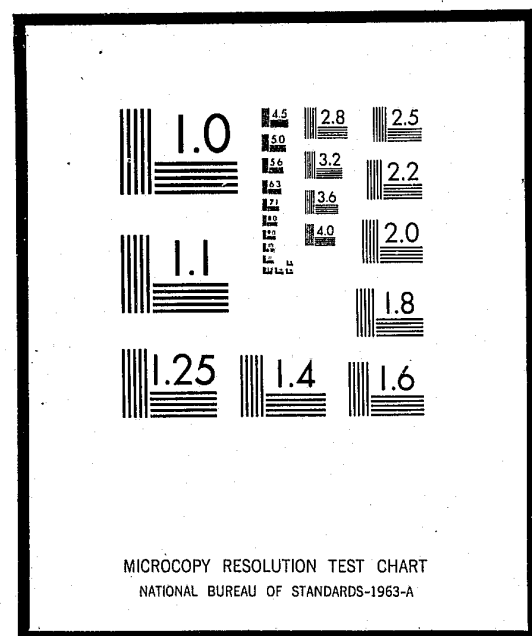


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LAW ENFORCEMENT ASSISTANCE ADMINISTRATION  
NATIONAL CRIMINAL JUSTICE REFERENCE SERVICE  
WASHINGTON, D.C. 20531

Date filmed 9/8/75

THE IMPACT OF TRAINING ON JOB RELATED DECISIONS:  
AN EVALUATION OF THE  
COLORADO YOUTH WORKERS TRAINING CENTER

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This Research Was Sponsored By The  
Department of Justice, Law Enforcement Assistance Administration  
Project Number 72-C3-(2)-C, June, 1973

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SECTION ONE  
AN INTRODUCTION TO EVALUATION

The specific purposes of this study are related to the general importance being placed on evaluation, and the specific emphasis being placed on evaluation of training, by federal and state government officials, social scientists, and training and development professionals. At the national level, in an extensive analysis of federal evaluation programs conducted by the Urban Institute in 1969, Buchanan and Wholey (1972, p.17) concluded,

"...the most impressive finding about the evaluation of social programs in the Federal government is that substantial work in the field has been almost non-existent."

A survey of members of the National Council of Community Mental Health Centers, conducted in 1971 (Davis, 1972) by the National Institute of Mental Health (NIMH), revealed that program evaluation was fifth among their perceived problems. In 1972, program evaluation was number one and far beyond any other concerns indicated. As the pressure on government to solve social problems has mounted during the last few years, the significance of knowing something about the effectiveness of programs has been recognized by policy makers. Laurence E. Lynn Jr. (1972, p.24), the Assistant Secretary for Planning and Evaluation in Health, Education and Welfare (HEW) points out that, "...considerable emphasis is being placed on relating evaluation activities to the policy concerns of the agency."

In proposing the Full Opportunity and National Goals and Priorities Act, Senator Walter F. Mondale, Chairman of the Special Subcommittee on Evaluation and Planning of Social Programs (1972, pp.29-30) has recognized the importance of evaluation in stating that,

"To insure the effectiveness of the human services industry, a research and development program of unprecedented scale must be launched. Here, it seems to me, is where evaluation becomes so crucial. We must design methods for filling the gaps in our information and methods to process such information systematically. We must develop

a coherent set of problem definitions, goals, and solutions. And this is a task to be addressed at all levels of national life. In short planning and evaluation must proceed at the national and local levels more or less simultaneously."

#### The Importance of Evaluating Training

The federal government, and to some extent state governments, have played a major role in developing not only new social programs, but also programs of a more "technical" nature. These social and scientific advances have resulted in a new demand - a demand for the training of employees to keep pace with these new advances. As Byers (1970, p.2) points out,

"...in private industry and more recently in public service, there has been a growing awareness that organization and employee development and training are inextricably interwoven with the successful achievement of organizational purpose and goals, and the maintenance of the organization as a viable entity."

This recognition on the part of government and industry has resulted in not only an increased emphasis on employee training, but also on evaluation as a tool for gathering the kinds of information needed to determine if the training is keeping pace with the burgeoning technology (Johnson, 1970).

One of the major examples of the national emphasis on the evaluation of employee training comes from the Department of Labor, which is responsible for Manpower Development and Training. In 1971, six million dollars was allocated for evaluation studies, and with the passage in the summer of 1971 of the Emergency Employment Act, an additional two million dollars was allocated for Manpower Development and Training programs. In 1972, over eight million dollars was authorized to evaluate the Public Employment program. According to Buchanan and Wholey (1972), prior to the passage of the Emergency Employment Act in 1971, there had been very few planned evaluation studies of Manpower Development and Training.

#### Federal and State Policy on Evaluation

The recognition by the federal and state governments of the need for program evaluation can be seen in policy directives and legislation becoming more and more common-place. In 1965 the Elementary and Secondary Education Act (ESEA) was one of the first steps toward requiring program and project evaluation. As governmental policy makers face the ever accelerating technological development of the 60's on the one hand, and a society suffering from inflation, unemployment, and a cultural lag on the other, they have focused on evaluation as a tool for gathering information to make decisions.

Illustrative of this fact is a report of the Committee on Urban Technology (National Academy of Sciences, 1969) which recommended that,

"Five to ten percent of the Urban Technology program's funds be used for continuous evaluation. The evaluation would assure maximum learning from each project; identify technology, plans and programs that deserve dissemination; avoid repetition of less fruitful paths; guide formulation of new projects; and provide experience information to assist in the selection of both solicited and unsolicited project proposals."

A continued shift in policy is reflected in the fact that more money has been budgeted for evaluation in 1973 than ever before. There also is a shift towards fewer but larger evaluations. The overall impact studies preferred by the Office of Education, the large concentration of effort on the Emergency Employment Act by the Department of Labor and the large impact evaluation that dominates the Law Enforcement Assistance Administration (LEAA) programs all illustrate this shift. The plans being developed for evaluating HR-1 (the General Welfare and Reform and Social Security Bill) constitute one of the first attempts at a large scale interagency evaluation effort.

While the congress has not enacted all the proposed legislation, e.g., Senator Mondale's Full Opportunity and National Goals and Priorities Act, the individual departments in the Executive branch have

developed policy guidelines for grant applications. The Justice Department's Law Enforcement Assistance Administration (LEAA) (Department of Criminal Justice, 1971), as well as HEW, have revised their fiscal year '73 applications to include a section on project evaluation. Under the evaluation section, LEAA requires the applicant to "Indicate what arrangements will be made to evaluate project results and performance. This is an important aspect of the project and should be accorded the same advanced planning as the project design itself."

Where the Federal government has not enacted legislation, some States have led the way. For example, the recent amendment to California's Lanterman-Petris-Short Act, calls for an evaluation of Mental Health program effectiveness if budget appropriations are to continue. A new Massachusetts law requires utilization reviews to be carried out for all patients in the State Mental Health program. Missouri has also passed legislation to meet their responsibility to evaluate the Community Mental Health Centers. Buchanan and Wholey (1972, p.21) conclude that,

"...this increasing support is due to a continuing recognition by the government that evaluation information is needed for the development and management of social programs, rather than to the recognition that evaluation as currently practiced is the answer to their needs."

#### The Role of the Social Scientist in Evaluation

While the federal and state governments have only recently recognized the importance of program evaluation, the interest among Social Scientists, as Walker (1972, p.45) points out "...has been with us for a long time, beginning with evaluation research, which may date back to the Civil War era." In 1947, Herring (1947, p.5) identified the need for a "social science technician," for individuals "professionally trained to apply to practical situations the facts, generalizations, principles, rules, laws or formulas uncovered by social science research."

Despite efforts to improve evaluation strategies and the hundreds of programs that have been carefully evaluated, program mediocrity has stubbornly persisted. For government, and business and industry, changes and innovations often have been accepted, rejected, forgotten or allowed to "peter-out" because of a whim, a new fad, a lack of interest or other imprecise criteria. In discussing the role of evaluation research, Suchman (1970) points out that,

"A prominent aspect of the need for evaluation today is that innovation and change often proceed without appreciable relevant theoretical basis, or without careful planning, and the resultant trial and error operation can only be rationalized through evaluation."

The pressure for change is often so great that change is introduced for its own sake with no adequate basis for anticipating improvement as a result. Empirical validation through evaluation becomes increasingly important under these circumstances.

Policy makers are now demanding that evaluation be used as a tool for assisting in the decision-making process. In response to the need for evaluation, social scientists have been called upon frequently to either design or conduct evaluations. According to Johnson (1970) the responses of social scientists to this challenge has generated much controversy, not only between program personnel and the evaluators, but among the evaluators themselves. Many social scientists have avoided involvement in evaluative work. Others have approached evaluation with a narrowness of vision ill-befitting responsible professionals, and have tried to impose unrealistic conditions on programs under development, in vain attempts to make the programs more amenable to evaluation with conventional measurement instruments and experimental designs.

Buchanan and Wholey (1972, p.22) ask, "Why is it so difficult for evaluators to produce information that can or will be used to develop, improve, or operate social programs." They point out that the response of some evaluators to this question has been that many decision-makers simply do not want to act on the results for political or bureaucratic

reasons, or do not know how to use the results when they are available. The view of decision-makers, on the other hand, has been that evaluators do not produce information of a sort, in a form, or at a time that is useful in making decisions about program.

This struggle between decision-makers and social scientist-evaluators points out one of the main problems with Federal and State evaluation procedures today. Evaluation has not been institutionalized into the management procedures and administrative structures of Federal and State agencies. Commenting on the problems that exist between program personnel and evaluators, Senator Mondale (1972, pp.30-32) states that,

"It is a rule of thumb in the behavioral sciences that research must be integrated with action projects, created at the inception of the idea, if the questions to be posed are to have a reasonable chance of being answered."

He further points out three directions for evaluation that have been charted by the behavioral sciences. The three areas include (a) baseline data-gathering-research, (b) causation studies, and (c) impact assessment. With respect to the latter type of evaluation, Senator Mondale (1972, pp.33-34) contends that "since most programs are not critically examined from this perspective, it is no surprise that this is the most neglected area of evaluation, the area with the least experience, and the area with the most difficult problems of proof."

Other commentators and critics of current evaluation practices believe that evaluation methodology itself is the problem and that methods must be improved if evaluation information is to be used in policy-making. The result has been a beginning among social scientists to question their criterion measures in a way which must inevitably improve the accuracy of the results and their interpretation of them. As Rains (1970, p.vi) has stated,

"Perhaps most importantly, many of us share an uneasy but firm conviction that our evaluation problems cannot be solved with the traditional scientific methods and paradigms and the statistical refinements we have developed for their analysis."

This fact is borne out by the work of some (Stufflebeam, 1967; Provos, 1969a, 1969b; Suchman, 1967; Scriven, 1967; Stake and Denny, 1969; Weiss and Rein, 1969) who have realized that new strategies and methods are needed and are attempting to develop and test new approaches to evaluation.

#### Training and Development Professionals and Evaluation of Training

While government policy makers and social scientists have been struggling over the evaluation question, business and industry has been struggling with the same issue. Program evaluation in modern business has been conducted primarily in terms of profit and loss. During the 60's, "human relations" training and its purported link to better management, and thus higher profits, provided the impetus for increased interest in training evaluation. Serious questions were asked, not only about "human relations" training, but also about the whole training picture in general.

The result can be seen in the training and development literature, which has what Campbell (1971) calls the "cyclical article." That is, there are several prototype papers that appear in the literature at regular intervals. Among these cyclical articles is the one admonishing people to evaluate their training efforts. In a series of articles written for the Journal of the American Society of Training and Development (Nov. and Dec. 1959, and Jan. and Feb. 1960) entitled "Techniques for Evaluating Training Programs," Kirkpatrick uses the following admonition from Goodacre (1957) as an introduction,

"Managers, needless to say expect their manufacturing and sales departments to yield a good return and will go to great lengths to find out whether or not they have done so. When it comes to training, however, they may expect the return but rarely do they make a like effort to measure the actual results. Fortunately for those in charge of training programs, this philanthropic attitude has come to be taken for granted. There is certainly no guarantee, however, that it will continue, and Training Directors might be well advised to take the initiative and evaluate their programs before the day of reckoning arrives."

A few year later, Moore (1964, p.46) writes,

"We need to do more to make training evaluation a part of the management system to be carried out by line managers and program staff. This prong of training evaluation must be built into the management system so that it can be understood and used by busy line managers."

The same theme, with variation, was pursued subsequently by Lott (1967, p.38) who recommended that evaluation efforts should be directed toward the goal of shortening courses, thereby reducing costs. This may in his words, "...locate the lever needed to raise the "interest levels of business managers, public administrators and leaders in education and training, with regard to the whole subject of course evaluation."

In 1968, Catalanello and Kirkpatrick conducted a research study to identify and analyze techniques used by business, industry and government in the evaluation of their training programs. A high percentage of the 110 firms surveyed assessed trainee reactions, but few tried to measure behavior or results. They concluded that training evaluation and research was still in its "infancy." The training and development literature illustrates this fact by pointing out that the success of many training programs has too often been measured in terms of the number of participants involved and the degree of subject matter expertise demonstrated by the trainer. However, as Lawrie and Borringer (1971, p.6) point out, "...there is a consistent call for some type of measurement...measurement of training needs and measurement of training outcomes. In practice these steps are usually not carried out."

In an article entitled "Training Surveys Surveyed" Raphael and Wagner (1972) point out that the key trend emanating from these surveys involves training evaluation, or the lack of it. From the studies reviewed, they conclude that the area receiving the least amount of attention is evaluation of training programs. If training effectiveness remains unknown, training efforts may lead to losses in terms of trainee performance and satisfaction and organizational, financial, and administrative effectiveness. More than a decade ago, McGehee and Thayer (1961, p.23) stated,

"We cannot rely on opinions of experts, the enthusiasm of our trainees, the acceptance of top management, and logic alone to answer the questions concerning training effectiveness. Empirical research - decades of research is necessary."

Others (Piffin and McCormick, 1965; and Campbell, Bunnette, Lawler and Weick, 1970) have subsequently expressed similar viewpoints. The admonition to evaluate training still remains and the above comments serve to confirm the previously expressed need for further research.

SECTION TWO

THE PROGRAM BEING EVALUATED

A Brief History of the Colorado Youth Workers Training Center

In 1961, the training staff of the Colorado Division of Youth Services consisted of an employee training specialist and a secretary. There were about 300 employees to be trained, and requests for training from other state, county, city, and private youth agencies had to be turned down. A systematic program for providing youth workers with training appeared to be one of the major needs of youth agencies in the state. As training requirements increased and funds became available, the training staff was increased to two trainers and several consultants. Changes in personnel and programs in youth agencies in the '60's provided the impetus for the development of a much more sophisticated system of training.

Recognizing the need for more training, the Colorado State Legislature provided funds for refurbishing buildings at Fort Logan, Colorado, which had been given to the Division of Youth Services by the United States Department of Health, Education, and Welfare through the Fort Logan Mental Health Center. Refurbishing and staffing was completed in May, 1971. The Center officially opened July 1, 1971. The Center now has a staff of training specialists, secretaries, and a librarian. Salary for permanent staff is provided by the State Legislature, while some costs are also provided for by a grant from the United States Department of Justice, Law Enforcement Assistance Administration. Budgets for the Center currently provide for research and evaluation of the effectiveness of training in terms of employee job performance.

Goals of Colorado Youth Workers Training Center Programs

The Colorado Youth Workers Training Center is designed to function within the context of the Division of Youth Services, and to support through staff training the achievement of the Division's goals. Therefore, the specific and temporal programs of the Center depend upon current needs as defined by the Division. Within this context there are



four essential goals of the Training Center.

Goal 1.

The first goal of the Center is to serve as a learning center, with emphasis on facilities and resources, for youth workers in Colorado. That is, the Center is designed to provide a primary location or central meeting place to bring various workers together. In addition, the Center attempts to provide a number of resources for the youth worker. These resources include a library and study center, including up-to-date publications and periodicals, and a large inventory of training equipment with emphasis on audio-video capabilities.

Goal 2.

A second goal of the Center is to provide in-service training for individual workers in order to increase their professional skills and facilitate their personal growth. This goal attempts to meet the needs of Colorado youth workers for more education and training. This goal follows the recommendations for program planning of the Master Plan Committee, Department of Institutions, State of Colorado, who state that the Department should: "Provide extensive programs of in-service staff training and development."

Goal 3.

The third goal involves the creation of training programs, materials, and approaches which relate to agency or organizational objectives. This focus is directed toward total program function and structure rather than to particular individuals within the organization. The Training Center attempts to provide for the maximum integration of the Division's concern for subject matter and for its people, by encouraging and developing systematic learning relevant to actual individual and Division problems.

Goal 4.

The final goal of the Center is to offer and encourage new models, alternative concepts, innovations, and fresh approaches to problems within the Juvenile System. The Center recognizes the need for struc-

tured opportunities designed to encourage innovation and fresh approaches. Therefore, one of the central goals of the Center is to relate, as a specific structural unit, to this need.

The Trainee Population

The primary goal of the Center is to provide training for Colorado youth workers employed within the Division of Youth Services. Therefore, many of the trainees are drawn from personnel working at Lookout Mountain School for Boys, Mountview Girl's School, Golden Gate Youth Camp, Lathrop Park Youth Camp, Division of Juvenile Parole, and Division of Youth Services staff.

In addition, employees of other state and federal agencies often take specialized training. Employees of various juvenile probation departments, city and county youth center workers, and state and federal agencies also comprise the trainee population.

Finally, courses are open, on a limited basis, to youth workers employed by private agencies. This category includes teachers and students as well as workers from private helping agencies.

Training Emphasis

There are seven major areas of training offered by the Center. In the following paragraphs a brief description of each of these general areas is provided. The seven major areas include: Communication, Drugs, Groups, I-Level, Law, Management Training, and Treatment.

Communication

This area is designed for youth workers desiring knowledge of human communication. It addresses itself to the following kinds of concerns: How to improve relationships with other staff members and youth; how to correct communication blocks; and how to accomplish tasks through improved communication methods. To this end, the Training Center offers courses dealing with interpersonal communication and interviewing/counseling techniques. The courses are designed to improve the trainee's abilities in such things as: listening, one and two-way communication, giving and receiving feedback, paraphrasing,

summarizing, attending behavior, and reflective techniques.

#### Drugs

The Training Center drug courses are designed to answer questions about: What drugs are; short and long term effects of drug abuse; why people use and abuse drugs; what to do for bad trips, withdrawal, and overdoses; and treatment programs for drug abuse rehabilitation. Drug courses cover marijuana, hallucinogens, amphetamines, barbiturates, opiates, alcohol, tranquilizers, and toxic miscellaneous agents. Course formats vary from didactic to experiential, depending upon course content and the needs of the trainees.

#### Groups

Courses in a variety of areas relating to groups are an integral part of the program, since this type of expertise is vital in the Juvenile Correctional System. Training classes provide a full range of didactic and experiential activities in group process, group dynamics, and group counseling. Group programs are designed both for the beginner, who has had no educational experience with group work, and for the group worker who is involved in actual group facilitation.

