



47/22

Inter-agency
Collaboration
In Drug Rehabilitation



Inter-agency
Collaboration
In Drug Rehabilitation

NCJRS

MAY 12 1978

ACQUISITIONS



Inter-agency Collaboration In Drug Rehabilitation

Dr. Zvi Feine, Project Director
Miss Debra Bogdan, Assistant Project Director
Miss Penelope Johnston, Research Assistant
Dr. Thomas F. Updike, Director, Bureau
of Drug Rehabilitation
Miss Patricia Kelley, Assistant Director,
Bureau of Drug Rehabilitation

Bureau of Drug Rehabilitation
Virginia Department of Mental Health and Mental Retardation
Richmond, Virginia

October 1974

This project was funded in part by Grant Number 73-A1922 from
the Virginia Division of Justice and Crime Prevention

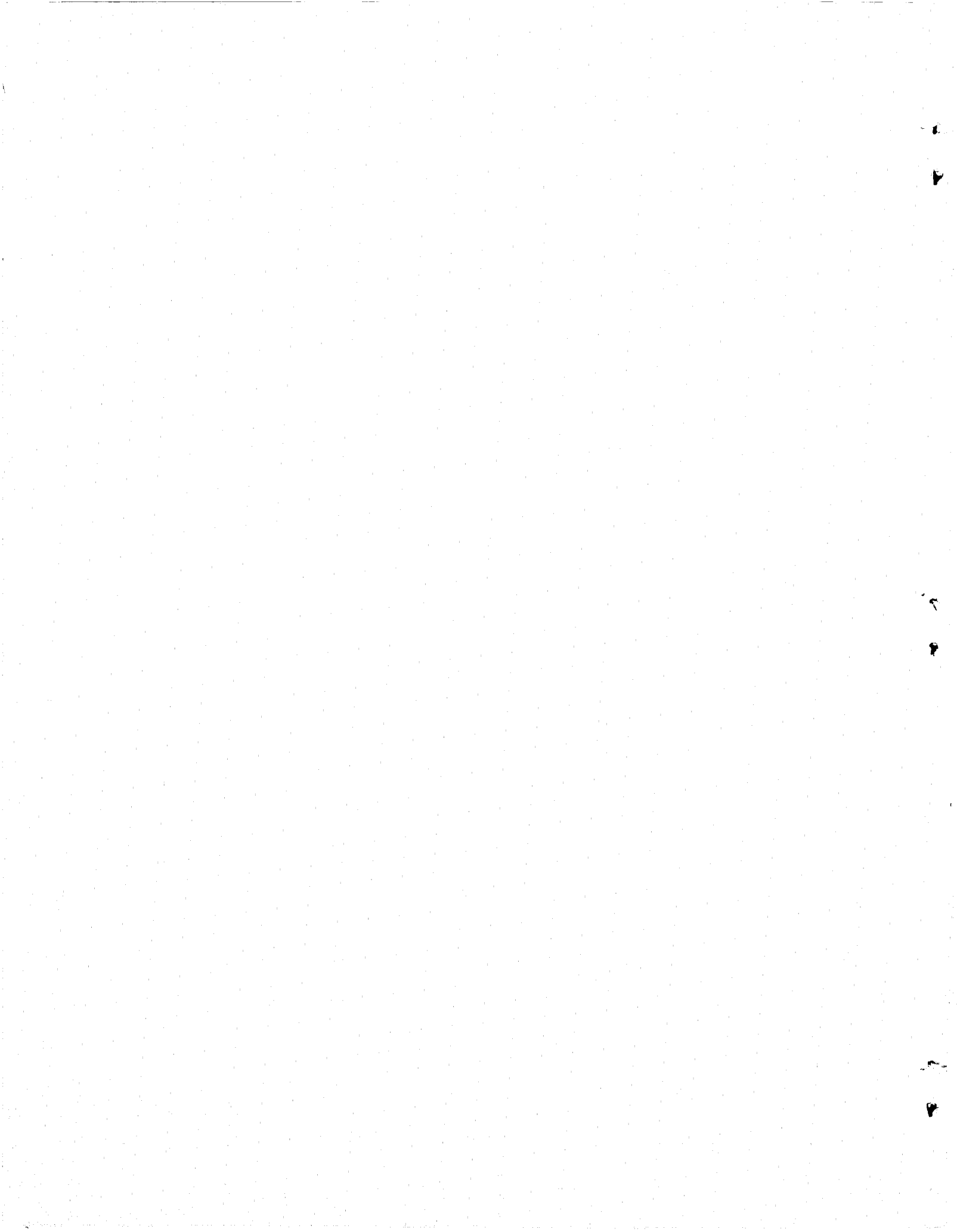


TABLE OF CONTENTS

List of Figures and Tables	vi
Abstract	viii
Acknowledgements	xi
 Chapter	
I. THEORETICAL BASE	1
Introduction	1
Review of Open Systems Theory	6
Coordination, Cooperation, and Collaboration	12
Inter-organizational Relationships	19
Personality and Role Behavior Needs	27
Footnotes	32
II. CONCEPTUAL FRAMEWORK	38
Major Hypothesis and Sub-Hypotheses	38
Construction of the Mapping Sentence	41
Description of Facets and Elements in the Mapping Sentence ..	54
Restructuring of the Mapping Sentence	77
Footnotes	86
III. METHODOLOGY	88
Developing the Interview Schedule	88
Implementing the Interview Schedule	97
Criteria for Programs Selected for Inclusion in the Study ..	102
The Dependent Variables	109
The Independent Variables	122
IV. RESULTS	133
Relation of Coercion to Maintenance of Clients (Depfact) ...	133
Number of Referrals in Relation to SSR	140
Maintenance in Relation to SSR	149
Other Findings	163
Footnotes	170
V. CONCLUSIONS	171
.....	
APPENDIX 1	182
APPENDIX 2	205
APPENDIX 3	215
SELECTED BIBLIOGRAPHY	222

LIST OF FIGURES AND TABLES

Figure

1. Mapping Sentence Presented in the Study's Proposal	39
2. Mapping Sentence Reflecting the Construction of the Study's Interview Schedule	78

Table

1. Treatment Modality Offered by Programs	107
2. Cross-Tabulation of Average Level of Participation by Length of Stay	117
3. Cross-Tabulation of Length of Stay by Direction of Stay	118
4. Average Level of Participation by Direction of Stay	119
5. Correlation Coefficients for Average Level of Participation, Direction of Stay & Length of Stay	120
6. Factor Matrix for Average Level of Participation, Direction of Stay & Length of Stay	121
7. Mean and Standard Deviation for Seven Independent Variables	126
8. Correlation Coefficient Matrix for Seven Independent Variables	126
9. Varimax Rotated Factor Matrix for Seven Independent Variables	127
10. Factor Score Coefficient for Computing Factors	129
11. Hierarchical Rankings for Court Coercion by Drug Rehabilitation Program Directors	135
12. Cross-Tabulation of Maintenance Score (Depfact) By Ranked Court Coercion for Coerced Clients	138
13. Cross Tabulation of Maintenance Score (Depfact) By Ranked Court Coercion for all Cohort Clients	139
14. Matrix of Five Drug Rehabilitation Programs by Their Respective Target Agency	141
15. Cross-Tabulation of Indfact I by Number of Referrals	142
16. Cross-Tabulation of Indfact II by Number of Referrals	143
17. Cross-Tabulation Between Dircon and Indfact II for Fifteen Agencies	147
18. Cross-Tabulation Between Dircon and Indfact I for Fifteen Agencies	148
19. SSR Scores for Each Program-Agency Combination	150
20. Correlation Coefficients for Seven Independent and Three Dependent Weighted Variables	153
21. Cross-Tabulation Between Indfact I and Depfact	154
22. Cross-Tabulation Between Indfact II and Depfact	155
23. Cross-Tabulation Between Indfact I and Depfact Controlling for Court Coercion (Clients with Coercion Only)	156

