - 920 square miles
Agricultural - 315 square miles
Parks &
Community
Facilities - 80 square miles
Other - 725 square miles

COUNTY - Government: See attachment

San Antonio County Sheriff's Department:

Personnel: Sworn - 1,461 Reserves/
Non-sworn - 830 other
volunteers - 900

BUDGET: \$131,000,000

VEHICLES: Marked - 460
Unmarked - 180

GENERAL:

The Department operates in the traditional organization and chain of command, with the Sheriff as department head, the Captain as station/division commander, a Lieutenant, Sergeants, and Deputy Sheriffs. There are 108 Sergeants in the Department, all of whom have supervisory responsibilities, ranging from those of

a watch commander at a station to those of Sergeant in support division such as aviation, records, and training. Some of the 282 corporal positions also require at least part-time supervisory skills. In addition there are 38 non-sworn positions whose principle functions include the supervision of subordinates.

Newly promoted Sergeants are sent to a two-week state approved supervisory course. They receive no additional required training beyond that. The Corporals receive no specific training in supervisory skills. The non-sworn supervisors' training varies with the division and specialty area from none to a polyglot mixture offered by the County's training center and outside workshops/seminars.

Further, newly incorporated cities contract with the Sheriff's Office for service. As the county cities are so rapidly growing and expanding, the need for Sheriff's Office services are at a high demand. Frequently, supervisory personnel are placed into positions with little or no training.

APPENDIX C

SHERIFF'S LIEUTENANT IN-BASKET EXERCISE INSTRUCTIONS

TIME LIMIT:

You have (2) hours in which to complete this in-basket. It is your responsibility to organize and plan your time so that this task is completed in the allotted time.

BACKGROUND SITUATION:

This "In-Basket" is a work simulation exercise which includes the types of materials that one might actually find in a Sheriff's Lieutenant in-basket.

For the purpose of this exercise, assume the following: You, Frank Smith, have been promoted to Lieutenant effective June 19, 1988 and assigned to the Sheriff's Red Mountain Station. Your predecessor, Harry Deal, was promoted to Captain and immediately reassigned as the commander of Special Investigations Unit and can not be contacted. The Red Mountain Station Commander, Captain Leif Erickson, is attending the National FBI Academy in Quantico, Virginia, and is also unable to be reached.

The City of Red Mountain is located in the desert area of San Bernardino County and contracts with the Sheriff's Department for law enforcement services.

It is Tuesday, July 19, 1988, and you are taking over the responsibilities of the Station Lieutenant and you are acting as Station Commander. Captain Erickson's secretary, Sara Jane Smith, is taking a vacation day and will not be in to assist you.

The materials you must take care of are in your in-basket, formerly Lt. Harry Deal's in-basket.

The In-Basket:

The in-basket envelope contains various memos, letters, assignments and day-to-day "emergencies" that might be found in an in-basket. You must respond to these materials by recording on the Record of Action Sheets all of the actions you would take if you were on the job. Also, you should write notes, memos, letters, and the like where appropriate. In addition, make notes to yourself about things you do later. Everything you decide to do should be in writing. In making a note, letter, etc., relate it to its source by clipping it to the item that prompted it or make notes on the in-basket items itself.

Each item in the in-basket is numbered. There is also a Record of Action Sheet with numbers corresponding to the numbered item. For every numbered item in the in-basket, list the actions you would take and the reason why you would take that action on the Record of Action Sheet.

Be as specific as possible. List all phone calls, contacts, scheduling, and other actions you would take. Also in the Record of Action Sheet rate each numbered item as to whether it is of high, medium or low priority for action by placing a check mark (✓) on the line next to the level of priority that you select.

To aid you in your task, the following four items are provided:

1. An organizational chart of the Red Mountain Division.
2. A calendar.
3. Documentation sheets for recording your actions and providing reasons.
4. A policy and procedure manual.

Final Notes:

1. If you would write a letter, memo, note or report, actually write it. Do not simply record that you would write it. Produce the actual written communication that you would leave to have typed and sent.
2. Write legibly.
3. The materials that are in your in-basket are in no particular order. Major problems and minor communications are mixed together in random order, just as they would be in any in-basket.

APPENDIX D

ASSISTANT DIRECTOR, FORENSIC SCIENCE LABORATORY

PROPOSED IN-BASKET EXERCISE

INSTRUCTIONS

Time Limit:

You have two (2) hours in which to complete this in-basket exercise. It is your responsibility to organize and plan your time so that this task is completed in the allotted time.

Background:

This "In-Basket" is a work simulation exercise which includes the types of materials that one might actually find in an Assistant Laboratory Director's in-basket.

For the purpose of this exercise, assume the following:

You, Andrea Whitson, have been promoted to Assistant Laboratory Director effective Monday, November 5, 1990. Your predecessor Terry O'Laughlin, retired recently and cannot be contacted. The Laboratory Director is attending an American Academy of Crime Labora-

tory Directors meeting in Quantico, Virginia, and is also unable to be reached.

Your laboratory is a full-service forensic science facility attached to a metropolitan police agency serving a population of approximately 2,000,000 people. Your immediate supervisor is the Deputy Chief in charge of Technical Support Services. The laboratory has a complement of 52 people, 31 of whom are professional employees. There are four section supervisors of equal rank; (1 drug and alcohol testing, 2) trace evidence/firearms/questioned documents, 3) serology and 4) "administration", including clerical and other support personnel not specifically assigned to one of the other sections.