#### I-Level

Since its inception in 1970, the I-Level project has been instrumental in the training of key personnel representing diversified juvenile disciplines in Colorado. The training has been specifically in areas of theory, diagnosis, and treatment. The goals of I-Level training are: to facilitate the consolidation of previous training of Division of Youth Services personnel in diagnosis, to provide in-depth seminars and consultations for the Division of Youth Services personnel who are using I-Level Treatment modes, and to make available basic I-Level training for new employees.

#### Law

Classes in this category are specifically related to the law and the juvenile. A primary intention of training is to provide familiarization with the Children's Code.

#### Management Training

Management training has become a regular part of the Division of Youth Services Staff Conferences held every two weeks. Subjects include team building, communication, job enrichment, goal-setting, working out objectives, evaluating results of management, and other subjects. Management training films are also reviewed on a regular basis at the Center, and at least one workshop is sponsored by the Center each year. Training which includes some management and supervisory subject matter is also offered as a part of seminars, conferences, and other special programs during the year.

#### Treatment

Basically, training in various treatment modalities takes two forms. The first consists of the presentations of brief overviews of several different treatment approaches. This introduction to treatment serves to familiarize youth workers with the theory, language, and application of various treatment modalities. It includes the following approaches to treatment with juvenile offenders: group dynamics, guided group interaction, transactional analysis, behavior modification, reality therapy, role playing, psychodrama, and gestalt therapy. The content of these courses is primarily didactic in nature; however, participation by class members in experiential learning is also included. These courses are offered for youth workers who are new employees or for other employees who want to learn or refresh their memories about these various treatment modalities.

The second form of treatment training involves consultation by experts with agencies in one specific treatment modality. Pre-test and post-test evaluation, as well as on-going evaluation, are often performed to assess the effectiveness of treatment training for staff members.

SECTION THREE  
EVALUATION PROCEDURES

Introduction

Two things should be kept in mind when considering the results of any evaluation research. 1. The criterion employed in evaluating the training. 2. The methods or procedures through which information concerning the criterion was gathered.

The Criterion

A review of the training and development literature reveals that there is a wide variety of criteria against which any training program might be evaluated. Whether trainees "feel good" about the training they have received, whether training affects the attitudes of trainees toward the organization, whether certain indices of productivity are affected, whether trainees comprehend and retain the content of training programs, and other such criteria exist as potential standards against which training efforts might be compared. Whatever conclusions, interpretations, and implications are drawn from the results of the evaluation research are necessarily constrained by the selection of the criterion. Thus, if evaluation research is to be useful, and if changes are to be made on the basis of the evaluation research, then the criterion selected for evaluating the training must be considered "fair" by those individuals who will employ the results in making policy decisions or revisions.

The criterion selected for this evaluation project was a simple and straight forward one: the impacts of training on on-the-job decisions. Most involved parties should have little difficulty agreeing that in-service training should be expected to affect trainee job performance. However, if the trainee population performs a variety of jobs, then finding a performance criterion against which all trainees may be compared would be an extremely difficult task. Similarly, if the training program includes a considerable variety of courses, then finding a performance criterion against which all courses may be compared would be a difficult task. Resolving these problems requires

the identification of a criterion which could be fairly and equally applied to all jobs, as well as to all elements of a training program. Such a criterion may be identified if we proceed on the basis of two assumptions: 1. With the exception of highly routinized jobs (e.g., assembly line worker), most workers are periodically confronted with the necessity of making decisions concerning the conduct of their jobs. 2. With the exception of training courses or programs whose objectives are primarily orientational and informational (e.g., providing information concerning fringe benefits, the internal operations of an organization, institutional policy), most training courses may reasonably be characterized as having a general objective of helping trainees make those on-the-job decisions which are essential to the performance of their jobs. Therefore, the impacts of training on on-the-job decisions is a criterion which seems "fair", and which allows for comparisons among types of jobs and among different elements in a training program.

#### Methods and Procedures

Having identified the evaluation criterion, an evaluation project must then be viewed in terms of the extent to which it generates reliable and valid information about the criterion. The remainder of this section outlines the procedures through which information was generated concerning the impact of training on on-the-job decisions.

#### The Trainee Population

The trainee population consisted of individuals who had participated in training programs conducted or sponsored by the Colorado Youth Workers Training Center between October, 1970, and October, 1972. This set of individuals included all Division of Youth Services employees who had attended training during this time period, and a sample of youth workers who are employed in community related agencies and institutions (i.e., probation, police, teachers, counselors, etc.)

The designated population consisted of 172 individuals. Of those 172 individuals, 12 were eventually eliminated because they had left their jobs, moved out of state, or were impossible to locate. Two individuals were unwilling to cooperate with the research team. Consequently, of the 172 individuals in the designated population, 158

were finally involved in the evaluation project. Of these 158 individuals, 115 were employed by the Division of Youth Services, Department of Institutions, State of Colorado. Forty-three individuals were trainees from outside the Division of Youth Services, and represented a variety of youth-related jobs in a number of community agencies and institutions. The breakdown of the total population with respect to departmental and institutional affiliation follows:

Department	Number
1. Lookout Mountain Boys School	18
2. Mountview Girls School	23
3. Golden Gate Youth Camp	7
4. Lathrop Park Youth Camp	6
5. Education	13
6. Closed Adolescent Treatment Center	22
7. Parole	13
8. Reception and Diagnostic Center	5
9. Other DYS Trainees	8
10. Community Youth-Related Agencies and Institutions	43
	<hr/> 158

Having enumerated the population to be involved in the evaluation research, a series of steps were followed leading to the actual conducting of interviews with the trainees: 1. A meeting was held involving all heads of departments from which interviewees would be drawn. The present investigation was explained and the cooperation of department heads was solicited. 2. Letters of orientation and explanation were written and mailed from the Director of the Division of Youth Services to: a. Department heads, reinforcing agreements arrived at during the meeting alluded to above. b. Division of Youth Services employees, explaining the present study, guaranteeing anonymity to the respondents, indicating that their superiors were aware of and cooperating with the research project, and indicating that the respondents would be contacted by a member of the research team for purposes of scheduling an interview.

c. Trainees outside of the Division of Youth Services, explaining the present study, asking for their cooperation, guaranteeing anonymity, and indicating that the respondents would be contacted by a member of the research team for purposes of scheduling an interview. Copies of these three letters may be found in Appendix C. 3. Six interviewers were trained, according to the procedures which are outlined later in this section. 4. Interviewers telephoned each respondent, arranged for a time and place for the conduct of the interview, and completed the interview.

#### The Construction of the Interview Schedule

The objectives of the present evaluation research required that information be obtained with respect to the following phenomena: 1. The kinds of decision situations encountered by the subjects in the performance of their jobs. 2. The factors which influenced the subjects to resolve decision situations in particular ways. 3. The types of job-related training the subjects had received. 4. The specific training which had been conducted by, or had been sponsored by the Colorado Youth Workers Training Center. 5. The kinds of decision situations, encountered by the subjects, which were influenced by the Colorado Youth Workers Training Center training. 6. In instances wherein the subjects could recall no incidents in which on-the-job decisions were affected by training, the reasons for such absence of training impact.

The general method selected for generating these classes of information was the critical incident technique. Our present concern is with the application of this technique to the specific objectives of this evaluation project.

An interview schedule was constructed which had the following specific objectives: 1. Put the interviewee at ease and explain the study in general terms so that the interviewee will be able to respond with appropriate and helpful information. 2. Get the interviewee to think about his job in terms of the types of decisions he is usually required to make in the performance of his job. 3. Get the interviewee to recall, and to report in detail, three specific incidents in

which he was required to make on-the-job decisions. 4. Get the interviewee to recall, for each of the three incidents, any factors which may have influenced the way in which the interviewee resolved the decision incident. 5. Get the interviewee to recall the specific training he had received from the Colorado Youth Workers Training Center. 6. Get the interviewee to recall and report in detail specific instances in which on-the-job decisions, made by the interviewee, were influenced by the training he had received from the Colorado Youth Workers Training Center. 7. In instances wherein the interviewee could not recall specific decisions which were influenced by training, get the interviewee to identify those reasons why the training he had received had not influenced his on-the-job decisions.

An interview schedule was constructed to attain these seven general objectives. Additionally, the interview schedule was developed so as to gather supplementary information which would be helpful in the analysis and interpretation of interviewee responses. The complete interview schedule is contained in Appendix B. If the reader will inspect the interview schedule at this time, he will be better able to understand the overall strategy and the results of this evaluation project.

#### Pre-testing the Interview Schedule

After the interview schedule had been constructed, a pre-test was run, involving eight interviews. Five members of the staff at Swedish-Porter Hospital, Denver, and three members of the staff at the Colorado Youth Workers Training Center were interviewed. The eight interviewees represented jobs at three levels (from first level worker to third level supervisor) in the two organizations. The pre-test interviews resulted in the conclusions that: 1. The questions were easily comprehended. 2. The responses provided the kinds of information for which the interview schedule was developed. 3. One section of the interview schedule had to be revised so as to provide a smoother transition between specific questions. 4. Some minor changes in wording of questions and instructions to interviewers had to be made. Following the revisions identified above, the interview schedule was considered adequate for

use in the formal interviewing of the population. The estimate of the time taken to complete an interview was approximately one hour.

#### The Validity of the Method.

Validity, as it is traditionally defined, refers to the accuracy with which a measure taps a theoretical concept or construct. Validity, as it must be used in referring to a method such as an interview schedule, relates to the adequacy with which the method generates "accurate" and "appropriate" information. The validity question with which we are presently concerned, therefore, are of two kinds: 1. Are subjects likely to report accurately the critical incidents called for by the interview schedule? 2. Can the critical incident reports be interpreted appropriately by researchers who subsequently characterize incidents in terms of more general categories?

We shall contend that the basic method associated with the critical incident technique has been established as adequate for our present research objectives. We will not review all of the validation available on the critical incident technique, but will refer to several illustrative validation studies.

With respect to the accuracy of the critical incident reports, several investigations have compared the reports generated by critical incident techniques with descriptions of the same events contained in formal records of an organization. For example, Flanagan (1954) compared the number of critical incidents of different types obtained from interviews collected in the Delco-Remy Division of General Motors with those recorded daily by foreman on performance records. The comparisons produced very similar results. Subsequently, Safren and Chapanis (1960) compared critical reports of medication errors by nurses in a 1100 bed hospital with formal records of such incidents which were kept for legal purposes and which were part of required procedure for all nursing personnel. The two types of reports, critical incident and formal records, corresponded closely. Indeed, the investigators argued that the critical incident reports contained more information and were more descriptive of the incidents than were the formal reports contained in hospital records.

Not only does the critical incident technique seem to yield accurate descriptions of on-the-job events, the types of incidents reported are not greatly affected by variations in the wording of interview questions. Thus, the general format of the critical incident technique seems to generate stable and consistent descriptions of incidents, even when the specific questions associated with the technique are allowed to vary. (Flanagan, 1954, p.332).

Ways in which job or job aspects are characterized, based upon critical incidents, must be appropriate. Appropriateness rests upon both a validity issue and a reliability issue. To the extent that a total set of incidents are characterized as having similar dimensions by different independent observers, we may claim that the job aspects to which the incidents relate have been validly identified. In other words, observers might agree on the categories which may be employed in characterizing a total set of incidents. This form of agreement deals with the appropriateness of the categories. Once the categories are established, however, independent observers may or may not agree with respect to assigning given incidents to specific categories. This form of agreement deals with the reliability with which events are assigned to categories.

Wagner (1951) demonstrated that two different teams of interviewers, without extensive training, were able to arrive at very similar results in terms of the frequencies with which types of incidents characterized different jobs. The interviewers gathered incidents from pilots, flight engineers, and radar observers. Each team of interviewers operated at different Air Force Bases. Yet, the correlations between frequencies of job elements obtained by the two teams of interviewers were .93 for pilots, .91 for flight engineers, and .97 for radar observers. Thus, percentage distributions of the extent to which certain job dimensions characterize certain jobs were arrived at with great similarity by independently operating interviewer teams.

The preceding studies are illustrative of investigations into the general adequacy of the critical incident technique. The method should be considered adequate for our purpose. We proceeded to focus our attention on the reliability of the coders in this investigation. Our

discussion of inter-coder reliability appears toward the end of this section.

#### Interviewer Training

The interviewing staff for this project consisted of six interviewers, five of whom were doctoral students in speech communication at the University of Denver. Each of the interviewers had had graduate level course work in research methods and were comparatively knowledgeable about survey research methods prior to their being hired for this project. Nevertheless, a 2 day training program for interviewers was conducted. This program consisted of the following units.

1). Orientation. A description of the organizational structure of the Division of Youth Services, indicating departments within the Division, their relationships with each other and their basic functions.

2). Research Objectives. A description of the general and specific purposes of the present research project. The basic empirical strategies involved in evaluation research. The empirical strategy selected for use in this project. The classes of information this project must generate in order to adequately evaluate training center programs.

3). Population. The population of respondents to be interviewed. The assignment of interviewers to subjects. The initial contact which had already been made with individuals in the population.

4). Contacting Subjects. The procedures to be followed in establishing contact with subjects and in soliciting cooperation of the subjects with the research team.

5). The Interview Schedule. The specific objectives of the interview schedule. The specific purpose of each of the items within the interview schedule. Interpreting interview items to the subjects. Following the interview schedule in the conduct of the interview.

6). Interviewer Behavior. Establishing initial rapport with the interviewee. The use of lead-ins and transitions. Appropriate and inappropriate behavior during the interview. The use of probes.

Techniques for facilitating interviewee responses.

7). Practice Interviews. Each of the interviewers conducted practice interviews with members of the Colorado Youth Workers Training Center staff. After the practice interviews a meeting was held in which the interviewers discussed the conduct of the practice interviews, and useful techniques for resolving special problems and for facilitating interviewee responses.

At the conclusion of the two days of interviewer training, the project staff was satisfied that the interviewers were competent to conduct interviews with individuals in the population. The interviewers then began the process of contacting individuals and arranging for the interviews.

#### Categorizing Interviewee Responses

The interview schedule called for relatively "open-ended" responses from interviewees. There was no basis, in terms of prior research or in terms of theory, for the arbitrary development of categories prior to the gathering of data. Hence, the procedures for interpreting and categorizing interviewee responses were developed after the interviews were completed. Four category systems were developed for coding interviewee responses: 1. A set of categories for coding and interpreting the kinds of decision situations interviewees reported having been confronted by. This set of categories is hereafter referred to as "decision categories." 2. A set of categories for interpreting and coding those factors which influenced the interviewee to resolve the decision situations in particular ways. This set of categories is hereafter referred to as "influence categories." 3. A set of categories for interpreting and coding those reasons (where applicable) that interviewees reported why, in their judgment, the training may not have been influential in helping them to resolve on-the-job decisions. This set of categories is hereafter referred to as "training evaluation categories." 4. A set of categories for distinguishing among the types of jobs interviewees performed. This set of categories is hereafter referred to as "job categories."

Since much of the results of this evaluation project are expressed

in terms of these four sets of categories, a careful consideration of the categories is necessary for an adequate understanding of this report. Hence, each of the four category systems will be considered next.

## DECISION CATEGORIES

### Introductory Comments

A content analysis was performed on the decision incidents described by respondents. Categories were identified which referred to the types of situations respondents were in when a decision was required of them or types of conditions which resulted in the necessity to make a decision. This category system has three levels of specificity: 1. There are five very general categories. 2. There are twelve categories of intermediate specificity. 3. At the most specific level, there are twenty-two categories. Thus, the results of this evaluation project may be expressed in terms of three different degrees of specificity.

The character of the decision incidents reported by respondents did not allow for the development of mutually exclusive categories. However, two rules governed the development of the categories and the subsequent coding of incidents: 1. Movement toward specific decision. 2. Movement toward specific category.

"Movement toward specific decision" implies the following:

1. When a decision involves a variety of conditions, emphasis is given to those conditions which require immediate attention. 2. When a number of different decisions are implied by the decision incident, emphasis is given to that decision which is implied as a first step. The following example may illustrate the two aspects of the rule: "movement towards specific decision." If a runaway is discovered in progress, there may be a variety of conditions surrounding that incident. However, the condition of the runaway itself requires more specific and immediate attention than other, perhaps related conditions. Similarly, there may be a number of decisions associated with the occurrence of a runaway. There may be decisions concerning punishment, the handling of youth complaints, the kind of counseling to

engage in with the runaway, etc. However, the logically prior decision, in a time sense, concerns how to intervene or abort the runaway attempt. The second rule, "movement toward specific category", implies: 1. If a decision incident is potentially related to a number of different categories, the most specific category available is chosen to characterize the decision incident. 2. If the report of the decision incident refers to a variety of conditions potentially related to a number of categories, the respondent's report of what he actually decided is used as the basis for inferring which of the decision conditions the respondent himself was attending to. The following example may serve to illustrate "movement toward specific category." If a runaway has occurred, and the youth has been returned to the institution, and if the youth threatens another runaway at the earliest opportunity, and if his behavior is generally disruptive and unmanageable, then a variety of decision categories might be implied. These implied decision categories might be "rewarding or punishing a youth" or "counseling/treatment decisions" or "disposition of a youth." However, if the respondent indicates that the youth was sent to the Closed Adolescent Treatment Center, then the decision incident is treated as one involving the category "disposition of a youth" and the further subcategory "referral to other units."

The following categories represent types of decision conditions described by the respondents.

### I. Decision Situations Requiring Immediate Action.

A. Crisis Intervention. This category refers to situations in which respondents were required to intervene in order to avoid relatively serious consequences of youth behavior. Within this category, there are two subcategories: 1. Drugs or Accidents. This subcategory refers to decision situations in which the respondents were required to intervene in situations which threatened the health or well-being of a youth. Bad trips, overdoses, or non-drug accidents which posed clear and present danger to the physical or mental well-being of a youth are representative of this subcategory. 2. Serious Crime or Runaway in Progress. This subcategory refers to situations in which



the respondent was required to cope with conditions where-  
in the respondent, himself, had discovered a crime or run-  
away in progress. This subcategory does not refer to de-  
cisions associated with the treatment of youth after the  
crime or runaway had been stopped or after it had been  
completed and the youth was apprehended. This subcategory  
refers only to the decision the respondents were required  
to make when they discovered a crime or runaway in pro-  
gress. "In progress" refers also to the discovery of a  
crime or runaway that is being planned, or is apparently  
about to occur.

- B. Aggressive Behavior/Violence. This category refers to  
decision conditions in which respondents were required to  
cope with aggressive or violent behavior by a youth or  
youths. "Aggressive behavior" implies verbal threats, dis-  
ruptive behavior, and behavior in which the youth deliber-  
ately refuses to comply with orders or assignments from a  
youth worker. "Violence" implies physical aggression.  
This category is further subdivided into four subcategories:  
1. Youth toward worker, in which aggression or violence is  
directed by a youth toward a youth worker. 2. Youth to-  
ward youth, in which violence or aggression is directed by  
a youth toward other youths. 3. Worker toward youth, in  
which violence or aggression is directed by a youth worker  
toward a youth or youths. 4. Non-directed, in which vio-  
lence or aggression is exhibited by a youth or youths, or  
youth behavior is unmanageable, but the behavior is dir-  
ected toward no specific target.