24.	Cross-Tabulation Between Indfact I and Depfact Controlling for Court Coercion (Clients without Coercion Only)	157
25.	Cross Tabulation Between Court Coercion and Depfact for Clients Referred by Fifteen Target Agencies	158
26.	Cross-Tabulation Between Type of Referral Source and Court Coercion	162
27.	Cross-Tabulation Between Three Types of Referral Source Maintenance Clients (Depfact)	162
28.	Number of Referrals and Number of Referral Sources by Program	164
29.	Cross-Tabulation of Number of Referral Sources by Number of Referrals for Five Programs	165
30.	Cross-Tabulation Between Two Types of Referral Sources and Maintenance of Clients (Depfact)	167

ABSTRACT

This study measures the effects of collaborative behavior of drug rehabilitation program staff with staff of community service agencies to secure appropriate referrals, i.e., higher number and maintenance of clients, for a drug rehabilitation program. The conceptual framework of this study is based on systems and inter-organizational theory. The conceptual framework delineates selected inter-personal techniques designed for enhancing interaction, as well as fulfilling the personal and organizational role needs of agency staff members by drug rehabilitation staff. The study suggests that if a drug program staff member invests in a relationship with a community agency staff member by using inter-personal techniques to fulfill role behavior needs, then the community agency staff members will reciprocate by referring appropriate clients to the drug program and, further, by helping the client to make better use of the program. The quid pro quo of this collaborative behavior is therefore enhanced service to clients.

Five comprehensive drug rehabilitation programs in Virginia were included in the study. An interview schedule based on the study's conceptual framework concerning collaborative behavior was administered to 59 individuals (95% of the programs' treatment staff). Respondents were questioned about the quality and quantity of their contact

with staff of selected community agencies. A distinction was made between direct contact and the use of indirect network linkages to influence the community agency staff member. Data on the referral sources and program participation were collected for all clients (288) entering the programs during a four-month period. A follow-up period of three months was used.

Using factor analysis the staff data showed that the variables comprising the conceptual framework's direct contact component load highly on one factor. The variables were weighted and treated as one factor. The same was true for the indirect contact components. No correlation was found between the two factors. The client data also showed that length of stay, level of program participation, and direction of stay comprise one highly loaded client maintenance factor.

The mean sum of frequency of contact between an entire drug program's staff and community agency's staff showed a very low and nonsignificant association with securing and maintaining clients.

The direct contact factor was found to be positively and significantly associated with securing numbers of referrals (Kendall's Tau B = .34 and P = .03) and maintaining clients (Kendall's Tau B = .22 and P = .01). The indirect contact factor, on the other hand, is strongly and inversely associated with number of referrals (Kendall's

Tau B = $-.61$ and $P = .01$) and not associated with maintenance (Kendall's Tau B = $-.10$ and N.S.). Thus, it was found that the mean sum of frequency of contact of drug programs' staff with community agency staff was positively associated with the direct contact factor but negatively associated with the indirect contact factor. This indicates, perhaps, that the use of indirect network linkages is ineffective, but still a necessary prelude to the more effective direct contact factor.

Two additional findings are: (A) The greater the number of referral sources, the greater the number of referrals secured by a drug rehabilitation program, and (B) Community agency referrals are more effective than non-agency referrals in terms of maintenance of clients in programs.

The narrow focus of the study and its limitations constrict the scope of conclusions and implications that can be drawn. Although further research is needed, this study has developed a conceptual framework for inter-agency collaboration, and it has shown that inter-agency collaboration does help secure and maintain clients in community-based comprehensive drug rehabilitation programs.

Acknowledgments

To express feelings of indebtedness or obligation, as is customary in an acknowledgment, would be inconsistent with the perspective of this study. Our focus in the study is on collaboration and reciprocity in inter-agency relationships. Through reciprocity, or quid pro quo relationships, both sides invest in the relationship, and, as a result, all may benefit. Obligation, on the other hand, implies a one-sided, give or take relationship. For example, the Hebrew term for obligation, assir toda, literally means "prisoner of thanks." Rather than obligation, the experience of this study shows that reciprocal relationships bring mutual satisfaction and result in more effective services for clients.

I want to acknowledge the invaluable contributions of those individuals mentioned below. Without them this study would not have been carried through. In accordance with the thrust of this study, I have attempted (though not always successfully) to interact with all these individuals in ways which would meet their own needs. The resulting collaboration has borne the fruit which you now have before you. I fully believe that the quality and usefulness of this report directly reflects my own ability to collaborate with the individuals listed below.

Dr. Mark Spivak, Director of the "Moadon Shalom-Social Rehabilitation Club in Jerusalem," first introduced me to the notion of learning to be a "social system clinician." It was the constant stimulation of working with such a gifted "social system clinician" as Dr. Spivak that led to the conception of this study. The years of experience I gained in binding in the unique social rehabilitation approach of the Moadon Shalom into the fabric of community agency

services in Jerusalem provided the testing grounds from which eventually came the conceptual framework of the study. It was also Dr. Spivak who helped clarify and finalize the study's conceptual framework through expertly using the mapping sentence technique.

The late Dr. Archie Hanlan, of the School of Social Work of the University of Pennsylvania, made a great contribution during the conceptualization stage of the work. Unfortunately, he did not live to see the finalization of our work, nor the study's results, nor the usefulness of the study in improving the delivery of human services. Dr. Hanlan died of a terminal illness in July 1973. Despite the painful nature of his illness and the knowledge he was going to die, Dr. Hanlan provided me with emotional support as well as expert knowledge and direction in developing the project's conceptual framework.

Dr. Stanley J. Brody, of the University of Pennsylvania's Department of Community Medicine, introduced me to and continually provided me with new concepts, many of which proved to be useful in focusing my ideas. I am appreciative to Dr. Brody for pushing me in the direction of needs theory and linkages, among others.

Dr. Raymond Carlson, of the School of Social Work of the University of Pennsylvania, was especially helpful in defining and expanding the dependent variables of the study. Dr. Marc Riedel, also of Pennsylvania's School of Social Work, gave crucial assistance especially during the instrumentation stage and the data analysis. Dr. Riedel was also kind enough to serve as my dissertation director; he suffered through an earlier version of this report in the form of my doctoral dissertation accepted by the School of Social Work, University of Pennsylvania.

It was Dr. Thomas F. Updike, Director of Community Mental Health Clinics and Centers, and of the Bureau of Drug Rehabilitation of the Virginia Department of Mental Health and Mental Retardation, a successful administrator and social

system clinician himself, who early recognized the potential relevance of this study for enhancing the delivery of drug rehabilitation services in Virginia. Dr. Updike, together with Miss Pat Kelley, Assistant Director of the Bureau, literally paved the way for the actualization of the study. They were instrumental in securing the necessary funds as well as giving the study a "home" in the Bureau of Drug Rehabilitation. They helped initiate a collaborative relationship between us and the programs we studied. Dr. Updike's and Miss Kelley's crucial facilitating roles were in addition to their valuable professional contributions to the study.

Miss Debra Bogdan served as more than a research assistant for this study. She was and is a colleague in the truest sense. Her excellent conceptual and integrative abilities contributed greatly to the study. Her responsible involvement in all phases of the study has left its stamp throughout.

Miss Penny Johnston contributed to the actualization, collection, and analysis of the dependent variables. Her dogged determination to qualitative research paid off in definitive dependent variables.