It is Monday, November 5, 1990, and you are taking over the responsibilities of the Assistant Laboratory Director acting as the Laboratory Director. The Laboratory Director's secretary, Joanne Dvorak, is taking a vacation day and will not be in to assist you.

The materials you must take care of are in your in-basket, formerly Terry O'Laughlin's in-basket.

THE IN-BASKET:

The in-basket envelope contains various memos, letters, assignments and day-to-day "emergencies" that might be found in an in-basket. You must respond to these materials by recording on the Record of Action Sheets all of the actions you would take if you were on the job. Also, you should write notes, memos, letters, and the like where appropriate. In addition, make notes to yourself about things you would do later. Everything you decide to do should be in writing. In making a note, letter, etc., relate it to its source by clipping it to the item that prompted it or make notes on the in-basket item itself.

Each item in the in-basket is numbered. There is also a Record of Action Sheet with numbers corresponding to the numbered item. For every numbered item in the in-basket, list the actions you would take and the reason why you would take that action on the Record of Action Sheet.

Be as specific as possible. List all phone calls, contacts, scheduling, and other actions you would take. Also, in the Record of Action Sheet rate each numbered item as to whether it is of high, medium

or low priority for action by placing a check mark (✓) on the line next to the level of priority that you would select.

To aid you in your task, the following items are provided:

1. An organizational chart of the forensic science laboratory.
2. A calendar.
3. Documentation sheets for recording your actions and providing reasons.
4. A policy and procedure manual.

FINAL NOTES:

1. If you would write a letter, memo, note or report, actually write it. Do not simply record that you would write it. Produce the actual written communication that you would leave to have typed and sent.
2. Write legibly.
3. The materials that are in your in-basket are in no particular order. Major problems and minor communications are mixed together in random order, just as they would be in any in-basket.

APPENDIX E

DIRECTOR, FORENSIC SCIENCE LABORATORY

PROPOSED COUNSELING EXERCISE

INSTRUCTIONS

Background:

You are the director of a crime laboratory attached to the River City Police Department. Your laboratory employs ten full-time criminalists, two half-time criminalists, two half-time technicians, and two clerical support people. You were hired four months ago from "outside" the laboratory. Shortly after you began your new job, the Police Chief informed you that Bruce McDonald, your predecessor as the laboratory director, resigned under pressure. The primary reason for his resignation (the "straw that broke the camel's back" as the Chief put it) was McDonald's failure on several occasions to take direct and immediate disciplinary action when it was evident that it was necessary. Of particular concern to the Chief was Criminalist Sara Chase, who had been discovered about one year ago "dry labbing" a particular examination: i.e., writing a report without actually examining the evidence. McDonald failed to discipline Ms. Chase

(because, according to the Chief, the two were "exceptionally close friends") until forced to by his supervisor, the Captain in charge of the Technical Services Bureau. By that time, and because McDonald had no written documentation of this matter, or of any previous problems with Ms. Chase, the discipline consisted simply of a letter of reprimand to be placed in her file.

Now, four months later, you have just received a telephone call from Bob Jackson, a respected local defense attorney. He had employed a private consulting criminalist, Dave Ingro, to examine some additional evidence from a homicide investigation and testify at the trial. Sara Chase was asked by the prosecuting attorney to help in preparing his cross-examination of the defense expert. Knowing that Mr. Ingro left his prior employment under very bitter circumstances, and that he had a great hatred for his former supervisor, she believes that the mere mention of his former supervisor is a psychological "button" that will cause Mr. Ingro to start ranting and lose all credibility in front of the jury. She decides to go ahead and suggest to the prosecuting attorney that he "punch this button".

Bob Jackson feels that this action by Ms. Chase is in violation of the criminalists' code of ethics

and informs you that he very likely will institute proceedings with your professional society to charge her with violations of the appropriate code sections.

You decide to call Sara Chase in to your office to discuss this matter and to get her version of what happened. You have a strong suspicion that you will need to take some quick action.

Time Limit: You have 15 minutes to outline your approach. Expect Ms. Chase to be defensive and argumentative.

APPENDIX F

DIRECTOR, FORENSIC SCIENCE LABORATORY PROPOSED BUDGET PRESENTATION (ORAL) INSTRUCTIONS

Background:

You are the director of a full-service crime laboratory that is a separate division within the Mojave County Sheriff's Department. The laboratory employs 18 full-time criminalists, 5 full-time laboratory technicians and 4 clerical support persons. Each of the division heads has been asked to make a detailed oral presentation to the Sheriff and his executive staff. You will be given a maximum of 20 minutes.

Scenario:

It is another tight budget year! The Sheriff, however, needs to add 75 additional sworn and nonsworn persons to man a new detention center. You, however, feel that you absolutely need to have a 50% increase in your \$850,000 annual budget to compensate for several years of insufficient funding. You need new equipment and, most importantly, you need to remodel part of

the laboratory, provide training for DNA analysis, and purchase the supplies and equipment for the DNA program. You will have twenty minutes to prepare your detailed budget presentation. Prepare carefully your arguments in favor of the 50% increase you feel you must have.

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