## II. Decisions Involving the Treatment of Youths.

- C. Rewarding or Punishing a Youth. This general category re-  
fers to decision situations in which respondents were re-  
quired to decide whether or not the youth should be re-  
warded or punished, or the nature of such rewards or pun-  
ishment. This category also includes situations in which  
the respondents were required to conduct investigations  
directed toward determining the guilt or innocence (in the

non-legal sense) of particular youths.

- D. Handling Youth Complaints or Requests. This general cate-  
gory refers to situations in which a respondent was re-  
quired to decide how to interpret or whether to respond  
to youth complaints, or whether to grant specific requests.
- E. Counseling/Treatment. This category refers to situations  
in which the respondent was required to decide, or to  
advise professional associates concerning, the kind of  
treatment to provide for youths, the kind of counseling  
to engage in with youths, or the kind of interpersonal  
relationship to establish or maintain with youths.
- F. Disposition of a Youth. This category refers to situa-  
tions in which the respondent was required to make a for-  
mal decision, as to the youth's status or location with-  
in the system. This category allowed for the establish-  
ment of three subcategories: 1. Release or Parole, in-  
volving decisions concerning whether the youth would be  
released from the institution, whether the youth would be  
paroled or whether parole would be revoked, the conditions  
of a parole, the assignment of a youth to a specific pa-  
role agent, etc. 2. Referral to other units, involving  
decisions concerning whether the youth would be trans-  
ferred from one unit to another within a system, the  
placement of a youth within the system, or the sending of  
a youth to another unit or a specific professional for  
assistance. 3. Recommendations to courts, involving deci-  
sions concerning what formal recommendations or evaluations  
concerning a specific youth should be forwarded to a court  
in which the disposition of a youth was to be decided.

## III. Management Decisions.

- G. General Administration. This category refers to decision  
situations in which the respondent was required to make  
managerial or administrative decisions, not involving  
personnel decisions. This category is further subdivided  
into: 1. Financial: budget and supplies, involving

decisions concerning the allocation of money or the procurement of supplies and equipment. 2. Institutional policy, involving decisions concerning the establishment or the revision of general policies covering an entire institutional unit. This subcategory refers also to decisions concerning program planning and development. 3. Inter-Unit Coordination, involving decisions concerning formal contacts or relationships among different units within a given institution, or between an institutional unit and a unit outside the institution.

- H. Personnel. This category refers to situations in which the respondent was required to make decisions concerning workers under his direct supervision. This category is further subdivided into: 1. Hiring, involving decisions concerning the acquisition or selection of individuals for specific jobs. 2. Dismissal and reprimand, involving decisions concerning whether an individual should be removed from a job or whether an individual should be reprimanded or "counseled" in terms of his performance of the job. 3. Staff assignment and scheduling, involving decisions concerning the delegation of job responsibilities, the assignment of individuals to specific tasks, the scheduling of work time or responsibilities of members of a given staff.

#### IV. Decisions Involving Job-relevant Interpersonal Relationships.

- I. Relationships with professional peers and associates. This category refers to situations in which the respondent was required to make a decision concerning the type of relationship to establish or maintain with a co-worker, a superior, or a subordinate. This category also refers to decisions concerning whether or not to confront a co-worker or associate with suggestions, complaints, grievances, etc.
- J. Advising and coping with parents. This category refers to situations in which the respondent was required to decide

whether or not to establish communication with parents, what kind of relationship to establish with a given parent, or how to advise or counsel a parent.

- K. Presentations. This category refers to situations in which the respondent was required to make decisions concerning the planning, organization, or conduct of formal meetings. This category includes public speeches, reports or briefings, the structure or conduct of training programs, etc.

#### V. Personal Decisions.

- L. Personal. This category refers to situations in which the respondent was confronted with the necessity of making decisions in which the consequences were seen by the respondent as primarily personal. The category includes decisions concerning job changes, relationships within the respondent's family, decisions concerning the respondent's future goals, etc.

To provide a recapitulation and a clarification of the arrangement of these categories, the following general outline is offered. You may note from the outline the three degrees of specificity involved in defining the categories. The categories move from general levels of specificity (I through V) to intermediate degrees of specificity (A through L) to the subcategory degree of specificity (small numbers).

OUTLINE OF DECISION CATEGORIES

- I. Immediate Action
  - A. CRISIS INTERVENTION
    - 1. Drugs or Accidents
    - 2. Serious Crime or Runaway in Progress
  - B. AGGRESSIVE BEHAVIOR OR VIOLENCE
    - 1. Youth toward Worker
    - 2. Youth toward Youth
    - 3. Worker toward Youth
    - 4. Non-Directed
- II. Treatment
  - C. REWARDING OR PUNISHING A YOUTH
  - D. HANDLING YOUTH COMPLAINTS OR REQUESTS
  - E. COUNSELING/TREATMENT
  - F. DISPOSITION OF A YOUTH
    - 1. Release or Parole
    - 2. Referral to Other Units
    - 3. Recommendations to Courts
- III. Management
  - G. GENERAL ADMINISTRATION
    - 1. Financial: Budget and Supplies
    - 2. Institutional Policy
    - 3. Inter-Unit Coordination
  - H. PERSONNEL
    - 1. Hiring
    - 2. Dismissal and Reprimand
    - 3. Staff Assignment and Scheduling
- IV. Interpersonal Relations
  - I. RELATIONSHIPS WITH PROFESSIONAL PEERS AND ASSOCIATES
  - J. ADVISING AND COPING WITH PARENTS
  - K. PRESENTATIONS
- V. Personal
  - L. PERSONAL

INFLUENCE CATEGORIES

Not only were respondents asked to report, in detail, decisions they were required to make in the routine performance of their jobs, but they were also asked to identify and report factors which influenced them to resolve each decision condition in the manner which they chose. That is, the respondents attempted to identify and report any sources of influence which were operating in the resolution of a specific decision situation.

A content analysis performed on the sources of influence described by the respondents resulted in the identification of four categories at the most general level, eleven categories of intermediate specificity, and a total of sixteen categories at the most specific level. In the development of categories and the subsequent coding of influences the unit of analysis was each numbered source of influence recorded on the interview schedule. Two rules governed the assignment of recorded influences in the infrequent case when an influence did not clearly fit into a single category: 1. Multiple assignment and 2. Referral to context.

"Multiple assignment" implies that when a numbered influence clearly fit into two established categories, it was assigned to both categories. The rationale for this rule is as follows: since the numbering of sources of influence was arbitrarily done in the recording process by the interviewer and not systematically by the interviewee. The following example may help illustrate the rule of "multiple assignment". The influence recorded as "the institution had a good behavioral modification program, which is what the psychiatrist said she needed" would be assigned to two categories: 1. "program/facilities" and 2. "professional recommendation", since the single source of influence might as easily have been recorded as two separate influences.

"Referral to context" implies that when a numbered influence does not clearly fit into any established category, a referral to the context of the influence was made by considering both the decision conditions and the resolution associated with the influence. The following example may help illustrate the rule of "referral to context".

The assignment of the source of influence recorded as "Bill's ability to make friends around the institution" would be made after referring to the decision conditions in order to determine whether Bill was a fellow staff member of the interviewee or a boy at the institution. That determination from context would result in the assignment of the influence either to the category of "client" or "staff involvement".

The following categories represent types of influences described by the respondents.

I. Educational. This general category refers to sources of influence derived from the respondents' experiences in educational contexts. This general category was further divided into three categories of intermediate specificity.

A. Formal Education. This category refers to knowledge and insights acquired by the interviewee through formal schooling, books, journals, research reports, and any formal educational experience excluding in-service or job-related training.

B. Training Center. This category refers to all courses offered or sponsored by the Colorado Youth Workers Training Center.

C. Non-Center Training. This category refers to all in-service or job-related training other than that which was offered by or sponsored by the Colorado Youth Workers Training Center.

II. Personal. This general category refers to influences which involved prior personal experiences of the respondent or the accumulated results of such personal experiences. The category is divided into three categories of intermediate specificity.

D. Experience. This category refers to influences which involved the interviewee's experiences with similar or related situations either first or secondhand. These prior experiences, however, did not concern the individual or parties involved in the present decision situations. That is, this category refers to a respondent's

report that the decision made in the present situation was influenced by experiences with prior similar situations.

E. Personal philosophy. This category refers to the personal philosophy, preferences, or attitudes about the way things are, or should be done. The category includes personal goals, beliefs, or values of the interviewee.

F. Common Sense. This category refers to an influence that may seem either obvious or obscure but which is assumed to be innate or shared by all. References to common values applicable to any decision, such as "fairness" or "practicality" are also included in this category.

III. Involved Parties. This general category refers to influences wherein the respondent's decision was affected by some feature or characteristic of the other individuals involved in the decision situation. This category is divided into two categories of intermediate specificity.

G. Client. This category refers to an influence that is related to an individual that is involved in the decision condition, when this involved individual is in a client role. The influence may vary from past experience with the client or knowledge of his record or family condition; his physical condition, behavior or personality; his needs, desires, or personal relationships; to the interviewee's evaluation of or attitude toward the client. But the influence must make at least an indirect reference to a client involved in the decision condition. The client is considered any person for whom an attempt is being made to render a service by the interviewee or the organization for which he works. Typically, "client" refers to a youth, a student, or a counselee.

H. Staff Involvement. This category refers to an influence that is related to an individual that is involved in the

decision condition who is in a staff role. The influence may vary from staff competencies, attitudes, personalities, or reputations, to the needs, job satisfaction or morale of the staff members. But the influence which is recorded must make at least an indirect reference to a staff member involved in the decision situation. A staff member is considered any person working (or being considered for work) with the interviewee or the organization for which the interviewee works, in either a salaried or volunteer position for the purpose of rendering services to clients. Examples of staff would include employees of other organizations working with the interviewee's organization, volunteer counselors, and foster parents, as well as the interviewee's superiors and fellow workers.

IV. Non-Involved Parties. This general category refers to sources of influence whose origins are individuals outside of the immediate decision situation. This category is divided into three categories of intermediate specificity.

I. Consultation. This category refers to influences resulting from consultation with an individual who is not directly involved in the decision situation. While the influence need not result from personal conversation with another (incoming data such as reports are included), the source of the influence must be another individual or individuals not directly involved in the decision condition. This category of influence is further subdivided into four subcategories with respect to the nature of the consultation. 1. Professional recommendation. This subcategory refers to an influence which originates from a professional individual performing a job or function other than that of the interviewees'. For example, a social worker. 2. Supervisory influence. This subcategory refers to an influence which originates with one of the interviewee's superiors. This subcategory includes

both supervisory recommendations and directives. 3. Staff consultation. This subcategory refers to an influence which originates with an individual performing a job or function similar to the interviewees. For example, recommendations from co-workers. 4. Non-professional consultation. This subcategory refers to an influence which originates with a non-professional individual, or individuals. Examples of such individuals include friends, parents, and community members.

J. Programs/facilities. This category refers to an influence relating to the character, availability, or needs of a program, facility, or treatment method.

K. Constraints. This category refers to an influence which the interviewee views in some way as limiting or constraining the decision process, and over which the interviewee has limited control. This category is further divided into three subcategories with respect to the type of constraint operating. 1. Law/rules/procedures. This subcategory refers to a constraint due to laws, rules or regulations of an institution, including security considerations, formal policies, or standard procedures regulating behavior of workers. 2. Time/work/money. This subcategory refers to a constraint due to time pressures, competing job demands which require the respondent to resolve particular decision situations quickly, or financial considerations which can limit the decision alternatives available to a respondent. 3. Situational alternatives. This subcategory refers to features or characteristics of the decision situation itself which severely restrict the range of alternatives the respondent can reasonably consider in resolving the decision situation. For example, severe weather, telephones out of order, etc.

As was the case with the decision categories, these influence categories are organized according to three degrees of specificity. The following outline summarizes the influence categories for the three levels of specificity.

OUTLINE OF INFLUENCE CATEGORIES

- I. Education
  - A. Formal Education
  - B. Training Center
  - C. Non-Center Training
- II. Personal
  - D. Experience
  - E. Personal Philosophy
  - F. Common Sense
- III. Involved Parties
  - G. Client
  - H. Staff Involvement
- IV. Non-Involved Parties
  - I. Consultation
    - 1. Professional Recommendation
    - 2. Supervisory Influence
    - 3. Staff Consultation
    - 4. Non-Professional Consultation
  - J. Program/Facilities
  - K. Constraints
    - 1. Laws/Rules/Procedures
    - 2. Time/Work/Money
    - 3. Situational Alternatives

TRAINING EVALUATION CATEGORIES

When respondents were unable to recall specific decision situations in which their decisions were influenced by the training they had received from the Colorado Youth Workers Training Center, then the interview branched to another set of questions. These questions centered on the respondents' descriptions of reasons why the training they had received had not been influential with respect to their job-related decisions. A content analysis was performed on the reasons respondents provided for the relative non-influence of training on their job-related decisions. Keep in mind the fact that the respondents' evaluations of training, as these evaluations are interpreted in terms of the categories here presented, are all negative evaluations. That is, this particular part of the interview recorded only reasons why training might be considered ineffective, rather than reasons why the training might be considered effective.

The content analysis resulted in the identification of five general categories, and the further division of three general categories into sub-categories. A description of the categories follows.

A. Conduct of the program. This category refers to responses wherein the non-influence of the training program or programs was associated with the manner in which the program was conducted. This general category is further sub-divided into two sub-categories: 1. Instructor. This sub-category refers to the instances in which the respondent described the specific instructor of the program in terms of the instructor's performance, behavior, or attitudes. 2. Course Format. This sub-category refers to instances in which the respondent described characteristics of the course in terms of its organization, the arrangement of units within the course, exercises and supplementary learning experiences, instructional methods and devices employed, etc.

B. Content of the program. This general category refers to instances in which the respondent described the specific information, theoretical material, ideas, or suggestions which made up the substance of the training program. This general category is further sub-divided into two sub-categories: 1. No new information or ideas. This sub-

category refers to instances in which the respondent described the course content as being a repeat of ideas or information the respondent had already been exposed to, as dealing with simple common-sense notions, or as providing no new insight into job-related problems.

2. Abstract-Theoretical. This category refers to instances in which the respondent described the content of the program as being presented at too abstract a level, as dealing with content which was too theoretical in nature, or as not providing sufficient illustration of the concrete, or practical utility of the content.

C. Discrepancies between training and job. This general category refers to instances in which the respondent described job characteristics, or job-related factors, which made it difficult or impossible to apply the results of his training experiences to his specific job. This general category encompasses instances in which the respondent alluded to the relevance, or non-relevance of the material for his job, the lack of opportunity to try out suggestions, other job factors which were of greater or more immediate priority than the ideas or suggestions he had experienced in the training program, and any other comment which implied that the training program or programs were inapplicable to his specific job demands.

D. Trainee-related. This general category refers to instances in which the respondent described personal, or more individual reasons why the training was not influential with respect to his job-related decisions. This general category is further sub-divided into two sub-categories: 1. Rejection of program information or ideas. This sub-category refers to instances in which the respondent rejected, disagreed with, or dismissed the information, ideas, or suggestions contained within a training program. 2. Personal reasons for attending training program. This sub-category refers to instances in which the respondent indicated that the training was not influential primarily because his reasons for attending the program were not related to any motivation or interest on his part with respect to improving or changing his job performance.

E. Interview-related. This general category refers to instances in which the respondent implied that the question was inappropriate or that the task of reporting specific decision situations influenced by

training was too difficult. In other words, this general category is one which implies that the reasons for the respondent's inability to recall training-influenced decisions were not a function of the training program, his job, or his personal motivations, but were a function of the difficulty the respondent experienced in adequately understanding or replying to the question.

Relatively few categories were required in order to describe reasons trainees provided for why training may not have influenced their on-the-job decisions. Since few categories were required, there was no need to collapse categories into very broad or global categories. The following outline, therefore, presents the categories at the two levels of greater specificity.

#### OUTLINE OF TRAINING EVALUATION CATEGORIES

- A. CONDUCT OF THE PROGRAM
  - 1. Instructor
  - 2. Course Format
- B. CONTENT OF THE PROGRAM
  - 1. No new information or ideas
  - 2. Abstract-Theoretical
- C. DISCREPANCIES BETWEEN TRAINING AND JOB
- D. TRAINEE-RELATED
  - 1. Rejection of program information or ideas
  - 2. Personal reasons for attending training
- E. QUESTIONNAIRE-RELATED

## JOB CATEGORIES

The identification of categories which describe types of jobs being performed by the interviewees was approached somewhat differently than the preceding category systems. The Colorado State Department of Personnel job specification manual provided already existing job categories. Consequently, this set of categories is the only one which did not have to be developed from responses of the interviewees.

The existing categories were based upon the designation "youth service worker", which was a generic title that had resulted from a classification study performed for the Department of Personnel. There are ten levels of youth service worker, each of which includes a number of specific job titles. For example, "Youth Service Worker V" includes such job titles as Correctional Counselor, Parole Agent I, etc. We have employed, for this study, the ten levels of Youth Service Worker instead of all of the specific job titles associated with Youth Service Workers, primarily for reasons of coding ease. Following are the 10 levels of Youth Service Worker.

Youth Service Worker I: Under immediate supervision, participates in a formal and on-the-job training program to acquire proficiency and competence in the supervision and care of institutional residents; or is assigned to security, safety and well-being of institutional residents during a night period and does related work as required. This category includes jobs such as those performed by Junior Resident Supervisors and Volunteers.

Youth Service Worker II: Under supervision, supervises a group of institutional residents in a group living setting; provides routine guidance and non-professional counseling; performs safety and security functions; and does related work as required. This category includes jobs such as those performed by Resident Supervisors and Youth Camp Counselor I.

Youth Service Worker III: Under general supervision, supervises subordinates within a cottage or dormitory; or directly supervises a group of security institutional residents in a group-living setting and does related work as required. This category includes such jobs as those performed by Senior Resident Supervisor, and Youth Camp Counselor II.

Youth Service Worker IV: Under general supervision, plans, directs and coordinates the work of subordinates in an agency responsible for the custody, guidance and training of residents assigned; and does related work as required. This category includes such jobs as those performed by Principle Resident Supervisors, Youth Camp Counselor III, Youth Counselors, Mental Health Nurse I, and Occupational Therapists.

Youth Service Worker V: Under general supervision, performs professional counseling work with individuals and groups; and does related work as required. This category includes such jobs as those performed by Parole Agent I, Group Home Parents-Counselors, Child Welfare Caseworker I, Private Agency Counselor, Senior Recreation Specialists, and Mental Health Nurse II.