Dr. Hugh Loebner, a former Director of Program Information and Evaluation of the Virginia Department of Mental Health and Mental Retardation, provided expert consultation during the data analysis phase of the study. He consistently found effective ways of dealing with complex methodological problems which led to the completion of this study. Mr. Richard Gunnels and Mr. Doug Scoven assisted with the data analysis. Their long hours of work assisted greatly in the analysis of large amounts of data. Mrs. Mary Barnes, Mr. Leslie Schaffer, and Mrs. Susan Schilling and Dr. Louis Weinbaum gave valuable consultation in constructing the interview schedule used. They also pre-tested and administered the interview schedule. Miss Anne Winfree coded all the voluminous data collected. By applying her intelligence to this boring task, she improved upon the coding design and subsequently the retrievability of the data. A special

note of appreciation is well deserved by Ms. Linda Firestone for the superb job in editing various drafts of the manuscript. Her tenacity in improving the copy has helped me improve my writing style.

The staff of MTST (Magnetic Tape Selective Typewriter), of the Department of Mental Health and Mental Retardation, is to be commended for their perseverance in typing and re-typing the manuscript. Mrs. Jane Marshall, Mrs. Susan Spielberg and Miss Ronnie Goldman also helped type, correct, and re-type sections of the manuscript.

Our staff's collaboration with staff members of the five programs studied here was crucial to our success in carrying out the study. Each treatment staff member of the five programs spent an average of two hours in an intensive interview as part of the study, while other staff members spent time providing us with client information. The directors of the five programs also spent considerable time with their own and the "Inter-Agency Collaboration" staff to pave the way for effective data analysis. The names of the programs and their directors are: Mr. Tom Geib of Prelude (Arlington County), Mrs. Iola Scrafford of Crossroads (Fairfax), Mrs. Susan Kirshberg of the Alexandria Comprehensive Drug and Alcohol Program (Alexandria), Mr. Mason Moton of Renaissance now the Comprehensive Addictive Services Program (Norfolk), and Mr. John Sabeau of RADACC (Roanoke).

Much appreciation is deserved by Miss Jan Sargeant, Director, Mr. Dick Haynes, former Clinical Supervisor, and the staff of Project Jump Street, Inc., in Richmond. Project Jump Street patiently endured the pre-testing of our instruments. Their contribution in helping improve our research questions was crucial.

As noted earlier an underlying theoretical construct of the "Inter-Agency Collaboration" study was reciprocity. Our intent at the inception of the study was not just to collect and analyze data, but to use it to assist programs studied as well as other programs in delivering more effective services. In order to do this we have engaged in the process of providing feedback of data

to the individual programs studied and conducted one-day workshops based on the study's finding. A prototype of such a workshop has been constructed by Mr. Gary Katz in conjunction with Miss Bogdan and myself. Thus far, fourteen workshops with more than 275 participants have been conducted for the staffs of the five drug programs studied, staffs of other drug programs, and representatives of a broad spectrum of local community service agencies throughout Virginia. The development of a training manual for the workshop is now in progress.

Many officials of the Commonwealth of Virginia have facilitated the carrying out of this study. Mr. F. John Kelly, Executive Director of the Virginia Division of Drug Abuse Control, and his staff gave early financial support and encouragement to our work. Mr. James Kouten, Drug Coordinator for the Division of Justice and Crime Prevention, has helped provide the major financial support necessary to carry out the study and subsequent applications. His continuing support for quality research and training to enhance the delivery of drug rehabilitation services in Virginia has been essential in the accomplishment of our tasks. Mrs. Susan Flinkow, Director of the Bureau of Methadone Studies of Virginia's Health Department, helped in her liaison role with the methadone programs in the study, as well as with general consultation to the study.

Numberous staff members of the Central Office of the Virginia Department of Mental Health and Mental Retardation have provided many kinds of assistance necessary to carrying out the project. Active support for the work included in this study was given by Dr. William S. Allerton, Commissioner, and Dr. Joseph Bevilacqua, Assistant Commissioner, Operations.

Many individuals and groups of people made significant investments of time, money, and support for the study. I firmly believe that many of their own role behavior needs, as well as my own, were met in carrying out this study. Otherwise, their collaboration with us would have been shortlived and the study far less significant. Perhaps for everyone the most important quid pro quo of the

study is the enhanced delivery of human services to clients. The study set as its goal the betterment of services for clients. It has, I believe, already contributed to this goal and has the potential for much more. The many hundreds of contacts the project staff and I have had with drug program staff have convinced me of the determination of the drug program staff members in Virginia to continue improving the services they provide clients.

Z. F.

Richmond, Virginia
September, 1974

CHAPTER I

THEORETICAL BASE

In recent years drug rehabilitation programs have been developed to meet the treatment needs of individuals who are drug abusers. These programs are usually comprised of a combination of the major modalities of drug rehabilitation programs: methadone maintenance, therapeutic community, and out-patient clinic. These major modalities represent the best, though imperfect, answers our society has developed to date to deal with those individuals who are abusers. Nevertheless, these programs often tend to be under-utilized by clients. Not enough clients reach the programs relative to budgeted capacity. Those clients reaching the programs drop out in such high proportions as to force us to question their viability.

The major goal of a drug rehabilitation program is to rehabilitate clients. In order to accomplish this, the program must secure a number of inputs such as funding, staff, and clients. These inputs are interrelated and also intergenerating. These are, in systems theory terms, necessary inputs needed to achieve an output--namely, the rehabilitation of drug abuse clients.

Much emphasis has been placed upon increasing drug program utilization through outreach and other methods of drawing clients into programs. It is the opinion of Virginia's state-level drug rehabilitation administrators that virtually all drug programs in the state are presently under-utilized in terms of the number of people who could benefit from the programs' services. Most staff members of other community agencies share this

opinion regarding local drug programs. A majority of the drug programs have not succeeded in securing the number of clients that their capacity or funding prescribes. Court and "street" referrals, which are the primary referral sources for virtually all drug programs, have usually not engendered sufficient referrals relative to the estimated potential pool of drug clients in a specific community.

Another explanation for under-utilization of drug programs lies in the high drop-out rate of clients from many of the programs. For example, one Virginia drug program had only 3 per cent of their clients "graduating" from their program. Ninety-seven percent of the clients had dropped out along the way. It is readily apparent that programs have great difficulty in successfully reaching and binding in drug clients.

It has been found that use of negative sanctions in court-related cases has helped keep some clients in drug programs. However, drug rehabilitation programs have had great difficulty in developing an array of inducements designed to bind clients into the program. Other programs have difficulty finding the dependency balance needed for binding in the client, and still others have limited control over clients' behavior. Often, drug rehabilitation staff members do not consider that the client usually has relationships with members of other community service agencies. These relationships, according to Antonovsky, can fall into the category of "resistance resources" for the client to prevent "social breakdown."¹ Since the drug abuse client will generally have such relationships with a welfare worker, hospital nurse, or store-front worker, increased collaboration between a drug program worker and a community service agency staff member might enhance their relationship for the purpose of plugging in and securing

referrals to and maintaining clients in the drug program. Neither field experience nor review of the literature indicates that a focus has been placed upon improving the referral process directly through enhancing the inter-staff relationships of drug programs and other community agencies as potential or existing referral sources.

Two major avenues are available then for analyzing the process of referral and maintenance of clients. On the one hand, the effectiveness of the treatment program itself can be questioned. The program's use of outreach, binding-in of clients, and the specific treatment offered may be ineffective. In contrast, collaborative efforts of the program with other community agencies may be non-existent or poor. If this is the case, poor collaboration may explain low utilization of drug programs in terms of low referral and maintenance of clients.

The crucial effects of intra-staff relationships upon clients' treatment was first clearly documented in 1949 by Stanton and Schwartz. They described the highly detrimental results of staff disagreement for hospitalized mental patients.² Nevertheless, inter-agency staff relationships have not been carefully studied for their effects upon various aspects of client treatment such as appropriate referral and participation in treatment programs.

The inter-agency collaboration approach to the issues of program utilization by clients, as outlined above, will be the one pursued in this study. Such an approach could result in enhanced utilization and effectiveness of drug rehabilitation programs. The development of a conceptual framework, which when effectively used would enhance inter-agency collaboration and thus program utilization, may turn out to be more successful than

other methods such as "outreach" and reliance upon court referrals, which have in the past been the only methods of referral for rehabilitation programs.

The conceptual framework should encompass a systems approach to collaboration because of the complex, continually changing, and inter-related nature of inter-organizational relationships. Techniques most useful for enhancing the quantity and quality of contact aimed at improving collaboration should be explored. A conceptual framework for collaboration should not only encompass a systems approach, use of inter-organizational theory, and useful inter-agency techniques. The "needs" of the individual community agency staff members must also be analyzed. It is posited that agency needs are in part reflected by the needs of individual staff members of that agency. Nevertheless, the individual staff member is the unit to be dealt with in this study. Relevant concepts from these bodies of social science knowledge will be utilized in the study's conceptual framework and will be explained later in this chapter. Services to clients are not delivered in a vacuum. A systems and inter-organizational perspective combined with the use of inter-personal techniques and the fulfillment of personal and organizational role needs of community agency staff members comprises the inter-agency collaboration conceptual framework of this study.

More specifically, the objective of this study is to see if utilizing specific areas and techniques of "Social System Relatedness" (SSR) contributes to increased appropriate referrals and maintenance of clients in drug rehabilitation programs. The concept of SSR comes from systems theory and in this study calls for fulfilling the role behavior needs of other staff members of community agencies by a staff member of a local drug rehabilitation

program which it is hypothesized would increase program utilization by increasing the number of referrals and the number of clients maintained in the program.

The inter-organizational environment is the focus of this study because we are interested in the transfer of inputs and outputs across organizational boundaries. Thus, a promising perspective for improving inter-organizational relationships is that of open systems theory. It calls for a view of the organization and the environment in which it operates.

Within the context of a systems theory approach, the acquisition of referrals (input resource) can, for the most part, be seen as one part of an exchange relationship. According to Blau, "the concept of exchange refers to voluntary social actions that are contingent on rewarding reactions from others and that cease when these expected reactions are not forthcoming."³

Referrals, then, exclusively seen as input resources to drug rehabilitation programs, will not usually be generated by themselves in the normal course of business. Some exchange or reciprocity must take place between those individuals referring clients and the staff of a drug program.

The extent to which the "needs" of other service agency staff members are met by the drug program staff members is a major determinant of the other community agency staff member initiating or continuing to engage in the referral of clients to the drug program. A discussion of collaboration and inter-organizational relationships as well as needs of community agency staff members can be found in Sections III and IV of this chapter.

The conceptual framework of this study incorporates a social system approach which is termed Social System Relatedness (SSR), consisting of

areas of SSR, techniques, and role behavior needs. This conceptual framework will be explicated below and can be used to analyze the inter-organizational oriented activities of staff members. SSR might also be used as an approach to altering staff's collaborative behavior.

Section II deals with the open systems approach of this study. Included in this section is a review of the concepts and development of systems theory which is the perspective assumed by the study.

Section II - Review of Open Systems Theory

A frequent objection to organizational research is that "the typical models of organizational theorizing concentrate upon principles of individual functioning as if these problems were independent of changes in the environment."⁴ The result is an emphasis on the concepts of production, efficiency, and internal stability in analyzing organizations. This is a closed system approach to organizational analysis because it concentrates on the internal operations of an organization. Recently, however, organizational researchers, including Von Bertalanffy and others, have viewed the organization in a new light, applying some of the principles of biology and physics in the process. This was the beginning of open systems thinking. Initially, this approach considered some of the biological aspects of organisms. An analogy was made between organisms and organizations. It involved the organism's symbiotic relationship with its environment. The analogy posited a tie between organism and environment, consisting of an exchange between them, an exchange that was necessary for the operation of both. In applying this analogy the organization does not exist in isolation but operates with close ties to its environment. For the organization, then, the environment is an essential

factor underlying the system's viability--a point that is not often stressed in systems models.⁵

The analogy of an organization as a mechanistic or organic model occurred at the beginning of systems thinking. As this school of thought has developed these approaches have been widely criticized. Thus Buckley speaks of the mistake of equating the organization with an organism and not the entire species. The organization in this system should not be an organism, but the species, for if it was an organism, then the parts would cooperate and not compete in a struggle for survival.⁶ Karl Deutsch also states that the concept of homeostasis is too confining and narrow to be of any real use as its emphasis is on stability and not the restructuring or change of systems. Since this organic model utilizes a rather functionalistic approach, it is criticized because the emphasis is on the more stable and normative aspects of the system.⁷

Physical systems also differ from social systems in their extent of purposiveness; therefore, the analogy to physical systems is thought to be erroneous. Social systems are more goal directed and as such have embodied in them the concept of feedback between the organization and the environment. This places a much larger burden on the input, throughputs, and output of the system.⁸

Work in this area has given the field of organizational research the concept of "systems", usage of which is fashionable today. However, as Blegen points out, this is not to state that there exists one "system school"; although it does signify a general approach to the study of organizations, even if differing aspects of those organizations are stressed.⁹

The significance of this approach is stated by Emery and Trist:

The environmental contexts in which organizations exist are themselves changing, at an increasing rate, and towards increasing complexity. . . In a general way it may be said that to think in terms of systems seems the most appropriate conceptual response so far available when the phenomena under study at any level and in any domain display the character of being organized, and when understanding the nature of interdependencies constitutes the research task.¹⁰

Mannheim expands this notion of complexity and interdependency in the development of the concept of "density of events." He points out that as the density of events increases, such as when traffic increases to the point of needing a light, the chance of reaching stability by mutual adaptation and competition is reduced. As the density of events increases, the focus is on the occurrence of interaction and its structure. Moreover, this higher density also results in new forms of interaction for different types of actors.¹¹

As the environment becomes increasingly more complex and as researchers focus in on the network of relationships to aid in understanding an organization's operation, the assumption of an open systems approach becomes more significant and almost unavoidable. This is because the area of interest is the relation between organizations; therefore, an approach that focuses on the nature of interaction among sub-units will be more appropriate than a perspective that focuses on the sub-units alone.

Thus open systems theory is a promising perspective or approach for use in analyzing inter-organizational relationships. It is the vantage point of this project. It has been called a "way of thinking and of analysis that accommodates knowledge from many sciences."¹²

A system is a set or arrangement of parts related to form a whole, such that a change in one part causes a change in the whole. Hall and Fagen

define the concept as "a set of objects together with the relationships between the objects and between their attributes."¹³ The relationships "tie the system together" and the environment "is the set of all objects, a change in whose attributes affects the system and also those objects whose attributes are changed by the behavior of the system."¹⁴ To determine when an object is part of the environment, one draws a boundary around the phenomenon one is studying. Everything within the boundary is the system, outside of it is the environment.¹⁵ The perspective is to view both the system (the organization) and its environment--in short, an open systems approach. Dill uses the term "task environment," which is a more workable concept than boundary maintenance, because it comprises those inputs which bear potentially on goal setting and attainment.¹⁶

The distinction between "open" and "closed" systems, as well as their respective approaches, relates to the interaction between systems and their environment. A system is open, generally, when an exchange occurs across the boundaries between system and environment. It is closed when no interchange occurs. Hence, with an open system perspective one is interested in the exchange and relation of system to environment. This can be stated in terms of "entropy." The closed system increases in entropy, or in other words runs down, while the open system is negentropic or tends to decrease in entropy.¹⁷ By extending this distinction between open and closed systems, we see that within a closed system approach one determines or has knowledge of cause and effect relationships from the results of action within the system. Furthermore, the actions all arise from within the system. With an open systems approach, however, the cause and effect relation is more difficult to determine because the consequences within the system might arise from

actions outside the system, that is, actions in the environment. Causal actions could then extend throughout the system with varying degrees of effect.¹⁸

Herein lies the dependence of the system on the environment for energy. As Katz and Kahn point out, the organization is "continually dependent upon inputs from the environment." Moreover, "the inflow of materials and unit energy is not constant."¹⁹ The flow of energy is broken up into the stages of input, transformation or throughput, and output. With this perspective, referrals can be conceptualized as an input resource, which is necessary for the continued existence of the organization. This implies a degree of openness of the organization to its environment.