Youth Service Worker VI: Under direction, as a fully qualified counselor, conducts rehabilitative counseling work for individuals and groups; serves as a lead worker over other counselors or assistants; and does related work as required. This category includes such jobs as those performed by Senior Correctional Counselor, Parole Agent II, Psychologist I, Juvenile Probation Counselor, Child Welfare Caseworker II and III, Social Worker III.

Youth Service Worker VII: Under direction, plans, organizes and directs the work of a group of Youth Service Workers or Institutional Counselors; reviews case work load and instructs on policies and techniques in case-handling, recording, counseling, preparation of rehabilitation plans and training assignments; reads and corrects reports completed by Youth Service Workers. This category includes such jobs as those performed by Juvenile Parole Supervisors, Psychologist II, Clinical Services Supervisor, Child Welfare Supervisor, Youth Service Bureau Director, High School Principal, Social Worker IV.

Youth Service Worker VIII: Under direction, assists the Youth Institution Director in the planning and direction of a Training School, program for the custodial care and rehabilitation of juveniles committed by the courts; and does related work as required. This category includes such jobs as those performed by Assistant Youth Institution Director, Assistant Youth Camp Director, Psychologist III.



Youth Service Worker IX: Under direction, is responsible for planning and directing the program of a Training School for the custodial care and rehabilitation of juveniles committed by the courts; and does related work as required. This category includes such jobs as those performed by Youth Institution Director, Youth Camp Director, Juvenile Parole Director.

Youth Service Worker X: Under direction, teaches academic and special courses in a State Institution; does related work as required. This category includes such jobs as those performed by Special Education Teacher, Institutional Vocational Teacher, Public School Teacher.

The classification of individuals with respect to these ten job categories was based upon their self-reported job title, their job description, and institutional records. In subsequent analyses of data, it was discovered that some of the job categories contained relatively few interviewees. That is, the number of trainees fitting certain job categories was so small as to severely restrict empirical comparisons across all ten job categories. Consequently, these ten job categories were reconstituted into four more general job types.

Youth Service Worker I, II, III, and IV consist predominantly of individuals who are in direct contact with youth in a resident setting. For purposes of data analysis, these four job categories were combined and were given what seemed to be a reasonably descriptive label, "cottage personnel".

Youth Service Worker V and VI consist predominantly of individuals who serve in professional counseling roles or who supervise those youth service workers who are in frequent contact with youth in a resident setting. For purpose of data analysis, these two categories were combined and were given what seemed to be a reasonably descriptive label, "supervisor/counselors".

Youth Service Worker VII, VIII, and IX consisted predominantly of individuals whose job responsibilities are primarily administrative. That is, these individuals tend to be responsible either for the management of institutional units, combinations of institutional units, or categories of other youth service workers. These three job categories were combined, for purpose of data analysis, and were labeled,

"administrators".

Youth Service Worker X is a distinct category which consists essentially of teaching and academic personnel. This category was retained intact and labeled simply, "teachers".

For purposes of data analysis, the, job categories were reconstituted into four general types of jobs: 1. Cottage personnel, 2. Supervisor/counselors, 3. Administrators, 4. Teachers.

#### Reliability of Category Systems.

Assuming that a given set of categories does, in fact, describe in general terms the content for which the categories were developed, then the adequacy of a category system is essentially a function of its reliability. The type of reliability associated with coding events into categories is inter-judge or inter-observer reliability. That is, do two independent observers, when interpreting the same unit or event (a decision, a source of influence, a reason why training was not effective) assign that event or unit to the same category? Consider, for example, the interviewee's reports of types of decisions made in the routine performance of their jobs. Each decision situation reported by an interviewee may be considered a "unit." The major form which the data takes, in this report, is the distribution of units across categories. That is, how many decisions of type A were made by individuals who performed job type 1, how many decisions of type B were made by these same individuals, etc. In order for us to have any confidence in the data, we must be assured that a given unit "belongs" in a certain category. This assurance is gained by determining whether or not independent observers or coders assign specific units to identical categories.

Reliability was established for three of the four category systems described herein. The fourth category system, job categories, consisted of relatively simple and straight forward classification of interviewees in terms of the types of jobs performed by them. Reliability was not considered to be at issue with this set of categories. For the other three, decision categories, influence categories, and training evaluation categories, reliability was assessed by determining the extent to which independent coders agreed in their assignment

of the units to categories.

For each of the three reliability checks, the following procedures were employed: 1. A sample of units was selected from the total number of units available for coding. For example, from among all decision situations reported by interviewees, a sample of decisions situations was selected for purposes of establishing inter-coder reliability. 2. Three or four coders (the number of coders involved in the reliability check varied as a function of the anticipated time involved in coding the total number of units for that particular set of categories) assigned the sample units to the appropriate categories. 3. Taking each and all possible pairs of coders, the number of instances in which the coders agreed with respect to their assignment of units to a particular category was recorded. 4. The average pair-wise agreement, expressed in terms of percentage, for each of the three category systems was computed.

The average inter-coder agreement for the decision categories was 93.3%. The average inter-coder agreement for the influence categories was 76.1%. The average inter-coder agreement for the training evaluation categories was 84.5%. These reliability figures are based upon the assignment of units to intermediate levels of specificity for the decision and influence categories, and the most specific level for the training evaluation categories. These levels of specificity were selected for this reliability check because it was anticipated that the reporting of data would occur primarily at these levels of specificity for each respective category system.

Given the number of categories involved, and the relatively complex nature of the units being assigned to categories, these levels of reliability were considered adequate for the accomplishment of the present research objectives. Consequently, the evaluation project proceeded with the coding and tabulation of interviewee responses and the subsequent analysis of data derived from such coding and tabulation of interviewee responses.

## SECTION FOUR

### RESULTS

#### Preliminary Analysis

Before results related to the specific evaluation objectives are presented, let us consider several preliminary analyses. These preliminary analyses bear on the question of how much confidence the reader may have in the data generated by this evaluation project. Three questions were posed which relate to the adequacy of the methods employed in the evaluation of Training Center programs: 1. Did the interview schedule effectively focus the respondents' attention on decision situations encountered in the routine performance of the job? 2. Is there evidence of systematic or concerted attempts by sub-units within the Institution to favorably or unfavorably evaluate the Training Center? 3. Did the interviewers encounter any signs of systematic bias in the responses of interviewees? Let us consider these questions separately.

With respect to the adequacy of the interview schedule for facilitating the respondents' recall of specific decision situations, a preliminary check was made. Recall that the first section of the interview schedule required subjects to recall and report specific situations in which they made decisions on-the-job. Each respondent was asked to recall and report three particular decision incidents. A check on the adequacy of the interviewing procedure is obtainable by determining whether or not respondents were able to recall and report specific decision incidents. The 158 respondents recalled and reported a total of 454 decision incidents. (An average of 2.9 incidents per respondent). One hundred forty-seven out of one hundred fifty-eight respondents were able to recall and report the maximum number of decision incidents requested by the interview schedule. The remaining eleven respondents were able to recall and report at least one decision incident, and usually two incidents. Since the respondents, as a group, approached the maximum number of incidents allowed by the interview schedule, a reasonable conclusion is that the interview schedule was effective facilitating attention to, and specific recall of, decision situations that respondents encountered in the routine performance of

their jobs.

With respect to the question of systematic bias operating in sub-units of the institution, two analyses were planned. Recall that one section of the interview schedule required respondents to recall and report specific decision situations in which their resolution of a decision was affected or influenced by training they had received from the Colorado Youth Workers Training Center. That is, in addition to recalling and reporting specific decision situations they encountered in the routine performance of their jobs, respondents were asked to identify and report specific decision situations in which the resolution of the decision was influenced by Training Center programs. Our assumption was that if bias were to operate in the identification and reporting of decision incidents, such bias would operate in those incidents which were attributed to or influenced by Training Center programs.

Figure I displays the number of subjects interviewed and the number of training influenced incidents reported for each of the sub-units whose members had received training sponsored or conducted by the Training Center. A word of explanation may be needed to interpret this and the remaining analyses. In figure 1, and in remaining analyses, two sets of values are being compared. The first set of values are observed frequencies (O). Observed frequencies are the number of times given instances of a phenomena are observed to fall into particular categories. For example, in figure 1 there were a total of 280 decision incidents reported which were influenced by Training Center programs. The bottom row of figure 1 represents the number of training influenced incidents reported by members of the various sub-units of the institution. A second set of frequencies are "expected" frequencies (E). The expected frequencies are those which theoretically should have occurred, if no systematic relationships or differences are operating. The top row of figure 1 shows the number of subjects who were interviewed in each of the sub-units. If there are no differences among the sub-units in terms of the likelihood that members of particular sub-units will report that their decisions were influenced by Training Center programs, then the number of training influenced incidents reported for particular sub-units should be simply a function of the number of subjects inter-

viewed in each sub-unit. The more individuals interviewed in a particular sub-unit, the more training influenced incidents should be reported by members of that sub-unit. Thus, the total number of observed training influenced incidents (280) theoretically should be distributed proportionately with respect to the total number of subjects interviewed in each sub-unit. It is on this basis that expected frequencies are calculated. The analysis then consists of determining the extent to which the observed frequencies deviate from the expected frequencies.

FIGURE 1

THE DISTRIBUTION OF SUBJECTS IN EACH DEPARTMENT AS COMPARED WITH THE DISTRIBUTION OF TRAINING INFLUENCED DECISIONS RECORDED IN EACH DEPARTMENT.

	DEPARTMENT										TOTAL
	OUTSIDE	LMSB	MVGS	GGYC	LPYC	ED.	CATC	PAROLE	R+D	OTHER	
NUMBER OF SUBJECTS INTERVIEWED	43	18	23	7	6	13	22	13	5	8	158
NUMBER OF TRAINING INFLUENCED DECISIONS EXPECTED	76.2	31.9	40.8	12.4	10.6	23.0	39.0	23.0	8.9	14.2	
NUMBER OF TRAINING INFLUENCED DECISIONS OBSERVED	69	23	50	18	5	12	63	20	12	8	280

$$X^2=35.052, \text{ DEGREES OF FREEDOM}=9$$

A  $X^2$  OF 35.052 WITH 9 DEGREES OF FREEDOM IS SIGNIFICANT AT THE .001 LEVEL.

If you examine figure 1, you will see that the Closed Adolescent Treatment Center (CATC) had a considerably greater number of training influenced incidents than should have been the case. Thus, if there was any inclination among respondents to systematically report a greater number of training influenced incidents, possibly as an implied favorable evaluation of Training Center programs, such an inclination would presumably have been greatest among members of the Closed Adolescent Treatment Center. To determine whether CATC personnel were systematically reporting greater number of training influenced incidents, a secondary analysis was implied. This analysis compared observed and expected frequencies of training influenced incidents for each of the six interviewers.

FIGURE 2

THE DISTRIBUTION OF SUBJECTS INTERVIEWED BY EACH INTERVIEWER AS COMPARED WITH THE DISTRIBUTION OF TRAINING INFLUENCED DECISIONS RECORDED BY EACH INTERVIEWER.

	INTERVIEWER						TOTAL
	1	2	3	4	5	6	
NUMBER OF SUBJECTS INTERVIEWED	39	26	22	17	3	51	158
NUMBER OF TRAINING INFLUENCED DECISIONS EXPECTED	69.11	46.08	38.99	30.13	5.32	90.38	
NUMBER OF TRAINING INFLUENCED DECISIONS OBSERVED	57	35	33	22	7	126	280

$\chi^2=22.469$ , DEGREES OF FREEDOM=5

A  $\chi^2$  OF 22.469 WITH 5 DEGREES OF FREEDOM IS SIGNIFICANT AT THE .001 LEVEL.

The results of the analysis represented in figure 2 suggests that interviewer #6 elicited more training influenced incidents than should have been the case, given the number of interviews conducted by him. Interviewer #6 also interviewed the majority of CATC personnel. An analysis of the interviews conducted by interviewer #6 disclosed that this interviewer elicited more training influenced incidents than did other interviewers, for both CATC personnel and for members of other sub-units who were interviewed by this individual. Consequently, a reasonable conclusion is that the greater number of training influenced incidents reported by CATC personnel were a function of having been interviewed by interviewer #6. Thus, there is no compelling reason to believe that members of sub-units were systematically and consciously attempting to paint a favorable or unfavorable picture of Training Center programs.

As a final check on possible sources of bias in responses of interviewees, a third step was included. Following the completion of the interviews, debriefing sessions were held with each of the six interviewers. During these sessions, the interviewers were questioned with respect to any evidence, growing out of their experience in conducting the interviews, which might lead one to suspect that systematic biases were operating within sub-units of the institution. The

interviewers reported nothing, in their discussions with interviewees, in their attempts to establish contact and secure cooperation of interviewees, or in their dealings with institutional personnel, which would suggest systematic biases in the responses of members of sub-units. Therefore, aside from the normal weaknesses of survey techniques, the evaluation methods employed in this investigation may be considered adequate. We may proceed with the specific evaluation results. These results are presented so as to move from general to specific results. That is, the results begin with an analysis of the types of decisions made by individuals in the population interviewed and conclude with specific comparisons among the course offerings of the Colorado Youth Workers Training Center.

Types of decisions made.

A first, and somewhat general objective of the evaluation project was to characterize the types of on-the-job decisions made by the population of trainees. In the first section of the interview schedule, the respondents recalled and reported specific decision situations they encountered in the routine performance of their jobs. These decision incidents were classified according to the decision categories presented in the preceding section of this report. Figure 3 presents, in bar graph form, the results of the content analysis and classification of these general decision incidents.

As you will recall, the decision categories were developed in terms of three levels of specificity. Figure 3 presents a bar for each category at the lowest level of specificity. In interpreting figure 3, therefore, one should keep in mind the fact that some categories were subdivided into more specific subcategories, while others were not. Thus, for example, the category "aggression/violence" contains sixteen percent of all decisions even though that category, when broken into the four subcategories, seems to contain fewer decisions than the "counseling/treatment" category. In fact, the respondents reported a greater number of decision situations involving aggression or violence than they did decision situations involving specific counseling problems with youths. This is simply an illustration of the fact that figure 3 may be interpreted in terms of any of three levels of specificity.

FIGURE 3

THE DISTRIBUTION OF GENERAL DECISION INCIDENTS BY THE NUMBER OF DECISIONS IN EACH DECISION CATEGORY (LIGHTFACE) AND THE PERCENT OF DECISIONS IN EACH DECISION CATEGORY (BOLDFACE).

IMMEDIATE ACTION	CRISIS INTERVENTION	DRUGS ACCIDENTS	7	1.5%
		CRIME RUNAWAY	33	7.2%
	AGGRESSION VIOLENCE	YOUTH TOWARD WORKER	14	3.1%
		YOUTH TOWARD YOUTH	16	3.5%
		WORKER TOWARD YOUTH	2	0.4%
		NON-DIRECTED	41	9.0%
TREATMENT	YOUTH REWARD OR PUNISHMENT		33	7.2%
	HANDLING YOUTH COMPLAINTS		31	6.8%
	COUNSELING/TREATMENT		65	14.2%
	DISPOSITION OF YOUTH	RELEASE PAROLE	31	6.8%
		REFERRAL TO UNITS	40	8.7%
		RECOMMEND TO COURTS	11	2.4%
MANAGEMENT	GENERAL ADMIN.	FINANCIAL	7	1.5%
		POLICY	23	5.0%
		COORDINATION	9	2.0%
	PERSONNEL	HIRING	4	0.9%
		DISMISSAL REPRIMAND	13	2.8%
		ASSIGNMENT	21	4.6%
INTER-PERSONAL	PROFESSIONAL RELATIONS		31	6.8%
	ADVISING PARENTS		6	1.3%
	MEETINGS		13	2.8%
PERSONAL		7	1.5%	

You will undoubtedly attach your own interpretations to the data represented in figure 3. Our intent, at present, is simply to provide you with a general appreciation of the variety and types of decisions made by the total population of respondents. More specific interpretations are possible if we proceed with the analysis of how decision incidents are distributed according to job classifications.

Figure 4 presents the statistical analysis of the distribution of decision incidents by job classification. The results of this statistical analysis demonstrate that decision types are systematically associated with job classifications. That is, the kinds of decisions which are reported by respondents are dependent, at least in part, on the job classification of the respondent. This is, of course, an expected result.

FIGURE 4

THE DISTRIBUTION OF GENERAL DECISION INCIDENTS FOR EACH JOB CATEGORY BY THE NUMBER OF DECISIONS IN EACH DECISION CATEGORY.

JOB CATEGORIES		DECISION CATEGORIES				TOTAL	
		IMMEDIATE ACTION	MANAGEMENT TREATMENT	PERSONAL INTERPERSONAL			
COTTAGE PERSONNEL	EXPECTED	44.30	82.73	29.80	18.43	2.74	178
	OBSERVED	74	81	12	9	2	
SUPERVISORS COUNSELORS	EXPECTED	38.58	72.04	25.95	16.05	2.39	155
	OBSERVED	11	91	29	24	0	
ADMINISTRATORS	EXPECTED	14.19	26.49	9.54	5.90	0.88	57
	OBSERVED	4	22	23	8	0	
TEACHERS	EXPECTED	15.93	29.74	10.71	6.63	0.99	64
	OBSERVED	24	17	12	6	5	
TOTAL		113	211	76	47	7	454

$X^2=121.698$ , DEGREES OF FREEDOM=12

A  $X^2$  OF 121.698 WITH 12 DEGREES OF FREEDOM IS SIGNIFICANT AT THE .001 LEVEL.

Having demonstrated that types of jobs are significantly different in terms of types of decisions associated with the performance of these jobs, let us examine each of the four general job categories in order to determine the types of on-the-job decisions made by individuals within those job categories. First consider the cottage personnel. Figure 5 presents a bar graph for the types of decisions made by cottage personnel, at the two broadest levels of decision categories.

FIGURE 5

THE DISTRIBUTION OF GENERAL DECISION INCIDENTS FOR COTTAGE PERSONNEL BY THE NUMBER OF DECISIONS IN EACH DECISION CATEGORY (LIGHTFACE) AND THE PERCENT OF DECISIONS IN EACH DECISION CATEGORY (BOLDFACE).

IMMEDIATE ACTION	CRISIS INTERVENTION	28	<b>15.7%</b>
	AGGRESSION VIOLENCE	46	<b>25.8%</b>
TREATMENT	YOUTH REWARD OR PUNISHMENT	19	10.7%
	HANDLING YOUTH COMPLAINTS	21	11.8%
	COUNSELING TREATMENT	26	14.6%
	DISPOSITION OF YOUTH	15	8.4%
MANAGEMENT	GENERAL ADMIN.	5	2.8%
	PERSONNEL	7	3.9%
INTER-PERSONAL	PROFESSIONAL RELATIONS	6	3.4%
	ADVISING PARENTS	1	0.6%
	MEETINGS	2	1.1%
PERSONAL		2	1.1%

As is apparent from figure 5, cottage personnel are confronted by decision situations which require two broad classes of decisions: Treatment decisions and immediate action decisions. Within immediate action decisions, cottage personnel seemed to be confronted disproportionately

by decision situations involving aggressive or violent behavior on the part of youths. Thus, there are three specific questions which may be posed at this point, and the answers to these questions will be sought in subsequent analyses: 1. To what extent, if any, do Training Center programs assist cottage personnel in resolving immediate action incidents? 2. To what extent, if any, do Training Center programs assist cottage personnel in resolving treatment decisions? 3. To what extent, if any, do Training Center programs assist cottage personnel in resolving specific decision situations involving aggressive or violent behavior by youths?

FIGURE 6

THE DISTRIBUTION OF GENERAL DECISION INCIDENTS FOR SUPERVISORS/COUNSELORS BY THE NUMBER OF DECISIONS IN EACH DECISION CATEGORY (LIGHTFACE) AND THE PERCENT OF DECISIONS IN EACH DECISION CATEGORY (BOLDFACE).

IMMEDIATE ACTION	CRISIS INTERVENTION	7	4.5%
	AGGRESSION VIOLENCE	4	2.6%
TREATMENT	YOUTH REWARD OR PUNISHMENT	9	5.8%
	HANDLING YOUTH COMPLAINTS	6	3.9%
	COUNSELING TREATMENT	25	16.1%
	DISPOSITION OF YOUTH	51	32.9%
MANAGEMENT	GENERAL ADMIN.	13	8.4%
	PERSONNEL	16	10.3%
INTER-PERSONAL	PROFESSIONAL RELATIONS	12	7.7%
	ADVISING PARENTS	5	3.2%
	MEETINGS	7	4.5%
PERSONAL		0	0.0%

Figure 6 consists of a bar graph which presents the types of decision situations encountered by supervisors/counselors. As you may recall from our discussion of the job categories, in the preceding section of this report, supervisors/counselors are those individuals whose responsibilities involved the supervision of cottage personnel, professional counseling responsibilities, or the supervision of counselors. Examining figure 6, we note that supervisor/counselors are confronted disproportionately by decision situations involving the disposition of youths. That is, individuals in this job classification are apparently frequently called upon to make recommendations or decisions concerning the assignment of youths to other units within the institution, the release or parole of youths, or recommendations to courts concerning the disposition of youths. In addition, as might be anticipated, individuals in this job classification also make a disproportionate number of decisions concerning the counseling or treatment of specific youths. If you refer back to figure 4, you will note that supervisors/counselors made more decisions involving interpersonal relationships with their professional peers and with parents of youths than should have been theoretically expected. Figure 6 indicates that half of the interpersonal decisions made by supervisors/counselors are the result of decision situations involving relationships with co-workers or professional peers. There are, then, three questions which may be posed at this point, and the answers to which we will look for in subsequent analyses: 1. To what extent, if any, do Training Center programs assist supervisors/counselors in decision situations involving disposition of youths? 2. To what extent, if any, do Training Center programs assist supervisors/counselors in decision situations involving the counseling or specific treatment of youths? 3. To what extent, if any, do Training Center programs assist supervisors/counselors in decision situations involving relationships with professional peers or co-workers?

Figure 7 consists of a bar graph representing the types of decision situations made by "administrators". This profile of decision types for administrators is reasonably close to what might have been anticipated. Administrators make decisions which are disproportionately management-type decisions. Additionally, administrators make a considerable number of decisions involving the disposition of youths. And, since administration implies, by its very nature, decision situations

FIGURE 7

THE DISTRIBUTION OF GENERAL DECISION INCIDENTS FOR ADMINISTRATORS BY THE NUMBER OF DECISIONS IN EACH DECISION CATEGORY (LIGHTFACE) AND THE PERCENT OF DECISIONS IN EACH DECISION CATEGORY (BOLDFACE).

IMMEDIATE ACTION	CRISIS INTERVENTION	2	3.5%
	AGGRESSION VIOLENCE	2	3.5%
TREATMENT	YOUTH REWARD OR PUNISHMENT HANDLING	2	3.5%
	YOUTH COMPLAINTS	2	3.5%
	COUNSELING TREATMENT	3	5.3%
	DISPOSITION OF YOUTH	15	26.3%
MANAGEMENT	GENERAL ADMIN.	10	17.5%
	PERSONNEL	13	22.8%
INTER-PERSONAL	PROFESSIONAL RELATIONS	8	14.0%
	ADVISING PARENTS	0	0.0%
	MEETINGS	0	0.0%
PERSONAL		0	0.0%

involving relationships with professional peers or co-workers, it is surprising to discover that administrators are required to make decisions of this type also. Thus, there are three questions which may be posed, the answers to which will be sought in subsequent analyses: 1. To what extent, if any, do Training Center programs assist administrators in decision situations involving management? 2. To what extent, if any, do Training Center programs assist administrators in decision situations involving disposition of youths? 3. To what extent, if any, do Training Center programs assist administrators in decision situations involving relationships with professional peers or co-workers?

FIGURE 8

THE DISTRIBUTION OF GENERAL DECISION INCIDENTS FOR TEACHERS BY THE NUMBER OF DECISIONS IN EACH DECISION CATEGORY (LIGHTFACE) AND THE PERCENT OF DECISIONS IN EACH DECISION CATEGORY (BOLDFACE).

IMMEDIATE ACTION	CRISIS INTERVENTION	3	4.7%
	AGGRESSION VIOLENCE	21	32.8%
TREATMENT	YOUTH REWARD OR PUNISHMENT	3	4.7%
	HANDLING YOUTH COMPLAINTS	2	3.1%
	COUNSELING TREATMENT	11	17.2%
	DISPOSITION OF YOUTH	1	1.6%
MANAGEMENT	GENERAL ADMIN.	10	15.6%
	PERSONNEL	2	3.1%
INTER-PERSONAL	PROFESSIONAL RELATIONS	4	6.3%
	ADVISING PARENTS	0	0.0%
	MEETINGS	2	3.1%
PERSONAL		5	7.8%

Figure 8 consists of a bar graph representing the types of decision situations encountered by "teachers". The first observation, which is immediately apparent, is that teachers are confronted disproportionately by decision situations involving aggressive or violent behavior by youths. The second observation is that even though teachers make fewer total decisions in the general category "treatment", they nevertheless make a considerable number of decisions in the subcategory "counseling/treatment". This implies that teachers are required to make decisions involving the specific type of relationship that will be established and maintained with individual students. That is, teachers report that they are confronted frequently with decision situations

involving how to "handle" particular students or how to assist particular students in overcoming classroom or learning problems. It would appear that teachers are also required to make decisions which are classifiable as "general administration" decisions. However, our inspection of the specific decision situations reported by teachers in this category suggest to us that the type of general administration decisions made by teachers are predominately "classroom policies". That is, teachers make decisions which involve establishing policies for the classes over which the teachers have specific responsibilities. Our assumption is that these types of decisions are more appropriately influenced by the formal educational training that teachers have accumulated, rather than specific Training Center programs. Consequently, we will not ask whether Training Center programs assist teachers in making "management" decisions. Nevertheless, two specific questions may be posed, the answers to which will be sought in subsequent analyses: 1. To what extent, if any, do Training Center programs assist teachers in resolving decision situations involving aggression or violence on the part of youths? 2. To what extent, if any, do Training Center programs assist teachers in resolving decision situations involving the specific counseling of youths, or the type of interpersonal relationship to establish and maintain with specific youths?

We have attempted to provide you with a general orientation in terms of the types of decisions reported by the total population of interviewees, and the types of decisions associated with specific job classifications. The following section is offered also as a general orientation. The next section deals with the general question: What are the things which influence the respondents to resolve particular decision situations as they do?

#### Sources of Influence on Decisions

After the respondents recalled and reported specific decision situations they had encountered on their jobs, they were asked to identify, for each decision incident, those things which had influenced them to resolve the particular decision situation in the manner which they chose. A total of 1,113 sources of influence were identified for the 458 decision incidents reported. These sources of influence were classified



according to the influence categories described in the preceding section of this report. Figure 9 is a bar graph which depicts the distribution of influences across all influence categories.

FIGURE 9

THE DISTRIBUTION OF INFLUENCES BY THE NUMBER OF INFLUENCES IN EACH INFLUENCE CATEGORY (LIGHTFACE) AND THE PERCENT OF INFLUENCES IN EACH INFLUENCE CATEGORY (BOLDFACE).

EDUCATION	FORMAL EDUCATION	59	5.3%	
	TRAINING CENTER	67	6.0%	
	NON-CENTER TRAINING	24	2.2%	
PERSONAL	EXPERIENCE	210	18.9%	
	PERSONAL PHILOSOPHY	99	8.9%	
	COMMON SENSE	32	2.9%	
INVOLVED PARTIES	CLIENT	278	25.0%	
	STAFF INVOLVEMENT	76	6.8%	
NON-INVOLVED PARTIES	CONSULTATION	PROFESSIONAL CONSULTATION	37	3.3%
		SUPERVISORY INFLUENCE	21	1.9%
		STAFF CONSULTATION	42	3.8%
		NON-PROFESSIONAL CONSULTATION	11	1.0%
	PROGRAMS/FACILITIES	45	4.0%	
	CONSTRAINTS	LAWS RULES PROCEDURES	39	3.5%
		TIME WORK MONEY	35	3.1%
		SITUATION ALTERNATIVES	38	3.4%

As is evident from figure 9, there are two predominant types of influences operating in the resolution of decision incidents. The first of these sources of influence is the "client" category. This category implies that decision situations were resolved by taking into account characteristics of the client (usually a youth) involved in the decision situation. That is, the respondents were implying that they resolved the decision situations on the basis of what they knew about the particular clients or youths involved in those decision situations. The second predominant category is "experience". This category implies that decision situations were resolved on the basis of prior experience with similar situations, not necessarily involving the same clients or youths. Thus, the predominant mode of decision making, as might be expected, is an experiential one.

Of particular interest is the category labelled "Training Center". This category included instances in which the respondents indicated that the way they resolved a particular decision situation was a direct result of their prior participation in Training Center programs. This category accounted for six percent (one in every sixteen) of all sources of influence on decision incidents. Training Center influences exceeded those influences derived from any other category of educational experiences. Additionally, Training Center influences exceeded those derived from a number of other categories of influence.

Think for a moment about your own job. It is likely that most individuals resolve many, if not most decision situations on the basis of prior personal experience or by taking into account characteristics of other parties involved in the decision situations. If one out of sixteen decision situations were directly influenced by in-service training, then, for all but the most highly routinized jobs, such in-service training could be reasonably considered "effective". Nevertheless, there is obviously room for improvement in the present case. That is, there may be ways to increase the relative impact of Training Center programs. One approach would be to increase Training Center offerings in those decision-making areas wherein individuals seem to be dependent primarily on "experiential" bases for making decisions. With this approach in mind, let us examine figure 10.

FIGURE 10  
THE DISTRIBUTION OF INFLUENCES FOR  
EACH JOB CATEGORY BY THE NUMBER OF  
INFLUENCES IN EACH INFLUENCE CATEGORY.

DECISION CATEGORIES		INFLUENCE CATEGORIES				TOTAL
		EDUCATION	PERSONAL	INVOLVED PARTIES	NON-INVOLVED PARTIES	
IMMEDIATE ACTION	EXPECTED	33.29	75.68	78.56	59.47	247
	OBSERVED	37	100	70	40	
TREATMENT	EXPECTED	70.89	161.16	167.30	126.66	526
	OBSERVED	74	129	179	144	
MANAGEMENT	EXPECTED	27.22	61.89	64.25	48.64	202
	OBSERVED	23	59	70	50	
INTERPERSONAL	EXPECTED	16.17	36.76	38.17	28.89	120
	OBSERVED	13	46	29	32	
PERSONAL	EXPECTED	2.43	5.51	5.72	4.33	18
	OBSERVED	3	7	6	2	
TOTAL		150	341	354	268	1113

$X^2=33.910$ , DEGREES OF FREEDOM=12  
A  $X^2$  OF 33.910 WITH 12 DEGREES OF FREEDOM IS SIGNIFICANT AT THE .001 LEVEL.

Figure 10 presents the distribution of general influence categories by general types of decisions. There are two types of decision situations which are resolved disproportionately by personal considerations (personal experience, personal philosophy, common sense). These two types of decision situations are: 1. Immediate action decisions (violence or aggression, drugs, crimes, runaways). 2. Interpersonal decisions (decision situations involving relationships with professional peers or co-workers). Consequently, one way of increasing the relative influence of Training Center programs on on-the-job decisions is to include within the programs a more specific focus on immediate action and interpersonal decision situations. With respect to immediate action decisions, this suggestion is further supported by an analysis of

the sources of influence operating within different job classifications. For example, teachers are influenced disproportionately by personal considerations in resolving decision situations. Incidentally, an unanticipated finding was that teachers are least influenced by "education". Additionally, cottage personnel are disproportionately influenced by the characteristics or nature of the "involved parties" in decision situations. As you will recall from earlier analyses, both teachers and cottage personnel are called upon to resolve decision situations of the "immediate action" type. Therefore, the influence of Training Center programs on on-the-job decisions might be increased by focusing more training effort on the immediate action decisions, and by including cottage personnel and teachers in training programs or courses with these specific emphases.

#### Training Influenced Decisions

You will recall from our discussion of the interview schedule that one section of the interview asked the respondents to recall and report on-the-job decisions which had been influenced by Training Center programs. Thus, two sections of the interview asked the respondents to report decision incidents. The first type of decision incident reported was a general decision incident. That is, the respondents recalled and reported decisions which were more or less characteristic of their job. The second type of decision incident involved incidents which were recalled and reported specifically because they had been influenced by Training Center programs. The distribution of the first set of decision incidents across the decision categories provides us with a general profile of the types of decisions made by the population interviewed. The distribution of the second type of decision incident across the decision categories provides us with a profile of the extent to which training programs influenced particular types of decisions. Consequently, a comparison of the two profiles provides us with a relative index of the "effectiveness" (in terms of influence on decisions) of Training Center programs.

The first profile was presented as figure 3. Figure 3 was a bar graph which represented the distribution of general decision incidents across decision categories. A brief re-examination of figure 3 will assist the reader in understanding and interpreting the comments which follow.

FIGURE 11

THE DISTRIBUTION OF TRAINING INFLUENCED DECISIONS BY THE NUMBER OF DECISIONS IN EACH DECISION CATEGORY (LIGHTFACE) AND THE PERCENT OF DECISIONS IN EACH DECISION CATEGORY (BOLDFACE).

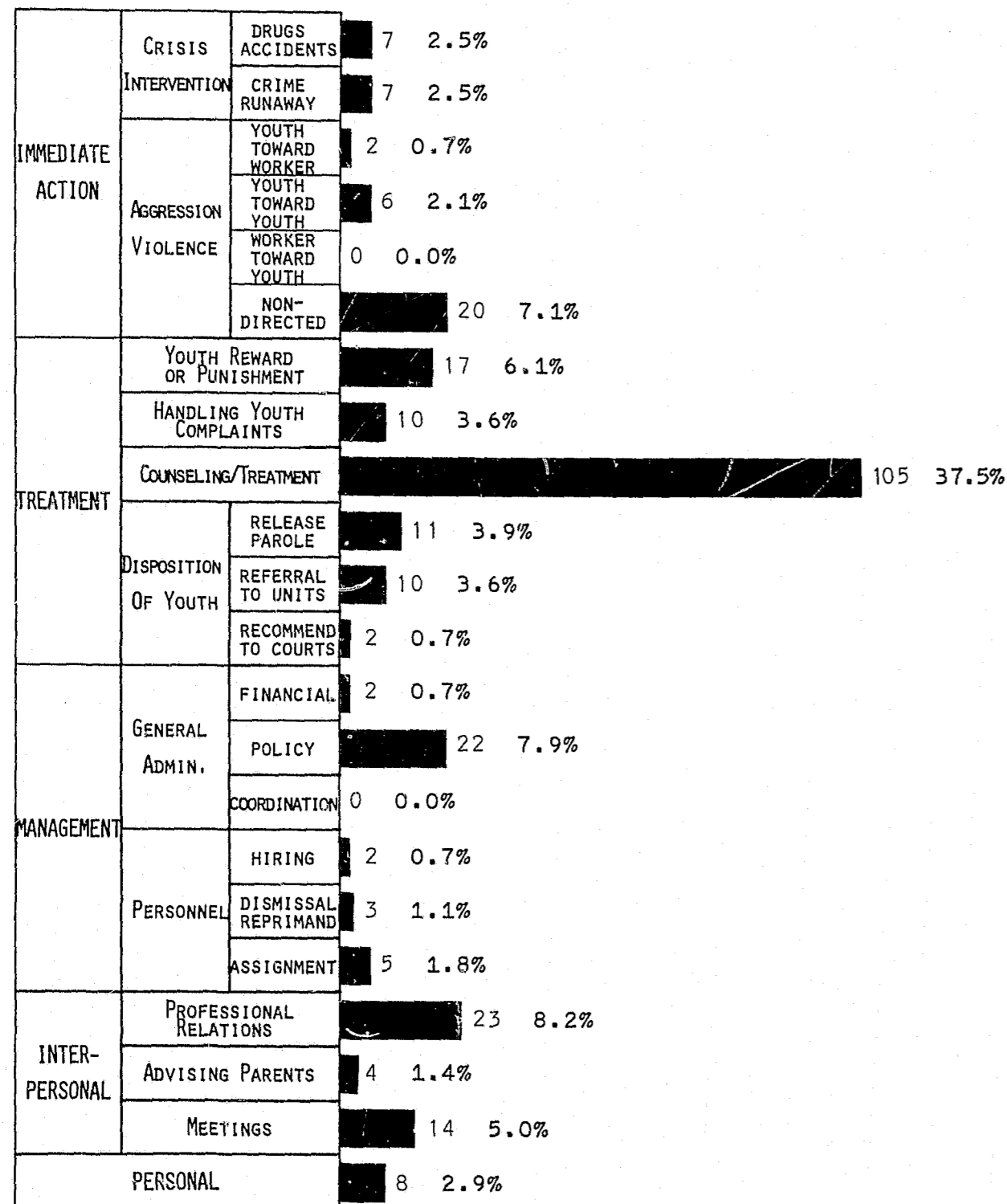


Figure 11 is a bar graph which represents the distribution of training influenced decisions across the decision categories. Although the graph's scale changes from figure 3 to figure 11, if one attends to the percentages represented by each bar, a number of observations are apparent, including the following: 1. The most dramatic impact of Training Center programs occurs with respect to counseling/treatment decisions. Whereas 14.2 percent of the general decision incidents were of this type, 37.5 percent of the training influenced decisions were counseling/treatment decisions. Since most of the individual courses offered by the Training Center are treatment/oriented courses, we may conclude that the Training Center is very effectively accomplishing its primary objective, that of assisting youth service workers in establishing and maintaining individual counseling and treatment relationships with particular youths. 2. Interpersonal decisions are influenced markedly by Training Center programs. Whereas 10.9 percent of general decision incidents are "interpersonal" in nature, 14.6 percent of training influenced decisions are "interpersonal". The impact of Training Center programs on interpersonal decisions falls predominately in two areas. The first is the impact of Training Center programs on relationships with professional peers and co-workers. The second is the impact of Training Center programs on youth service workers' participation in meetings. 3. The impact of Training Center programs on management decisions is two-fold. First, there seems to be a positive influence on management decisions which involve the establishment or modification of institutional policies. Second, there seems to be a comparative lack of influence on management decisions involving the hiring, dismissal and reprimand, assignment or delegation of responsibilities with respect to subordinates. Thus, Training Center programs seem to be influencing policy decisions, but are considerably less influential with respect to decisions involving personnel matters. 4. The most apparent area of relative non-influence involves decisions of the immediate action type. There are six specific subcategories of immediate action decisions: Drugs and accidents, crimes and runaways, aggression or violence involving youth toward worker, youth toward youth, worker toward youth, and non-directed aggression and violence. Of these six specific categories of immediate action decisions, in five of these the training influenced decisions are less than the general

decision incidents. 5. Another area of comparative non-influence of Training Center programs is in decisions involving disposition of youth. In all three specific subcategories, release or parole, referral to other units, recommendations to courts, training influenced decisions are considerably less than general decision incidents.