In this process of energy transfer, only throughput involves a stage contained within the system itself; the others involve the system and some parts of its environment. Because of this energy transfer, there is the premise of constant flux for the organization, although it seeks stability. Rice says that a characteristic of an open system is that "it exerts forces to attain, and then to maintain, a steady state."²⁰ In an effort to make the environment more predictable, organizations might engage in the investment of relationships with other organizations.

Systems theory at the same time tends to be very general and vague. In its focusing on the "organization-set" of the total system, a little precision is lost in attempting to have a broader view. Moreover, the very generality of systems theory means that the concept can be manipulated according to individual bias. Given these shortcomings and our realization of their existence, open systems theory nevertheless is a useful tool in any attempt to describe and view an organization's operation in its environment.

In fact, it is essential, for any other approach which focused entirely on a particular sub-unit would not provide a viable approach to inter-agency relationships.

From the systems perspective is derived a number of dimensions, described below, for viewing organizations. While systems theory is the vantage point, the dimensions indicate means of action to enhance the referral process and are the functional elements of the systems perspective.

In developing a conceptual framework for effective inter-agency collaboration, use should be made of relevant areas of social science knowledge. Relevant knowledge should be organized clearly in order to be tested empirically and to be transferrable and communicable to staff delivering human services. According to Greenwood, our task is to gain additional clarification in our work through the systematic use of scientific theory. "The conversion of social science laws into principles of social work practice can only be achieved via research."²¹

A conceptual framework attempting to explain a large area of reality, such as inter-agency collaboration, runs the risk of being highly abstract and difficult to translate into reality. Such a conceptual framework may well be a prelude to further research in testing various elements or hypotheses of the framework. Literature will be reviewed below. The focus of the initial literature review will be upon discovering useful concepts for effecting inter-agency collaboration. Such an applicable conceptual framework can incorporate only a small number of unified concepts at one time. In this way, an empirical test is possible. We are attempting in this study to glean from social science findings knowledge that can be used to improve service delivery. An eclectic approach from various social science areas could be

most useful. The conceptual framework for effecting inter-agency collaboration must at the same time use social science findings, deal with the realities of collaboration, and, if found to be effective, be communicable to practitioners. Below is a review and discussion of work done in the area of collaboration.

Section III - Coordination, Cooperation, and Collaboration

Those who work at providing social services are probably more aware than other professionals of the problems in service delivery. Potentially effective programs remain under-utilized by clients, gaps and overlaps of services are apparent and result in either a lack of essential services or competition between agencies. Moreover, community resources may be wasted when a comprehensive plan is not in operation.

As a result, social workers have been concerned with issues regarding collaboration, cooperation, and coordination with other professionals and agencies to reduce the problems and improve the delivery of services. Nevertheless, neither the social work profession, nor others have achieved a great degree of specificity regarding these issues which can be used in service delivery. Magner states:

While the social work skills related to inter-agency coordination, political and legislative processes, and the community as a socialization entity have by no means become highly refined, the profession's basic awareness of and orientation to these factors probably far surpasses that of the other traditional mental health professions.²²

The interest in this subject is reflected in the number of articles emphasizing the importance of collaboration. Yet most of the professional articles dealing with this subject simply survey the issues involved and emphasize the need for collaboration.²³ Despite the vital practice implica-

tions for clients in enhancing effective collaboration between professionals and agencies, there has been a relative lack of integration of recent social science findings and social work experience to enhance collaboration.

Relatively little sophisticated conceptualizing of the various issues in collaboration as well as translating the social science knowledge we possess into practical planning and interventive frames of reference has been accomplished. Social science has only in the last decade begun to relate to inter-organizational behavior.

Articles by Parnicky et al.,²⁴ Black and Kase,²⁵ and Wolkon²⁶ exemplify much of the social work literature on "coordination and cooperation." These particular articles deal with the securing of referrals as the focus of inter-agency cooperation. The articles generally "call for" strengthening referral procedures, the need for cooperation and cite obstacles preventing such cooperation. These articles, though, do not present a conceptual framework for achieving such cooperation. Moreover, the distinction between coordination, cooperation, and collaboration is not usually clarified.

Reid²⁷ sees coordination of services as an ideal state and carefully lists many of the reasons why this goal is so elusive. Rein, on the other hand, points to the dangers of too much coordination, and he adds that confusion and competition between organizations may be all for the best--otherwise a client may be dependent upon one social worker or agency who will impose controls on what he considers deviant behavior on the part of the client.²⁸ As Powell and Riley²⁹ point out, the coordination, development, and integration of relevant services can place the community mental health agency "in a potentially competitive and threatening relationship to other agencies and private practitioners." On the other hand, Kahn points out that "efforts

need to be integrated, interrelated policies coordinated. This goal does not result simply from value orientation but the belief that increased collaboration will lead to a system with reduced overlap of services and therefore, increased efficiency."³⁰ Much confusion, then, is to be found in the social science literature regarding the concept of coordination. Thompson, using the work of March and Simon (1959), outlines three methods for achieving coordination. These include:

1. Standardization - which involves establishing routines and rules to constrain the action of an organization and thereby to make them consistent
2. Planning - which creates a schedule for the interdependent units to govern their actions
3. Manual adjustment - or feedback in March and Simon's terms, which involves the transmission of new information while in action.

These three methods involve progressively more communication and decisions and include real costs for the organization as a result of the coordination.³¹

Kahn cites a number of methods for achieving coordination of policy and programs through:

1. The structuring of executive and administrative authority
2. The formal administrative mechanisms at the level below the executive
3. Inter-agency, inter-departmental, or inter-organizational committees
4. Joint or unified service operations³²

The ambiguity of the term coordination is well pointed out by Mott. In essence, it is the value which we attach to the term coordination and the ways in which it is secured. According to Mott,

coordination is an ambiguous term that describes all organized behavior, for the efforts of individuals and groups are coordinated when their behavior is concerted in respect to some desired purpose or consequence. The term only takes on specific meaning in relation to the methods by which coordination is accomplished and the ends that they serve.³³

White also points to cooperation including processes "often called collaboration, team-work, multidiscipline approach or interagency integration. By whatever technical name, these processes imply individuals working together towards a shared objective."³⁴ According to Cohen, Nisbet presents a carefully written historical and conceptual analysis of the term cooperation. He differentiates between five types of cooperation--automatic, traditional, contractual, directed, and spontaneous. According to Nisbet, cooperation can be viewed both as a process and as a social structure.³⁵

In reviewing the concept of collaboration, Soffen asserts "that the word means the working together on the basis of parity or equal working together."³⁶ Soffen continues to differentiate between collaboration and subcontracting. It is not the "use of resources," but an interdependence of leadership functions.³⁷ Stukes defines collaboration as "shared responsibility for outcome with both parties relinquishing or minimizing individual credit."³⁸

Collaboration seems more appropriate as the frame of reference for this project than that of cooperation or coordination.

Although cooperation emphasizes association or working together for a mutual objective between groups, it says nothing about the relative position of the groups that are cooperating.

Coordination, on the other hand, is identical with "being carried out from above" and hints at a less than equal relationship between the partners. The term coordination can be conceived as bringing "into common action" various programs whose aims, skills, or beliefs are strikingly different.³⁹

In comparison to cooperation and coordination, collaboration is usually associated with more equality and involvement between the partners in any particular undertaking. An exchange or reciprocal relationship will exist. Thus, the focus of this study is on the collaborative effort made by drug rehabilitation programs with other community service agencies.