FIGURE 12

THE DISTRIBUTION OF GENERAL DECISIONS IN EACH DECISION CATEGORY AS COMPARED WITH THE DISTRIBUTION OF TRAINING INFLUENCED DECISIONS IN EACH DECISION CATEGORY.

		DECISION CATEGORIES												
		A	B	C	D	E	F	G	H	I	J	K	L	TOTAL
NUMBER OF GENERAL DECISIONS	EXPECTED	33	62	31	25	105	65	38	30	33	6	15	9	454
	OBSERVED	40	73	33	31	65	82	38	38	30	6	11	7	
NUMBER OF TRAINING INFLUENCED DECISIONS	EXPECTED	21	39	19	16	65	40	24	18	20	4	10	6	280
	OBSERVED	14	28	17	10	105	23	24	10	23	4	14	8	
TOTAL		54	101	50	41	170	105	62	48	53	10	25	15	734

$X^2=75.224$ , DEGREES OF FREEDOM=11

A  $X^2$  OF 75.224 WITH 11 DEGREES OF FREEDOM IS SIGNIFICANT AT THE .001 LEVEL.

Our statistical analysis of general decisions compared with training influenced decisions, presented in figure 12, is consistent with the above comments.

Our statistical analysis of the comparative impact of Training Center programs on the four major job classifications, presented in figure 13, disclosed that all four job categories were influenced to approximately the same extent by Training Center programs. That is, the observed number of training influenced decisions did not deviate significantly from the expected number of training influenced decisions for each of the four job classifications. It would appear, therefore, that whatever degree of influence is approximately equal for all four job categories. As a result, suggestions for revisions in Training

Center programs must be based upon the types of decisions which are comparatively uninfluenced by Training Center programs and the particular job categories which characteristically make those types of decisions. On these bases we may advance the following suggestions: 1. Training in the resolution of immediate action decision situations should be initiated for cottage personnel and for teachers. 2. Training in management decisions, emphasizing personnel matters, should be initiated for administrators. 3. Training which acquaints youth service workers with the alternatives associated with disposition of youths, the bases on which dispositional decisions should rest, and other matters pertaining to the disposition of youths should be initiated for supervisors/counselors.

FIGURE 13

THE DISTRIBUTION OF SUBJECTS IN EACH JOB CATEGORY AS COMPARED WITH THE DISTRIBUTION OF TRAINING INFLUENCED DECISIONS RECORDED IN EACH JOB CATEGORY.

	JOB CATEGORIES				TOTAL
	COTTAGE PERSONNEL	SUPERVISORS COUNSELORS	ADMINISTRATORS	TEACHERS	
NUMBER OF SUBJECTS INTERVIEWED	63	53	19	21	156
NUMBER OF TRAINING INFLUENCED DECISIONS EXPECTED	113.08	95.13	34.10	37.69	
NUMBER OF TRAINING INFLUENCED DECISIONS OBSERVED	123	94	33	30	280

$X^2=2.488$ , DEGREES OF FREEDOM=3

A  $X^2$  OF 2.488 WITH 3 DEGREES OF FREEDOM IS NOT SIGNIFICANT.

These suggestions do not imply a reordering of priorities for the Training Center. Care should be taken so as not to de-emphasize the considerable and positive impact of Training Center programs on counseling/treatment decisions and on interpersonal decisions. Assisting youth service workers in the counseling and treatment of youths could remain

as the first priority in Training Center programs. However, we will suggest in subsequent analyses that certain Training Center courses are accounting for most of the impact on on-the-job decisions, and that other Training Center courses are accounting for almost no impact. Thus, it is possible to replace the relatively non-influential courses with a few courses focusing specifically on immediate action, personnel, and dispositional decisions.

Comparison of Individual Training Courses.

An analysis which is related to, but preliminary to the specific comparison of individual training courses is that which is presented in figure 14.

FIGURE 14  
THE DISTRIBUTION OF THE NUMBER OF TRAINING INFLUENCED DECISIONS CITED BY THE NUMBER OF COURSES TAKEN.

		NUMBER OF COURSES TAKEN					TOTAL
		1	2	3-4	5-10	11 OR MORE	
NUMBER OF SUBJECTS CITING NO TRAINING INFLUENCED DECISIONS	EXPECTED	6.25	7.46	9.38	8.66	6.25	38
	OBSERVED	16	10	8	4	0	
NUMBER OF SUBJECTS CITING ONE TRAINING INFLUENCED DECISION	EXPECTED	3.95	4.71	5.92	5.47	3.95	24
	OBSERVED	8	5	7	4	0	
NUMBER OF SUBJECTS CITING TWO TRAINING INFLUENCED DECISIONS	EXPECTED	5.10	6.08	7.65	7.06	5.10	31
	OBSERVED	0	6	12	10	3	
NUMBER OF SUBJECTS CITING THREE TRAINING INFLUENCED DECISIONS	EXPECTED	10.70	12.75	16.04	14.81	10.70	65
	OBSERVED	2	10	12	18	23	
TOTAL		26	31	39	36	26	158

$\chi^2=66.922$ , DEGREES OF FREEDOM=12  
A  $\chi^2$  OF 66.922 WITH 12 DEGREES OF FREEDOM IS SIGNIFICANT AT THE .001 LEVEL.

Figure 14 compares the number of training influenced decisions reported with the number of individual courses the respondents had taken in connection with the Training Center. The analysis of figure 14 disclosed a significant relationship between the number of courses taken and the number of training influenced decisions reported. However, what is worthy of noting from figure 14 is that the impact of Training Center courses on on-the-job decisions increases systematically up to and including 10 courses. When individuals had taken 11 courses they reported the maximum influence on on-the-job decisions which was possible given the procedures employed in this investigation. The following inferences are supportable by figure 14: 1. Relatively little impact should be expected from participation in 1 training course. 2. The point at which the maximum impact observed exceeds that which is theoretically expected is the point at which the individual has taken 5 or more training courses. 3. The impact of Training Center courses is reasonably maximized when an individual has taken 11 training courses.

During the two years for which this evaluation project is relevant, October 1970 to October 1972, the Training Center conducted or sponsored a total of 56 individual courses. Some of these courses involved few participants, others many. Some of these courses were offered only once, others were repeated often. Given these circumstances, a special analytic strategy had to be devised which would allow fair comparisons among the 56 individual courses sponsored or conducted by the Training Center. The logic of this analysis follows:

1. During the interview, respondents were asked to identify specific courses which had influenced on-the-job decisions they recalled and reported. The interviewers were instructed to elicit sufficient information from the respondents so that every training influenced decision reported could be attributed to at least one specific course. 2. Any particular respondent might have taken any given combination of courses. If the respondent had taken only one course, no comparisons between courses were possible; therefore, none were made. Typically, respondents took several, and sometimes many courses. 3. Whenever the respondent had taken two or more courses, all possible pair-wise comparisons among these courses were made. The comparisons took the

following form. 4. For each possible pair of courses, course A and course B, four results were possible. First, the respondent might have attributed an influence to course A and none to course B. In this event, course A accumulated one favorable comparison to course B. Second, the respondent might have attributed influence to course B and none to course A. In this event, course B accumulated one favorable comparison to course A. Third, the respondent might have attributed influence to both courses. In this event, neither course accumulated a favorable comparison to the other. Fourth, the respondent might have attributed influence to neither course. In this event, neither course accumulated a favorable comparison with respect to the other. 5. Any time any individual respondent had taken any two courses, comparisons were made between that pair of courses. Following these procedures, a total of 5,103 pair-wise comparisons were possible. 6. For each particular course, we summed across all comparisons involving that course and all other courses. Thus it was possible to calculate a ratio, this ratio representing the number of times a specific course was compared favorably with other courses in ratio to the number of times a specific course was compared unfavorably with other courses.

The statistical analyses following these operations involved the assumption that, by chance alone, a course should be compared favorably and unfavorably with other courses an equal number of times. To the extent that a given course was compared favorably more frequently than unfavorably with other courses, the course could be considered "influential". To the extent that a given course was compared unfavorably more often than favorably with other courses, the course could be considered "non-influential". (The statistical analysis involved transforming the favorable/unfavorable ratios into z scores, and determining the statistical significance of those z scores.)

The results of the comparisons of the 52 courses are presented below in terms of five levels of influence: 1. Very influential (z score significant at .01). Individual courses falling in this category were found to have influenced on-the-job decisions much more frequently than other courses with which they were compared. 2. Influential (z score significant at .10). Individual courses falling in this category were found to have influenced on-the-job decisions more often than

other courses with which they were compared. 3. No difference (z scores not significant). Individual courses falling in this category were found not to have influenced on-the-job decisions more or less than other courses with which they were compared. 4. Non-influential (z scores significant at .10, negative direction). Individual courses falling in this category were found to have been unfavorably compared with other courses the respondents had taken. 5. Very non-influential (z score significant at .01, negative direction). Individual courses falling in this category were found to have been compared unfavorably most of the time with other courses the respondents had taken. What follows, then, is a listing of these five categories of courses.

#### Very Influential Courses

C-203 Interviewing Techniques  
 HG-201 Psychodrama Workshop  
 I-101 Introduction to I-Level  
 T-302 Behavior Modification  
 Out of State Training Programs (training programs sponsored by the Colorado Youth Workers Training Center but which required sending youth service workers out of state to receive the training)

Guided Group Interaction/Positive Peer Culture (Vorath)

#### Influential Courses

I-210 I-Level Sequential Diagnostic System  
 Sensitivity Training

#### No Difference, Neither Significantly Influential Nor Non-Influential.

C-201 Interpersonal Communication  
 C-302 Interviewing/Counseling  
 D-201 Drugs and Motivation  
 D-301 The Drug Scene  
 D-305 Cenikor Techniques  
 GL-101 Orientation to Youth System  
 GL-302 Cross Cultural Communication  
 GL-304 Workshop in Group Dynamics  
 GL-310 Self Image Techniques

- I-201 I-Level Interviewing and Diagnosis
- I-202 Advanced I-Level Interviewing
- I-303 Cfm Treatment
- I-304A Cfc/Mp Treatment
- I-305 Na Treatment
- I-306 Nx Treatment
- MS-200 Basic Supervision
- MS-300 Principals of Supervision
- T-301 Reality Therapy
- T-311 Group Therapy
- T-312 Guided Group Interaction
- T-319 American Indian Culture Today

Non Influential Courses

- D-102 Alcoholism
  - GL-305 Group Life Theory and Practice
  - GL-306 Counseling Techniques
  - GL-309 NTL Techniques and Role Playing
  - I-304B Mp/Cfc Treatment
  - I-310 Behavior Modification and I-Level
  - I-311 Transactional Analysis and I-Level
  - I-412 I-Level and Religion
  - JD-201 Theories of Delinquency
  - T-303 Defense Mechanism
  - T-304 Radical Therapy
  - T-308/9 Family Therapy
  - T-310 Transactional Analysis
  - T-315 Introduction to Transactional Analysis
  - T-318 Psychopharmacological Agents in Treatment
- General Orientation

Very Non-Influential Courses

- C-202 Interpersonal Communication Practicum
- C-305 Minority Group Communication
- D-101 Pharmacology of Drug Abuse
- GL-301 Concepts of Group Dynamics
- GL-307 Group Counseling

- HG-401 Psychodrama Leadership
- I-301 Introduction to I-Level Treatment
- I-302 I<sub>2</sub> Treatment
- I-402 Classification of Workers
- L-101 Law and the Juvenile
- T-306 Gestalt Treatment

In interpreting these degrees of influence on on-the-job decisions, based upon pair-wise comparisons among individual courses, it is essential that the reader keep in mind the following qualifications: 1. The criterion involved in the course comparisons is the impact of the course on on-the-job decisions, as reported by the respondents interviewed. To the extent that individual courses should have been expected to influence on-the-job decisions, the comparisons are fair. To the extent that certain courses were offered for reasons other than influencing on-the-job decisions, the comparisons are not fair. Ultimately, the precise interpretation of these individual course comparisons will be most adequately and accurately made by the Director of the Colorado Youth Workers Training Center. In those instances in which courses may reasonably be expected to influence on-the-job decisions but were found to be very non-influential, it seems reasonable to suggest replacing these courses with other courses specifically designed to influence on-the-job decisions. 2. The degrees of influence listed above are comparative. This means that "relative influence" is being assessed, not the absolute presence or absence of influence. Several implications of the results should therefore be made more explicit. First, the influential courses are extremely influential. Indeed, most of the influence on on-the-job decisions is attributed to relatively few courses. Second, particular attention should be paid to the middle level of influence, "no difference". This category does not in any way imply that the courses were not influential with respect to on-the-job decisions. This category simply implies that the courses falling within were neither more nor less influential than other courses with which they were compared. Thus, the most appropriate use of the data presented above would be: 1. To offer more frequently, or to offer similar courses to, the ones which were found to be influential. 2. To improve or to eliminate those courses which were found to be comparatively

less influential, especially those found to be very non-influential, if it is reasonable to assume that the specific courses should have had an impact on on-the-job decisions.

#### Reasons Why Training Was Not Influential.

In particular instances, respondents reported that particular courses were not influential with respect to their on-the-job decisions. In those instances, respondents were asked to provide reasons why, in their opinion, specific courses were not influential. These reasons were content analyzed according to the categories presented in the section dealing with methods and procedures. From this content analysis, the following conclusions are offered: First, it should be noted that only 34 out of the 158 respondents indicated that Training Center programs had not been influential with respect to their on-the-job decisions. The majority of these 34 respondents had taken only one or two courses. Given our earlier analysis of the relationship between the number of courses taken and the number of training influenced decisions reported, it is reasonable to assume that many of these 34 respondents would have attributed influence to Training Center programs had they participated in more individual courses. Nevertheless, their responses are informative with respect to the reasons why individual courses were, in their case, non-influential. The reasons given for the relative non-influence of individual courses fell predominately into two categories: discrepancies between training and job, and content of the program. These two categories imply several things. First, in particular cases, respondents were unable to see or appreciate the relationship between what was presented in the training program and the demands of their particular jobs. Second, in particular cases, the respondents expressed the opinion that particular courses presented no new information or ideas, or that the content of the course was presented with insufficient direct applications to the jobs they were performing. Of interest is the fact that the least frequent criticism of Training Center programs involved "instructor". Thus, it seems that the Training Center staff, in their actual conduct of the courses, are performing adequately, or even commendably. What is suggested by the responses of the interviewees is greater attention to the extent to which individual

courses are specifically appropriate to the jobs being performed by the participants or trainees.

#### General Summary and Recommendations.

With respect to the general effectiveness of Training Center programs, the following information is particularly relevant. Of all possible sources of influence on on-the-job decisions, the Training Center accounts for approximately one-sixteenth of the influence. Given that the predominant sources of influence were prior personal experience and knowledge of parties involved in decision situations, Training Center influence, compared with other sources of influence excluding personal experience, is substantial. Training Center influence is greater than a variety of other sources of influence, including formal education, non-Center training, common sense, etc. One hundred twenty-four out of one hundred fifty-eight respondents were able to recall and report specific decision situations in which Training Center programs were influential in helping them resolve the decision situations. Of the 34 respondents who attributed no influence to Training Center programs, the majority were individuals who had taken only one course. These 34 respondents were generally uncritical of Training Center instructors. When criticisms were offered, these criticisms involved the relevance or applicability of specific courses to job characteristics or demands. In view of the fact that Training Center programs are offered on a voluntary participation basis, some of the responsibility for the appropriateness of particular courses to individual trainees must rest with the trainees themselves. Nevertheless, the Training Center may improve its general program by eliminating certain courses which have been found to be very non-influential with respect to on-the-job decisions and including other offerings which are tailored to the decision-making responsibilities of particular job classifications.

The most dramatic impact of training seems to be in the counseling/treatment area. To the extent that Training Center programs are designed primarily to assist youth service workers with respect to counseling/treatment approaches, the Training Center is very effectively accomplishing this purpose.

A secondary impact on decisions is found in the "interpersonal"



category. Training Center programs apparently have the side-effect of assisting youth service workers in resolving decision situations involving relationships with professional peers, co-workers, supervisors, and subordinates, and in decision situations involving the conduct of, or participation in, formal meetings.

Analyses of the types of decisions made by individuals in specific job classifications, and analyses of the relative impact of Training Center programs on particular decision types, result in the following recommendations: 1. The Training Center could substantially improve its offerings by conducting a course or courses directed toward assisting youth service workers to resolve immediate action situations. These situations involve drugs and accidents, crimes and runaways, and aggressive or violent behavior by youths. Such a course or courses would be most appropriately directed toward cottage personnel, and to a lesser but still a substantial degree toward teachers. Such a course or courses could take advantage of the information gathered during this evaluation project. That is, in the conduct of this evaluation project we have generated information concerning specific decision incidents involving immediate action. The nature of these decision situations is available in our records. Consequently, training with respect to immediate action situations could be specifically tailored for cottage personnel and/or teachers on the basis of the decision situations reported by these classifications of youth service workers. 2. A course or courses could be developed for administrators. Such a course or courses would most appropriately emphasize management decisions, especially those decisions involving dismissals, reprimands, staff assignments, and the delegation of responsibilities to subordinates. 3. There is some evidence that supervisors/counselors might profit from a course or courses dealing specifically with disposition of youths. Such a course or courses might identify, in more detail than is presently the case, alternatives that are available with respect to the disposition of youths, programs, facilities, special institutional resources available, guidelines with respect to recommendations to courts, etc.

These revisions or modifications in Training Center programs might be reasonably expected to substantially improve the overall impact of Training Center programs on on-the-job decisions. Such revisions and

modifications could be made without endangering the substantial and positive effects on counseling/treatment and interpersonal decisions.

The influence of Training Center programs was attributed disproportionately to 8 individual courses. On the other hand, there were 11 individual courses which compared very unfavorably with the remainder of the courses. There were 16 courses which compared somewhat unfavorably with the remainder of the courses. Thus, to the extent that influence on on-the-job decisions is a reasonable criterion, we would suggest substantial revision or elimination of some of these courses. In their place could be developed a series of courses directed specifically at types of decision situations encountered by particular job classifications of youth service workers.

SECTION FIVE

A MODEL FOR EVALUATING TRAINING

Issues in Training Evaluation.

The evaluation of training programs both in the rhetoric and the published literature surrounding this problem area, inevitably confronts three major issues: 1. The appropriateness and acceptability of evaluation criteria 2. The adequacy of the evaluation methods 3. The utility of information generated by the evaluation projects.

Evaluation projects must address the issue of identifying appropriate and acceptable evaluation criteria. Typically, this issue is addressed in the evaluation literature through suggestions that evaluators identify the specific goals and objectives of training programs and assess the extent to which these specific goals and objectives are being achieved. This standard suggestion, though very important, is usually not sufficient in and of itself. First, it is sometimes difficult to get training directors and those responsible for training programs to list specific goals and objectives in terms which are directly measurable. That is, objectives are frequently couched in rather global and abstract terminology, making it difficult to develop assessment procedures which will generate empirical data concerning the extent to which those goals and objectives are being achieved. Secondly, even when goals and objectives have been stated in assessable terms, training objectives frequently vary considerably within an overall training program, or between elements of a training program. That is, different courses have different objectives. Thus, it is often difficult to compare the relative effectiveness of elements in an overall training program, especially if those different elements are assessed with different measures in order to be consistent with their individual goals and objectives. Third, individuals who make policy and financial decisions concerning training programs are themselves frequently not the trainers. Indeed, policy and financial decisions are frequently made by individuals higher in the levels of an organization or institution. And whatever criteria are employed in evaluating training must make sense to these decision makers. The ideal situation, of

course, is the identification of evaluation criteria which are acceptable to trainers, training directors, and policy makers who ultimately control the destiny of training programs. That in-service training should somehow affect job performance or influence on-the-job decisions is a general criterion which should be considered "fair" by most parties concerned with the results of evaluation research.

Arguments concerning the adequacy of evaluation methods will probably always characterize training evaluation projects. The principal point at issue is how far the evaluator can reasonably go toward adherence to rigorous "scientific" methods. These methods are associated with scientific experimentation, with the constituting of equivalent treatment and control groups, with pre-testing and post-testing, with reliable and valid measurement, and with sophisticated statistical treatments of data. Indeed, these methods are usually associated with "hard" sciences, and those aspects of the social and behavioral sciences in which research is conducted primarily in laboratory settings. The laboratory need not be a laboratory in a physical sense, but is frequently a context in which the researcher is able to manipulate or control relevant variables. Unfortunately, it is often difficult or impossible to meet the requirements of scientific methods in the evaluation of training. For example, at the very center of experimentation in the social sciences is the setting up of experimental and control groups. Theoretically, one group of subjects is exposed to a "treatment" while another, equivalent group of subjects is not exposed to the treatment. Pre-to-post changes on a criterion measure is the basis for assessing the differential impacts of treatment versus no treatment on the two groups. The two strategies ordinarily employed in constituting experimental and control groups are randomization and matching. Randomization assumes that subjects are randomly assigned to either the experimental or the control group, thus yielding equivalent groups. In many organizational or institutional settings, randomization is impractical or impossible. Similarly, attempts to match a sample of trainees with a sample of non-trainees are potentially error-filled. Even if all of the relevant characteristics on which the two groups should be matched were amenable to measurement, in many situations samples of trainees are self-selecting samples. That is, in

many situations trainees attend training programs voluntarily. Hence, individuals who ultimately end up in the sample of trainees differ from individuals who are not included in the sample of trainees in terms of perhaps the most relevant characteristic, that of wishing to receive the training in the first place. At any rate, the injunction to employ more rigorous scientific methods in evaluating training is frequently at odds with organizational or institutional realities. The question then becomes: can we identify evaluation methods which are reasonably adequate and which are, at the same time, usable in organizational and institutional settings? What will be presented shortly is an approach to training evaluation which is as simple and yet as reasonable as we can make it.

Another issue in training evaluation revolves around the utility of the information generated by the evaluation projects. Program planners and training directors frequently charge that the results of evaluation projects are so general as to provide a rough index of "how well we are doing". Seldom does the evaluation information point to specific revisions or modifications which can be made to improve the overall effectiveness of training programs. What is needed is an evaluation strategy which is both evaluative and instructive. Such a strategy would not only assess the general effectiveness of training, but would also assist in the planning and development of new training elements which would overcome the deficiencies discovered in the training evaluation project.

The model which is presented below is an attempt to resolve the major issues confronting training evaluation. It is an attempt to develop a general approach to training evaluation which would be usable in a wide variety of organizational and institutional settings, and with a wide variety of training programs.

#### The Elements of the Model

1. A generally appropriate criterion. A general model for evaluating training must include a criterion which possesses the following minimum characteristics: 1. It must be a reasonable and fair standard against which training efforts may be evaluated. 2. It should allow for the discovery of differential impacts with respect to job

characteristics, or other subcategories of trainees. 3. It should allow for the discovery of differential impacts with respect to training contents, training components, or different aspects of a general training program. The criterion suggested herein is the impact of training on on-the-job decisions. Such a criterion seems to possess the three characteristics alluded to above. First, in all but the most unusual cases, it is a reasonable and fair standard against which training efforts may be compared. Whatever more specific objectives training programs might have, a reasonable assumption is that most training programs are designed to improve the job performance of trainees. If the jobs performed by trainees involve other than purely mechanical skills, then one of the most basic ingredients of job performance is the resolution of decision situations. To the extent that specific jobs allow for behavioral alternatives, then the resolution of on-the-job decisions is an essential characteristic of the job. The very least that should be expected of training programs in general is that they influence the manner in which on-the-job decisions are resolved.

Second, training programs are frequently directed toward individuals performing a variety of jobs. Trainees differ in terms of types of jobs they perform, amounts of experience on the job or in the organization, background characteristics, personality characteristics, etc. Training programs are frequently effective with respect to some subcategories of trainees, but relatively less effective with respect to other subcategories of trainees. Rarely is a training program either totally effective or totally ineffective. Consequently, a productive approach to training evaluation is one which allows for modification and revision of training efforts. Unfortunately, much contemporary training evaluation treats training as an all or nothing phenomenon. That is, the results of training evaluation frequently yields the conclusion that "it works" or "it doesn't work". The identification of more appropriate evaluation criteria would allow for more realistic appraisals of training impacts. The resolution of on-the-job decisions is a criterion which would allow for comparisons of subcategories of trainees. Hence, the results of training evaluation projects would allow for modification or revision of training efforts, the redirection

of training emphases, and the more appropriate use of evaluation outcomes.

Third, rarely are training programs uniformly effective or ineffective. Some features of a total training program may be relatively effective while other features are relatively ineffective. Unfortunately, if different dimensions or aspects of a total training program are evaluated according to different criteria, then no comparisons among elements of a total training program are possible. However, if a generally appropriate criterion can be identified, then comparisons among different elements of a total training program are possible. The resolution of on-the-job decisions is a criterion which would allow for comparisons among different elements of a total training program. Hence, training programs could be modified in terms of retaining those elements which influence on-the-job decisions and revising or modifying those elements which seem to have little impact on the resolution of job-related decisions.

2. A Description of Decision Characteristics. The model herein proposed assumes that jobs can be characterized in terms of the types of decision situations encountered by individuals performing the jobs. It is possible, therefore, to secure answers to the following questions: 1. What kinds of decision situations are characteristically encountered by a given population of trainees in the routine performance of their jobs? 2. What kinds of decision situations, encountered by these trainees, are influenced by the training they have received? 3. To what extent is the training influencing the types of decisions trainees are required to make in the performance of their jobs? In order to answer these questions the following evaluation procedures are suggested.

a. Developing an interview schedule. Interviewing is suggested as the basic method for several reasons. First, the objective is to elicit relatively detailed responses. That is, we wish to get beyond simple descriptions of jobs performed. We want respondents to recall, and to report in detail, specific decision situations they have encountered on the job, so that jobs can be characterized in terms of concrete decisions made, rather than more abstract and superficial definitions of job responsibilities. Second, during the conduct of an interview, a trained interviewer is capable of adjusting and correcting the interview

if it becomes apparent that the respondent is not providing the kind of information or the depth of information necessary to accomplish the evaluation objectives. The interview schedule employed in this evaluation project, and contained in appendix B, may serve as a general illustration of the format which can be employed in eliciting information concerning the characteristics of on-the-job decisions.

b. Training interviewers. This approach to training evaluation requires interviewers who are relatively skilled at monitoring interviewee responses and guiding those responses in directions consistent with the evaluation objectives. For the evaluation project reported herein, interviewers were selected from among graduate students in a Department of Communication. In addition, the interviewers need to understand the evaluation strategy, the kinds of information the evaluation project is attempting to generate, and how the interviewer may behave so as to elicit appropriate and useful information from respondents. A description of interviewer training for this project, and one which may serve as a general illustration of training interviewers for this suggested approach to training evaluation, was presented in section III of this report.

c. Developing categories. The essential information generated by the interviews is of two types: 1. Reports of specific decision situations encountered by interviewees in the performance of their jobs. 2. Reports of specific decision situations in which the resolution of the decision situation was influenced by the training interviewees had received. The development of categories for types of decisions is based upon the first set of responses; that is, decision situations encountered in the routine performance of the job. The methods involved in developing category systems for characterizing verbal content, such as the reports of decision incidents, are derived from a sub-area of research methods called "content analysis". At the very basis of this approach to training evaluation is the development of a category system which is capable of yielding adequate and reliable classifications of decision incidents in terms of types of decisions. Consequently, considerable care should be taken in the development of decision categories and in their subsequent testing for the reliability of coders employing the category system. In executing this phase of the evaluation

project, one should secure the assistance of an individual practiced in the performance of content analysis.

d. Breaking the sample. Once it has been established that the decision incidents reported by respondents can be reliably classified in terms of a set of decision categories, then it is possible to describe the sample in terms of the types of decisions which characterize the jobs performed by the respondents. It is also possible to compare sub-samples of respondents in terms of types of decisions made. Thus, the total sample of interviewees may be broken down by type of job, job classification, department, or any other relevant sub-sample characteristic which might help to make the evaluation results more useful in developing specific training components which are oriented toward the needs of particular sub-samples. If analyses of the distribution of decision types for different sub-samples results in the conclusion that all sub-samples make essentially the same kind of decisions, then the different sub-samples may benefit from essentially the same kind of training. However, if sub-samples vary considerably in terms of types of decisions made, then more specific types of training may be developed to meet the needs of particular sub-samples.

3. Description of training influenced decisions. In addition to reporting specific instances in which decision situations were encountered in the routine performance of their jobs, the interview schedule requires respondents to recall and report specific decision situations in which the resolution of the situation was influenced by the training they had received. The category system developed for the analysis of general decision types is also employed for the analysis of training influenced decisions. The analytic strategy is to compare the distribution of general decisions with the distribution of training influenced decisions. Such comparison may be made for the total sample, and for relevant sub-samples. Discrepancies found between the distribution of general incidents and the distribution of training influenced incidents provide the basis for refining or modifying the training program. For example, if a particular sub-sample makes a substantial number of decisions of type X, but reports relatively little influence of training on decisions of type X, then training may be developed specifically

for the purpose of assisting trainees to resolve decisions of type X. The basic strategy is a relatively simple one: 1. For a total sample, or for specific sub-samples, identify the types of decisions that individuals are required to make in the performance of their jobs. 2. Identify the types of decisions which are influenced by the training respondents have received. 3. Focus on those cases in which the training is apparently not influencing particular types of decisions, especially when those types of decisions represent a substantial proportion of the decisions required in the performance of jobs. 4. Revise training emphases so that the training offered is tailored to the types of decisions required in the performance of jobs.

This basic approach to training evaluation might be modified in a number of ways, depending upon how detailed an evaluation is desired. For example, it is possible to identify the characteristic ways in which the particular decision situations are resolved. Thereafter, assuming that adequate criteria are available or could be developed, it would be possible to determine whether particular decision situations are resolved "adequately" or "inadequately" by the respondents. In cases wherein decision situations are resolved "adequately", perhaps training is unnecessary. In particular situations in which decisions are resolved "inadequately" then the development of corrective training may be essential. Additionally, it is possible to obtain, from individuals who report relatively little or no influence of training on their decisions, the reasons for this lack of influence. It may be that the training is not sufficiently relevant to the job. It may be that the training is presented in such theoretical or abstract terms that it is difficult to make applications to the job. It may be that particular individuals are so constrained by institutional policies and regulations that they have little opportunity to engage in real decision-making. It may be that certain courses are conducted poorly. Whatever the reasons, it is possible that the information elicited will be helpful in revising or modifying training efforts, or in using training courses more productively.

This model for evaluating training is offered as a response to the issues discussed in the introduction to this section. More generally, this model is offered as a reaction to a recurring problem in training

evaluation. It is frequently the case that evaluation projects generate information which is "evaluative", but not "instructive". We have too often encountered evaluation results which leave us with only two alternatives: continue what we are doing or do something entirely different. We wish to obtain more evaluation results which provide us with guidelines for revising or modifying our training efforts. The model presented herein serves that end. Indeed, the basic strategy of describing decision situations in terms of job classifications could even be employed in the absence of an established training program, and for purposes of determining what kind of training is originally needed. To the extent that the resolution of on-the-job decisions is an appropriate and acceptable criterion, then the model should generate both realistic and useful information.

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**CONTINUED**

**1 OF 2**

Appendix A  
COURSE DESCRIPTIONS

C-201 INTERPERSONAL COMMUNICATION

This course is designed to provide basic skills in communication on both a theoretical and practical level. Listening, one-two way communication, symbolic interaction, self-disclosure and feedback are dealt with in order to help the student improve relationships, overcome roadblocks, and accomplish tasks through better communication.

C-202 INTERPERSONAL COMMUNICATION PRACTICUM

This course is a practical application of C-201. Emphasis is on demonstrations, and exercises that are directed at providing individual feedback for members.

C-203 INTERVIEWING TECHNIQUES

This three day course is primarily experiential. During the morning of the first day, theory and techniques will be presented, including the viewing of video tape segments of good and bad interviews. During the rest of the course each student conducts two video taped interviews with institutionalized youth. These interviews are viewed and discussed by the total class.

C-302 INTERVIEWING/COUNSELING

This course is an intense three day workshop relying heavily on video feedback. Theory is presented via discussions, handouts, and a video tape on techniques. Each student does two taped interviews utilizing youth from the institutions. The entire class evaluates the interview.

C-305 POLICE AND MINORITY GROUP COMMUNICATION

This course is a thirty hour course dealing with methods and techniques for improving communication between law enforcement officers and citizens from minority cultures.

D-101 PHARMACOLOGY OF DRUG ABUSE

This course gives a basic overview on the pharmacology of amphetamines, barbiturates, alcohol, hallucinogens, marijuana, opiates, tranquilizers, and miscellaneous agents. This course includes slides, and video tapes dealing with attitudes and facts related to drugs. The course gives suggestions on what to do for bad trips and overdoses.

D-102 ALCOHOLISM

This course is designed to give the student a general overview of alcoholism. Some specific areas covered are: stages of alcoholism, effects of alcoholism on the body, psychological factors of alcoholism, treatment modalities for alcoholism, and several theories. This course combines lecture and discussion and is for youth workers interested in understanding alcoholism as another drug addiction afflicting youth.

D-201 DRUGS AND MOTIVATION

This course is designed to provide the participant with the opportunity to discuss why some people have chosen drugs which are culturally defined as illegal.

D-301 THE DRUG SCENE

This course is a experiential course which provides the student with on the street experience. Police, minority groups, street people, and helping agencies provide perspective on the drug issue.

D-305 CENIKOR TECHNIQUES

This course will be presented by staff members of Cenikor. The class format consists of short lectures, discussion, and some experiences with the Cenikor drug rehabilitation techniques.

GL-101 ORIENTATION TO DELINQUENT YOUTH SYSTEM

Through the use of closed circuit TV, and other audio-visual aids participants are provided with an overview of the Colorado delinquent youth system. Participants visit several institutions or agencies serving youth and may observe juvenile court hearings. Visits to agencies may vary according to interest of class. This course is designed for any interested youth worker who wants a short, intensive overview of the delinquent youth system in Colorado.

GL-301 CONCEPTS OF GROUP DYNAMICS

This course is a pre-requisite to all other group life courses. This course utilizes lectures and open group techniques in order to demonstrate the theoretical concepts and processes which may be applied to an understanding of group dynamics.

GL-302 CROSS CULTURAL COMMUNICATION

This course is designed for youth workers who want first-hand knowledge of the youth scene in an urban environment. Through intensive, but concentrated learning experiences, the class gains first-hand knowledge of the current youth scene in Denver. Psychological concepts are explored, sociological problems are viewed. Acquaintanceship with the value systems of youth is provided through life experiences on the street. Class members are given an opportunity to practice what they have learned during the quarter.

GL-304 WORKSHOP IN GROUP DYNAMICS

This course is designed for the youth worker who wants an opportunity to apply the concepts of group dynamics. Through the use of games, exercises, and video-tapes, the student learns how the concepts of leadership, power, and authority operate in a group. The student also learns how to handle group cooperation, competition, interpersonal attraction, status, and feedback.

GL-305 GROUP LIFE THEORY AND PRACTICE

Utilizing a wide variety of audio-visual aids, this class provides practical suggestions on managing small groups of youth within the institutional setting. Subject matter includes: interviewing and counseling techniques, discipline, helping relationships, formation, and drug abuse.

GL-306 COUNSELING TECHNIQUES

This course is designed to provide training in one-to-one counseling techniques. The structure of the class is flexible and is built around the needs of the class. It consists of short lectures on general counseling techniques and counseling sessions which are video-taped and critiqued by the class.

GL-307 GROUP COUNSELING

This course provides an intensive look at small group dynamics as they complement group counseling. This course will include games and exercises to demonstrate how leadership, power, authority, competition, and cooperation may be used in group counseling.

GL-309 NTL TECHNIQUES AND ROLE PLAYING

This four-hour course consists of two distinct and separate subjects: 1. A representative presentation of group techniques used by National Training Laboratories; and 2. Discussion and experience of role playing techniques. This latter section includes a video tape presentation.

GL-310 SELF IMAGE TECHNIQUES

This class emphasizes the experiential learning process and participants are expected to deal with their own self-image on a gut level. Such tools as the mirror, johari window, power game, diactic encounters and structural analysis in TA are utilized.

HG-201 PSYCHODRAMA WORKSHOP FOR YOUTH WORKERS

This course is designed for youth workers interested in learning about the use of psychodrama and role-playing techniques, either for personal growth or for use with youth in a treatment setting. Some theory is presented, but the workshop concentrates on the experiential learning system. Participants are given a chance to participate in psychodrama learning experiences and are given the opportunity to conduct practice sessions in psychodrama work. The workshop includes experience in sociometric diagramming, utilization of school of Moreno Psychodrama techniques such as The Gift Shop, The Projection Booth, Projected Chair, Protagonist, Alter Ego, and Mirror methods.