In focusing on the collaborative efforts made by one agency toward another the sphere of interest is the inter-organizational environment and the relationships within that sphere. The concern then becomes relationships between organizations as reflected in the relationships between the staff of different organizations. These relations assume importance since organizations can not collaborate without the staff of those agencies collaborating.

One way to look at inter-agency collaboration is through exchange theory. Exchange theory provides a means to conceptualize the collaborative process as a flow of goods between organizations. Exchange, as defined by Levine and White, refers to "any voluntary activity between two organizations which has consequences, actual or anticipated, for the realization of their respective goals or objectives."⁴⁰

Gouldner criticizes the concept of exchange for its tendency to become "more and more one sided."⁴¹ To counterbalance this tendency, Gouldner prefers the concept of reciprocity which he finds "implies that each party

receives something from the other in return for what he has given him." Gouldner maintains that people tend not only to receive, "but to reciprocate relationships."⁴² For Thompson, the result of a reciprocal relationship is a form of interdependence between organizations. It is a situation in which the outputs of one organization become the inputs of another; thus each organization involved is penetrated by another organization.⁴³

Another approach for understanding inter-organizational relationships can be found in the literature dealing with obstacles or barriers in delivering human services.

Furman lists seven obstacles in the development of community mental health centers. His approach questions various professional values and practices as well as community beliefs. Furman's seven obstacles are listed below:

The obstacles that we consider to be paramount for the next decade or so are the following: (1) the persisting illusion of "cure" as the standard goal, coupled with emphasis on and higher status for long-term or "open-end" psychotherapy, as well as depreciation of other methods; (2) rigid concepts of professionalization, inter-disciplinary conflicts and lack of clarity about the boundaries of the field itself; (3) overestimation of public tolerance of the mentally ill; (4) postponement of evolutionary approaches due to a magical aura attached to the term CMHC itself; (5) the dominance or primacy of research, resulting in overall selectivity of intake; (6) inappropriate training models in community mental health settings, leading to the same self-defeating result; and (7) abuse or distortion of the mental health consultation and referral processes.⁴⁴

Rome extensively surveys barriers to the establishment of comprehensive community mental health centers. He cites Boek's model for community action that is intended to circumvent organizational barriers. His behind-the-scenes attack on the decision-making power structure includes the following six steps:

(1) informing the executive committee of the Board of Health; (2) conferring with leaders of the power structure, (3) involving community professionals, (4) stimulating citizen interest, (5) securing support from leaders, and (6) obtaining action from policy-makers.⁴⁵

Gross says that a deficiency in any of the areas of community planning -- professional involvement, utilization of the existing power structure -- will create a barrier to any attempt to reconcile overlapping and competing bureaucracies.⁴⁶

Glasser et. al. identify the community organization and attitudinal barriers keeping agencies from developing innovations for their own and for others use. They stress: 1. disseminating information regarding a successful project to other agencies and 2. using techniques of consultation for the potential users of the demonstration project's results.⁴⁷

Borus speaks of eight obstacles which may lead to a prior antagonism between the private medical practitioner and the community mental health center. These include: 1. lack of feedback, 2. fear of receiving "dumped" clients, 3. lack of sensitivity to others, 4. differing modes of behavior and decision making, 5. different funding patterns, 6. fear of "snooping", 7. poor previous referral experience, and 8. fear of being put out of business. Borus goes on to list a series of strategies and techniques to counteract antagonism and effective collaboration.⁴⁸

Lastly, Dubey lists a series of socio-cultural factors which lead to resistance to technological change in traditional societies. The technological change may: 1. not be approved by significant others, 2. be incompatible with their expected role behavior, 3. conflict with their value system, 4. not be related to their felt needs, and 5. bear a very wide impact upon their lives.⁴⁹ The factors listed above are thought-provoking in

the complex area of human service delivery.

The obstacles or barriers approach to understanding inter-organizational relationships has its limitations. The literature presented above provides some helpful perspectives for viewing the problem and suggests some helpful strategies and techniques. Yet neither alone, nor in any combination, were we able to use this collection of articles to construct a unified conceptual framework for effecting inter-agency collaboration. The concepts were too broad, as presented, to allow them to be tested empirically. Nevertheless, the obstacles, strategies, and techniques were helpful to us as a basis for attempting to arrive at greater specificity in constructing our conceptual framework.

Section IV - Inter-organizational Relationships

As was indicated in the sections on open systems theory and collaboration, the concern of this study is the organization, the environment, and the relationship between the two. Since we are interested in inter-agency collaboration and the flow of goods across organizational boundaries, the concern becomes inter-organizational relationships. Therefore, Section IV involves a discussion of the literature on inter-organizational relationships and its use as a frame of reference for inter-agency collaboration.

The inter-organizational field has only recently been recognized as a distinct area of study in the social sciences.⁵⁰ Both Etzioni⁵¹ and Warren⁵² point to the growing literature on inter-organizational relationships and to the need for research in this area.

The areas of health, welfare and community organization are especially well suited for studying inter-organizational relations. Most of the

articles in the inter-organizational field are in those three areas.

White and Vlasak explain the applicability of inter-organizational relationships to the study of the health service delivery system.

Any attempt at "rationalization" of the American health service delivery system must inevitably come up against the problems of recognizing inter-organizational relationships and adapting, changing, or bringing them about. This necessity affects the most naive, exhortative, general coordination schemes as much as the most modest and realistic ones. While such problems are not limited to the health field, it is the field where problems of inter-organizational relationships seem to be currently most widely noted, discussed, and occasionally even tackled on a large scale. Coordination, cooperation, comprehensiveness, planning--all of these and others are only slightly more specific, directional terms for the same generic phenomenon: they all speak of processes that by definition take place between and among, as well as within, organizations. Endeavors intended or actually undertaken under the banners of Regional Medical Planning or Comprehensive Health Planning can be seen as pure examples of inter-organizational processes.⁵³

Etzioni indicates that agencies cannot usually control the elements necessary or helpful to carrying out their operations, such as securing funding and clients. Indeed, Etzioni states that "the need for a sufficient number of clients, for example, is often more efficiently met through exchange with other organizations than through independent case-finding procedures."⁵⁴

The inter-organizational field is closely tied to systems theory.

Warren states:

The concept of interorganizational field is based on the observation that the interaction between two organizations is affected, in part at least, by the nature of the organizational pattern or network within which they find themselves.⁵⁵

Emery and Trist point to "those processes in the environment itself which are among the determining conditions of the exchanges" between the organization and elements in its environment. The additional concept of

the causal texture of the environment at a social level of analysis is necessary, according to Emery and Trist. They add:

With this addition, we may now state the following general proposition: that a comprehensive understanding of organizational behavior required some knowledge of each member of the following set, where L indicates some potentially lawful connection, and the suffix 1 refers to the organization and the suffix 2 to the environment:

L 11, L 12
L 21, L 22

L 11 here refers to processes within the organization--the area of internal inter-dependencies; L 12 and L 21 to exchanges between the organization and its environment--the area of transactional interdependencies, from either direction, and L 22 to processes through which parts of the environment become related to each other--i.e., its causal texture--the area of interdependencies that belong within the environment itself.⁵⁶

In a similar vein Terreberry's thesis is "that the selective advantage of one intra- or inter-organizational configuration over another cannot be assessed apart from understanding of the dynamics of the environment itself."⁵⁷

A systems approach is at the basis of the inter-organizational field. Indeed, the quickly changing network, its complexities, and the inter-related nature of organizations indicates the necessity of a systems approach to the inter-organizational field.