HG-401 PSYCHODRAMA LEADERSHIP

This course is designed for any youth worker interested in becoming active as a psychodrama leader. The course begins with a two and one-half day in residence workshop which is followed by regular classes for eleven weeks, four hours per week. The course concludes with an eight-hour marathon. The techniques utilized in this course may be useful for family therapy.

I-101 INTRODUCTION TO I-LEVEL THEORY

This course consists of a 12-hour introductory workshop designed to introduce the student to the basic concepts of I-Level including a detailed discussion of the level and sub-type classifications. Essentially an overview of theory, the workshop serves as a basis for I-201.

I-201 INTRODUCTION TO I-LEVEL TREATMENT

This workshop builds on I-101. It touches on relevant differential treatment environments suggested by I-Level developmental model. Included is some discussion of worker/client matching. This course is an overview and is not designed as a depth analysis of treatment.

I-202 ADVANCED I-LEVEL INTERVIEWING AND DIAGNOSIS

This course is a 30-hour advanced workshop in I-Level interviewing. The program involves three phases. Phase one consists of a two-day workshop during which each student will interview one youth. The interview is video-taped for immediate playback and analysis by an instructional group of three other students and an instructor. The second phase is the assignment to interview another youth and second-rate a tape done by a partner from Phase one. During Phase three, at least four of these interviews are intensively critiqued by the instructor. This course is designed for youth workers who have had I-201.

I-210 I-LEVEL SEQUENTIAL DIAGNOSTIC SYSTEM

This course consists of a 12-hour workshop designed to train intake staff in the diagnostic procedures used by Dr. Carl Jesness in the California Youth Authority. The major focus of this class is to train students in the administration and scoring (for I-Level diagnosis) of a sentence completion test.

I-301 INTRODUCTION TO I-LEVEL TREATMENT

This course is a 12-hour workshop which overviews I-Level treatment for all classifications. It touches on relevant treatment modalities, environments, and some discussion of appropriate worker characteristics.

I-302 I<sub>2</sub> TREATMENT

This course is a 12-hour seminar for intensive discussion and analysis of I<sub>2</sub> treatment.

I-303 Cfm TREATMENT

This course consists of a 12-hour seminar for intensive discussion and analysis of Cfm treatment.

I-304 Cfc-Mp TREATMENT

This course is a 12-hour seminar for intensive discussion and analysis of Cfc-Mp treatment.

I-305 NA TREATMENT

This course consists of a 12-hour seminar for intensive discussion and analysis of Na Treatment

I-306 Nx TREATMENT

This course is a 12-hour seminar for intensive discussion and analysis of Nx treatment.

I-310 BEHAVIOR MODIFICATION TECHNIQUES AND I-LEVEL

The intent of this 12-hour workshop is to explore the differential effectiveness of operant conditioning techniques.

I-311 TRANSACTIONAL ANALYSIS AND I-LEVEL

This course consists of a 12-hour workshop designed to examine the differential effectiveness of T.A.

I-402 CLASSIFICATIONS OF WORKERS

This course is a 20-hour workshop designed to train personnel in identifying types of treatment agents. This is a "how to" class and includes the assignment of at least one worker style interview.

I-412 I-LEVEL AND RELIGION

This course is a three-hour seminar addressing itself to the correlations between I-Level development and religious experience. Continuing directed study may be arranged with instructor's consent.

JD-201 THEORIES OF DELINQUENCY

In this course, several current theories of Juvenile delinquency are presented and discussed. The presentations are broad enough to include causal and treatment considerations. Discussion is encouraged, as is the student's expression of his own ideas of delinquency. This course is designed for any youth worker interested in understanding delinquency on a theoretical basis.

L-101 THE LAW AND THE JUVENILE

This 20-hour course is an in-depth exploration of the Colorado Juvenile Code and various landmark decisions regarding juveniles. Discussions center around social implications of these court decisions and related relevant material.

MS-200 BASIC SUPERVISION

This course is designed to create an awareness of supervisory skills that must be developed by employees as they progress toward beginning levels of supervisory responsibilities. The course is designed to assist participants in planning their own future development.

#### MS-300 MANAGEMENT AND SUPERVISION

This course provides participants with the methods and techniques enabling them to put into use newly acquired skills in their own job, in terms of management of others. Emphasis is on administration and human relations skills. The course is designed for personnel in management/supervisory positions in state institutions and other affiliated state or volunteer youth agencies.

#### T-301 REALITY THERAPY

This course provides didactic instruction in Glaser's reality approach to treatment. The course emphasis is experiential.

#### T-302 BEHAVIOR MODIFICATION

This course describes the use of behavior modification techniques with adolescents. It includes background in learning theory, as well as examples of how this technique can be applied to institutional treatment settings.

#### T-303 DEFENSE MECHANISMS - THEIR USE AND ABUSE

This course comprises a basic discussion of defense mechanisms, a description of the various kinds of defenses, their utility, their destructive potential, and some suggestions as to treatment implications.

#### T-304 RADICAL THERAPY

This course describes an unconventional approach to treatment which looks at political and economic factors rather than internal dynamics as causes of emotional maladjustment.

#### T-306 GESTALT TREATMENT

This course includes a didactic description of the Gestalt approach to treatment with an emphasis on applying some of the characteristic techniques, e.g., "the empty chair."

#### T-308 FAMILY THERAPY

This course is a didactic and experiential presentation of techniques applicable to family therapy. Phase I (T-308) is a formal discussion of family therapy techniques. Phase II (T-309) focuses on the experiential aspects of the treater and treated. In this phase participants role play families and therapist.

#### T-310 TRANSACTIONAL ANALYSIS

This course is a formal introduction to the theory and practice of Transactional Analysis, with emphasis on its application to group treatment. The didactic part of the course leads up to the practice groups in which each participant has the opportunity both to lead and be a member of a TA-oriented group.

#### T-311 GROUP THERAPY

This course presents different technical approaches to group therapy with emphasis on the individualistic style developed by each therapist using any one of these approaches.

#### T-312 GUIDED GROUP INTERACTION

This course is a presentation of the principles of G.G.I. It includes a demonstration, using course participants, of the use of the G.G.I. concept.

#### T-315 TRANSACTIONAL ANALYSIS

This course offers a thorough exposure to the basic TA concepts of Parent-Adult-Child, Transactions, Stroking, Games, Rackets, and Scripts.

#### T-318 PSYCHOPHARMACOLOGICAL AGENTS AS USED IN TREATMENT WITH ADOLESCENTS

This course involves the discussion of the utilization of drugs in the treatment of adolescents. Focus in this course is on the things the treatment agent needs to be aware of in dealing with adolescents whose treatment includes drugs.

#### T-319 AMERICAN INDIAN CULTURE TODAY

This course focuses on the contemporary aspects of Indian culture and some of the difficulties encountered by the modern Indian in today's society.

#### OUT OF STATE TRAINING

This training consists of sending key personnel to various states having youth programs. The purpose is to observe and/or be trained in specific treatment methodologies employed by these agencies.

#### SENSITIVITY TRAINING

This training involves a typical weekend T group or sensitivity experience which focuses on the individual's personal growth.

#### VORATH

This particular training is an intensive and in-depth course taught by the developer of Guided Group Interaction. Participants must be familiar with G.G.I. and must be involved in a treatment program using G.G.I. or planning to implement this treatment modality.

#### PRESSURE POINTS

This course is for personnel involved with assaultive and acting-out youth. It focuses on how to handle these youth by being aware of various body pressure points that can be used to control disruptive activity.

Appendix B  
INTERVIEW SCHEDULE

Date: \_\_\_\_\_  
Interview Number: \_\_\_\_\_  
Interviewee: \_\_\_\_\_  
Job Title: \_\_\_\_\_

Introduction, approximately 1 minute of friendly, casual remarks, if not "forced".

LEAD IN

You were selected from a list of all those who are working in the Division of Youth Services, to be interviewed. The interviews are a part of a research study sponsored by a government agency, with the cooperation of Mr. Agee. Incidentally, by the time the research study is completed, I will have interviewed several hundred individuals, like yourself, who work in this Division.

Since you may be interested in what the study is about, let me give you just a brief explanation. Generally, we are interested in the kinds of situations you encounter on the job that require you to make a decision of some kind. We are also interested in the things which influence your decisions. We are trying to discover the kinds of decisions individuals in different job classifications make, and what influences their decisions. This kind of information could be very helpful to institutions such as this one. It could help in classifying jobs, in training programs, and in other ways we probably haven't even thought of yet.

We will make no attempt to evaluate the "goodness" or "badness" of the decisions you or anyone else makes. Our research objectives don't include such evaluations. And besides, you are the only one who really knows whether your decisions are good or bad. So please be candid and honest. The only ones who will ever see the results of this interview are the researchers. In fact, your name will be removed from the interview record as soon as we have coded your answers for computer analysis.



So let's begin. And since I know very little about your job, it will help me considerably if you would tell me what you do in a typical working day.

SECTION I: GENERAL DECISION INCIDENTS

LEAD IN

This part of the interview deals with the kinds of decision situations you encounter on your job. Would you think for a moment about the kinds of decisions you make and some specific situations when you were required to make a decision.

Question 1: Critical Incident

Can you recall one particular situation recently when you had a decision to make that was a part of your job?

(Interviewer Note: If the respondent is hesitant, probe by referring to something he mentioned when he was describing his job. e.g., "You mentioned that you are in charge of the girls in this cottage. Can you recall the last time you had a problem with one of the girls?" Continue prompting until the respondent has an incident in mind.)

Question 1-1

Would you describe the situation you have in mind. For the moment, don't tell me what you decided, but simply describe the incident so that I might be able to understand the situation you were in.

Note Decision Conditions:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Question 1-2

How did you resolve this situation? That is, what did you decide or what did you do?

Note Resolution:

Question 1-3

I suppose there are many things which might have influenced you to resolve the situation in the way you did. Something you learned from a past experience, something you read in a book, or heard in a lecture, or perhaps seeing someone else resolve a similar situation. Can you think of some of the things that might have influenced your decision in this situation?

Note Sources of Influence:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Question 1-4

Finally, can you recall approximately when the situation occurred?

Note Approximate Date:

Question 2: Critical Incident

Can you recall another recent situation when you had a decision to make that was part of your job?

(Interviewer Note: If the respondent is hesitant, employ two probes. If the respondent remains hesitant, go directly to Section II)

Question 2-1

Would you describe the situation you have in mind. Again, don't tell me yet what you decided, but simply describe the incident so that I might be able to understand the situation you were in.

Note Decision Conditions

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Question 2-2

What did you decide?

Note Resolution:

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Question 2-3

Can you think of some of the things that might have influenced your decision in this situation?

Note Sources of Influence

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Question 2-4

Approximately when did this situation occur?

Note Approximate Date

Question 3: Critical Incident

Can you recall another recent situation when you had a decision to make that was simply part of your job?

(Interviewer Note: If the respondent is hesitant, employ two probes. If the respondent remains hesitant, go directly to Section II.)

Question 3-1

Would you describe the situation you have in mind. Again, don't tell me yet what you decided, but simply describe the incident so that I might be able to understand the situation you were in.

Note Decision Conditions

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Question 3-2

What did you decide?

Note Resolution

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Question 3-3

Can you think of some of the things that might have influenced your decision in this situation?

Note Sources of Influence

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Question 3-4

Approximately when did this situation occur?

Note Approximate Date

---

SECTION II: TRAINING BACKGROUND

(Optional by Sampling Frames)

Yes	_____	No	_____
Known	_____		
Not Known	_____		

LEAD IN

This part of the interview deals with whether you have received any on-the-job training for your present job, and the nature of such training.

Question 4

How long have you worked here?

\_\_\_\_\_ years

Question 5

Since you have been in your present job have you participated in any training program, workshop, class, or seminar conducted by any unit of this institution?

\_\_\_\_\_ No

\_\_\_\_\_ Yes

(If "no" probe by repetition and elaboration. If still "no", go to Interview Closing.)

Question 6

Would you identify those training experiences you have had that were conducted by this institution.

Nature of training	Conducted by
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____
9. _____	_____
10. _____	_____

TRANSITION (If no responses identified Training Center, go to Interview Closing)

Let me check my notes for a minute. (Statement disregarded if less than 4 responses above, Question 6) You indicated that you participated in training offered by the Training Center. This training involved....(Repeat responses given)

Was this all the training you received which was connected with the Training Center in any way?

Would you describe to me briefly what you got out of these training programs.

SECTION III: TRAINING RELATED INCIDENTS

Question 7

Can you think of any situations, along the lines we discussed earlier in the interview, when a decision you made may have been influenced in any way by something you learned or experienced in any of the training you have just identified? Think about it for awhile.

\_\_\_\_ No  
\_\_\_\_ Yes

(If "no," probe with references to the types of situations described in earlier critical incidents. If still "no," go to question 10.)

Question 7-1

Would you describe the situation you are thinking of.

Note Decision Conditions

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

Question 7-2

What did you decide?

Note Resolution

\_\_\_\_\_

\_\_\_\_\_

Question 7-3

Can you recall what you learned or what happened in your training experience that influenced your decision?

Note Source of Influence

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Interviewer warning: Response must be adequate to identify specific training program.

Record here: \_\_\_\_\_

Question 8

Can you think of another situation in which you were influenced in any way by something you learned or experienced in any of the training you have identified? Please take time, if you need to, to think about it.

No  
 Yes

(If "no," probe by referring to respondent's discussion of benefits from training. If still "no," go to Interview Closing.)

Question 8-1

Would you describe the situation you are thinking of.

Note Decision Conditions

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Question 8-2

What did you decide?

Note Resolution

\_\_\_\_\_  
\_\_\_\_\_

Question 8-3

Can you recall what you learned or what happened in your training experience that influenced your decision?

Note Source of Influence

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Interviewer Warning: Response must be adequate to identify specific training program.

Record here: \_\_\_\_\_

Question 9

Can you think of another situation in which you were influenced in any way by something you learned or experienced in any of the training you have identified? Please take time, if you need to, to think about it.

No  
 Yes

(If "no," probe by referring to respondent's discussion of benefits from training. If still "no," go to Interview Closing.)

Question 9-1

Would you describe the situation you are thinking of.

Note Decision Conditions

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Question 9-2

What did you decide?

Note Resolution

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Question 9-3

Can you recall what you learned or what happened in your training experience that influenced your decision?

Note Source of Influence

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(Interviewer Warning: Response must be adequate to identify specific training program.)

Record here: \_\_\_\_\_

Question 10 only if no training-related incidents were given.

Question 10

Can you think of any reasons in particular why nothing you have experienced in the training has seemed to influence the decisions you make in the performance of your job?

No  
 Yes

(If "no," go to Interview Closing.)

Question 11

Record reasons mentioned

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

INTERVIEW CLOSING

Your answers have been very helpful. Again, let me emphasize that your answers will be treated as anonymous. Thank you for your time. I enjoyed talking with you.

Appendix C  
LETTERS OF CONTACT

STATE OF COLORADO



JOHN A. LOVE - GOVERNOR

DEPARTMENT OF INSTITUTIONS

HILBERT SCHAUER - EXECUTIVE DIRECTOR

DIVISION OF YOUTH SERVICES

GERALD L. AGEE, CHIEF

3900 SOUTH CARR STREET - DENVER, COLORADO 80235

TELEPHONE (303) 986-2277

M E M O R A N D U M

TO: Loren Adlfinger, Kaye Colvin, Dick Compton, Gene Davis,  
Dick Douglass, Larry Grauburger, Gene Hopper, Ken Joos,  
Bill Masimer, John McIlwee, Jack Sliemers, Tim Smith.

FROM: Gerald L. Agee

DATE: October 24, 1972

SUBJECT: Training Research Study Interviews

As you are aware, at the October 11 meeting of Department heads, Frank Herzog described a research study sponsored by LEAA and directed toward an evaluation of Training Center programs. This research study requires that approximately 180 DYS employees be interviewed. The interviews deal with the kinds of decisions the employee makes in the performance of his job and the factors which influence those decisions. No attempt will be made to evaluate the "goodness" or "badness" of those decisions.

Some of your subordinates will be contacted by representatives of the research team conducting the study, and will be asked to participate in an interview. The interview takes up to one hour to complete. If it is possible to do so, I would like you to allow your subordinates to complete the interview during regular working hours. In instances where this is not practical, the researchers will make other arrangements to interview your subordinates.

Our cooperation is essential to the success of this project. I have reason to believe that this project will help improve Training Center programs.

jf



STATE OF COLORADO



JOHN A. LOVE - GOVERNOR

**DEPARTMENT OF INSTITUTIONS**

HILBERT SCHAUER - EXECUTIVE DIRECTOR

**DIVISION OF YOUTH SERVICES**

GERALD L. AGEE, CHIEF

3900 SOUTH CARR STREET - DENVER, COLORADO 80235

TELEPHONE (303) 986-2277

October 24, 1972

Dear

Within the past two years, you participated in a training program conducted by the Colorado Youth Workers Training Center. With the assistance of a grant from the Justice Department, Law Enforcement Assistance Administration (LEAA), the Training Center is conducting a formal evaluation of its programs. The information growing out of the formal evaluation project will be used by the Training Center to improve its programs and to develop more useful training experiences for future participants.

In order to gather information objectively, a special team of program evaluators has been contracted to conduct interviews with individuals who have participated in Training Center programs. The interviews are confidential, and the participants are not identified, by name, in the report of the results of the evaluation.

Within the next month, a representative of the evaluation team will contact you and ask for your cooperation. Your assistance, in the form of about one hour of your time to complete an interview, will be of considerable help to us. I hope you will be able to provide a time, convenient to you, when you are contacted by the evaluation team.

Sincerely,

Gerald L. Agee

STATE OF COLORADO



JOHN A. LOVE - GOVERNOR

**DEPARTMENT OF INSTITUTIONS**

HILBERT SCHAUER - EXECUTIVE DIRECTOR

**DIVISION OF YOUTH SERVICES**

GERALD L. AGEE, CHIEF

3900 SOUTH CARR STREET - DENVER, COLORADO 80235

TELEPHONE (303) 986-2277

October 24, 1972

Dear

You have been selected, from a list of all those who are working in the Division of Youth Services, to be interviewed as a part of a research study sponsored by the Justice Department Law Enforcement Assistance Administration. The research study deals with the kinds of situations you encounter in your job and the factors which influence your decisions on-the-job. No attempt will be made to evaluate the "goodness" or "badness" of the decisions you make. You will not be "evaluated" in any way or sense.

Within the next month, a representative of the research team will contact you and ask for your cooperation. Your assistance, in the form of about one hour of your time to complete an interview, will be of considerable help in successfully carrying out this research project. The interviews are confidential. They are conducted by interviewers who are members of a special research team, and are not employees of the Division of Youth Services. You will not be identified, by name, in the report of the results of the research study.

Your department head has been informed that this research is being done and that some of his workers will be asked to participate in an interview. I would appreciate your cooperation with the research team, when you are contacted for an interview.

Sincerely,

Gerald L. Agee

**END**