Literature reviews of the inter-organizational field, ranging from listings of articles to comprehensive critiques, can be found in Warren,⁵⁸ Terreberry,⁵⁹ Turk,⁶⁰ Evan,⁶¹ and Aiken and Hage.⁶² White and Vlasak have presented us with a highly sophisticated collection of papers on inter-organizational relationships in health. The papers represent the "state of the art" of the inter-organizational field.⁶³ We shall present below the thrust of the major articles which comprise the inter-organizational field.

Some have conceptual frameworks and others, series of hypotheses.

In studying inter-organizational relationships and understanding the elements of collaboration, Levine, White, and Paul⁶⁴ advise those who study health and welfare agencies to study organizational factors which influence collaboration. They identified three organizational factors as determinants of inter-action. These include:

1. The function of the agency and therefore the elements of inputs needed
2. The access the organization has to elements outside itself or its relative dependence on the local environment
3. The degree to which domain consensus exists⁶⁵

Gummer⁶⁷ approaches inter-organizational relations from a similar perspective as Levine, White, and Paul. His emphasis is on the use of systems theory in inter-organizational relationships. By categorizing organizations in terms of the concentration of inputs, and the acceptance of claim to function (domain consensus), Gummer establishes a typology of organizations similar in a number of its main points to the framework of Levine, White, and Paul.

Litwak and Hylton, on the other hand, take a more "structural" view of inter-organizational relationships and coordination. They stress that:

interorganizational analysis suggests two important facets of analysis which differ somewhat from intraorganizational analysis: (1) the operation of social behavior under conditions of partial conflict and (2) the stress on factors which derive equally from all units of interaction rather than being differentially weighted by authority structure.⁶⁷

Litwak and Hylton identify the coordinating agency, such as a community chest or social service exchange, as a mechanism whose "major purpose

is to order behavior between two or more other formal organizations." The authors view this mechanism as "specialized coordination."⁶⁸

From this point of departure, Litwak and Hylton present their major hypothesis:

Coordinating agencies will develop and continue in existence if formal organizations are partly interdependent; agencies are aware of this interdependence, and it can be defined in standardized units of action. What characterizes the three variables in this hypothesis (interdependence, awareness, and standardization of the units to be coordinated) is the extent to which they are tied to the organizations to be coordinated.⁶⁹

The three concepts of interdependency, awareness, and standardization are used by the authors for analyzing inter-organizational relationships and coordinating mechanisms.

Aiken and Hage relate an organization's interdependence with other organizations, or the impact of the environment, upon internal organization behavior. In the inter-organizational frame of reference, the scarcity of resources is identified as the factor that forces organizations to engage in cooperative activities with other organizations, thus creating greater integration of the organizations in a community structure.⁷⁰

Assael also relates functional interdependence to the scarcity of resources. The potential for conflict is high in situations of functional interdependence. Conflict may be positive when it leads to a more stabilized system, but destructive when there is lack of recognition of mutual objectives. Assael lists conditions for constructive conflict.⁷¹

Turk utilizes an inter-organizational level of analysis for studying the integrative significance of government and voluntary associations. He contends that:

The establishment of formal relations among an important set of the community's organizations depends upon the community's capacity for such relationships and upon the need for them. Capacity is defined in terms of the community's overall organizational structure, measured here by two organizational sources of integration: (1) the scale and diversification of municipal government, and (2) the extent to which voluntary associations are community-wide and uncontested.⁷²

Turk generates two major hypotheses that are confirmed by his data.

They are:

Hypothesis 1. Formal relations in any broad class of local organizations will occur more frequently (a) the more diversified the municipal government and the larger its scale or (b) the less contested and the more community-wide the voluntary associations

Hypothesis 2. The correlation between the need for formal relations in any broad class of local organizations and the occurrence of such formal relations will be greater (a) the more diversified the municipal government and the larger its scale or (b) the less contested and the more community-wide the voluntary associations.⁷³

The authors cited below relate also to the individual in the framework of inter-organizational relationships. Yuchtman and Seashore utilize a conceptual framework based on a systems approach. The framework views the distinctiveness of an organization as an identifiable social structure and its interdependence with the environment. Organizational effectiveness is to be measured by success in securing scarce and valued resources.

A "bargaining position" is viewed as pointing to the more general capability of the organization as a resource-getting system. Specific goals are incorporated in this conceptualization in two ways: 1. as specifying means or strategies employed by members toward enhancing the bargaining position of the organization and 2. as specifying personal goals of members of the organization. The better the bargaining position of the organization, the more capable it is of allowing the attainment of the personal goals of members.⁷⁴

Thompson has developed a typology of output roles, all of which are

boundary spanning roles linking organization and environment. The output roles are designed to arrange for the distribution of the organization's ultimate product or services. The output roles are defined in part by reciprocal roles of non-members. "Both member and non-member roles contain the expectation of closure or completion of interaction or bringing the relationships into a new phase."⁷⁵ We feel that the concept of boundary spanning roles can also be used in viewing input transactions which are the focus of this study. Thompson has emphasized that within the organization's structure an individual worker's role may span the boundaries of the organization.

Evan utilizes Merton's concept of "role-set" for analyzing role relationships. "A role-set consists of the complex of roles and role relationships that the occupant of a given status has by virtue of occupying that status." With role-set as a point of departure, Evan develops the concept of "organization-set." Instead of taking the individual as a unit of analysis, the unit will now be an organization or class of organization. The interactions the organization has within its network are then traced. "The relations between the focal organization and its organization-set are conceived as mediated by (a) the role-sets of its boundary personnel, (b) the flow of information, (c) the flow of products or services, and (d) the flow of personnel."⁷⁶

Evan's dimensions of organizational sets is as follows:

1. Input vs. output organization sets
2. Corporative vs. normative reference organization
3. Size of the organization-set
4. Concentration of input organizational resources
5. Overlap in membership

6. Overlap in goals and values
7. Boundary personnel⁷⁷

In his notion of boundary personnel, Evan deals with the individual's role and behavior in an inter-organizational context. We feel a stronger emphasis upon understanding an individual's role in an inter-organizational context is an integral element in understanding inter-organizational relationships.

The major inter-organizational studies discussed above for the most part are either too vague to indicate any definite course of action or deal with effecting collaboration and overcoming organizational obstacles to successful collaboration.

Reid believes the representative sample of inter-organizational theories he studied "offers us better descriptions than explanations of cooperation among organizations." Nevertheless, they make "us aware of the range of factors that may affect cooperation in giving us systematic ways of viewing them."⁷⁸

Seemingly, the inter-organizational field is still in its infancy, being highly abstract and comprising conceptual frameworks, dimensions, and hypotheses which have not, for the most part, been empirically tested. Moreover, little can yet be translated into processes or practice for use in effecting inter-organizational collaboration. The inter-organizational perspective has influenced our own thinking and the development of some of this study's major foundations included in the conceptual framework. Much overlap exists between many of the studies presented above. The role of the individual in the organizational context was not, for the most part, integrated into the conceptual framework. Nevertheless, if we are to effect and

enhance inter-agency collaboration in human service delivery, the individual will, of necessity, be both the actor and the target of any form of interaction.

This study is interested in inter-staff collaboration and the effect of collaboration on the acquisition of inputs, specifically the referral of clients. Thus, the primary concern is not with the determinants of inter-organizational collaboration, but inter-staff collaboration and the exchange which occurs in interaction between staffs. To cite Piedmont, "the failure to reciprocate leads to withdrawal of initiated communication."⁷⁹ The analysis will focus therefore on the inter-staff collaborative process and the reciprocal need fulfillment by the staffs of community service agencies.

Brody conceptualizes exchange as a quid pro quo.⁸⁰ In this study, the "quid" might be referrals of clients and the "quo" could relate to fulfilling the needs of the worker. The role behavior needs of staff members include personality makeup, the role of the staff member in the organization, and organization needs. The extent to which these "needs" are fulfilled will largely determine the completion and reinforcement of an exchange or reciprocal relationship. Need fulfillment then will be viewed in terms of the effects of the inputs into the organization. Lastly, a focus on the individual in the inter-organizational context will emphasize personality and role behavior need fulfillment for enhancing inter-agency collaboration.

Section V - Personality and Role Behavior Needs

In previous sections we have discussed open systems theory, collaboration, and inter-organizational relationships; however, we have not yet

dealt with the individuals involved in collaboration. Each of these individuals besides having a role in the organization also has certain role behavior needs. The importance of these role behavior needs will be discussed below.

The development of the human resources school in the study of organizations is a dramatic change from the traditional "scientific management" emphasis. With the new approach, the behavior of the organization's member is determined not only by his role in the organization but also by his personality. Role is defined as "definite acts or complexes of customary ways of doing things organized about a particular problem or design to attain a given objective."⁸¹ Individuals may have comparable job descriptions, and yet may carry out their roles differently depending upon their own unique personalities. The role itself will be a major determinant of an individual's behavior in a work situation. However, because personality has some impact on the performance of a role, it is necessary to delineate the personality variables involved.

An individual develops a self-concept through interaction; he also develops a concept of others. Both concepts work to organize behavior. Behavior then represents an ongoing process which is the result of a transaction between the individual and others. It is posited that patterns of behavior are in response to and reflect a "need" for that individual. The study of personality then focuses on the individual as a system of needs, feelings, aptitudes, skills, and defenses.⁸²

Murray defines needs as:

A construct (a convenient fiction or hypothetical concept) which stands for a force . . . a force which organizes perception, intellection, conation and action in such a way as to transform apperception in a certain direction, an existing, unsatisfying situation.⁸³

Maslow constructed a need hierarchy for the work situation. He separated the needs structure of individuals into five categories: Physiological, safety, belonging, self-actualization, and esteem. The five needs categories can be divided into deficit and growth needs, of which self-actualization is the only growth need.⁸⁴

Bartow uses the concept of need to illustrate the idea that individuals participate in activities for a number of reasons. In participation, there is an exchange that occurs and satisfies some individuals' needs. As a result of the interaction, an actor will satisfy to an extent some of the needs of the other actors participating in the interaction.⁸⁵

Many studies have been conducted on personality and needs as influencing job performance. Aram, Morgan, and Esbeck studied collaboration, needs satisfaction, and goal attainment. They hypothesized that collaboration and consensus in interpersonal relations would benefit both the individual and the organization. The results of the study indicated that individuals do benefit from collaboration and consensus; however, it did not confirm the hypothesis that organizations benefit from collaboration and consensus. Yet, team collaboration was not an obstacle to the organization's effectiveness.⁸⁶

Rettig et al. studied the factors that were of importance for job satisfaction. Of the eight variables that they identified, intellectual stimulation, pay, and status and prestige were among the most important. For the professional, they found that the essence of work motivation was intellectual stimulation.⁸⁷

The unit of analysis in Murray's conceptual efforts was the individual's needs. Since he was interested in human motivation, his framework incorporates twenty needs reflecting the complexity of human motives.⁸⁸

Like Maslow, Murray employs the idea of prepotency. He suggests that there is a hierarchy of needs which is constantly changing as needs are being satisfied according to their hierarchical ordering.⁸⁹

The importance of the "needs" of individuals is their effect on individual behavior. In this study we are interested in the needs of staff members of drug programs in the organizational setting and the fulfillment of those needs. Since a staff member's needs and the degree of their fulfillment influences staff behavior and performance, these needs become important for the operation of the program, specifically the referral process. Thus the concern of this study is the staff needs that we feel operate in the work situation, such as Murray's concern with dominance, achievement, affiliation, and deference or Bartow's consideration of political influence, professional knowledge, and institutional performance.

In reviewing the literature and the needs structure discussed therein, "needs" in the context of this study will be limited to those which most directly influence the performance of the organization role. Thus, the study has derived a list of eight needs we feel are most important. They are: control of information, funding, power, professional competence, relatedness, status, support, and task attainment. These needs come from the work of Maslow, Bartow, Rettig et al., and Murray. Many of the needs included in this study overlapped in the works reviewed, e.g., affiliation or belonging, self actualization, professional knowledge, and intellectual stimulation.

It must be emphasized, however, that the purpose of this project is not to develop and then test a new "needs" structure. Researchers "inevitably run up against the well known fact that, more often than not, it is

impossible to use published research results for purposes other than those for which the original study was designed."⁹⁰ Many studies tend to become too specific and are not generalizable to other situations. Thus we have used research studies and their findings as a jumping-off point, from which we have been able to create our own "role behavior needs" structure. We have simply modified and combined previous research to fit this particular study in hopes that it will be applicable to the specific organizational situation encompassed by this study.

In summary, this chapter has emphasized the usefulness and inter-relatedness of an approach for enhancing inter-agency collaboration, which would use perspectives of systems theory, collaboration, inter-organizational relationships, and an individual's role behavior needs. In the following chapter, we shall expand upon the study's conceptual framework alluded to in this chapter.

FOOTNOTES

¹Aaron Antonovsky, "Breakdown: A Needed Fourth Step in the Conceptual Armamentarium of Modern Medicine," paper presented at the First International Conference on Social Science and Medicine, Aberdeen, Scotland, 4-6 September 1968, pp. 9-12.

²Morris S. Schwartz and Alvin H. Stanton, "The Management of a Type of Institutional Participation in Mental Illness," Psychiatry 12 (February 1949): 13-22.

³International Encyclopedia of the Social Sciences, 1968 ed., s.v. "Social Exchange 4," by Peter M. Blau.

⁴Robert Kahn and Daniel Katz, The Social Psychology of Organizations (New York: John Wiley and Sons, 1966), p. 26.

⁵Walter Buckley, Sociology and Modern Systems Theory (Englewood Cliffs, New Jersey: Prentice-Hall, 1967), p. 50.

⁶Ibid., p. 15.

⁷Ibid.

⁸Ibid., p. 52.

⁹Hans Morris Blegen, "The Systems Approach to the Study of Organizations," Acta Sociologica 2 (1968): p. 13.

¹⁰F.E. Emery and E. L. Trist, "The Causal Texture of Organizational Environments," Human Relations 18 (February 1965): p. 21.

¹¹Roland L. Warren, "The Interorganizational Field as a Focus for Investigation," Administration Science Quarterly 12 (December 1967): p. 398.

¹²M.P. Janchill, "Systems Concepts in Casework Theory and Practice," Social Casework 50 (February 1969): p. 77.

¹³Blegen, p. 13.

¹⁴Ibid., pp. 13-14.

¹⁵Ibid., p. 14.

¹⁶William Dill, "The Impact of Environment on Organizational Development," in Readings in Organizational Theory: Open Systems Approaches, ed. John G. Maurer (New York: Random House, 1971), p. 82.

- ¹⁷Buckley, p. 51.
- ¹⁸James Thompson, Organizations in Action (New York: McGraw-Hill, 1967), p. 85.
- ¹⁹Kahn and Katz, p. 26.
- ²⁰A. K. Rice, The Enterprise and Its Environment (London: Tavistock Publications, 1963), p. 184.
- ²¹Ernest Greenwood, The Practice of Science and the Science of Practice in the Planning of Change, eds. Warren G. Bennis, Kenneth D. Bennis, and Robert Chin (New York: Holt, Rinehart and Winston, 1961), pp. 81-2.
- ²²George W. Wagner, "Social Work Practice in Mental Health 1955-69," in Abstract for Social Workers 6 (Fall 1970): p. 14.
- ²³Harold M. Visotsky, "Role of Governmental Agencies and Hospitals in Community-Centered Treatment of the Mentally Ill," American Journal of Psychiatry 122 (March 1966): 1007-11.
- ²⁴Joseph Parnicky, David Anderson, Charles Nakoa, and William Thomas, "Study of Effectiveness of Referrals," Social Casework 42 (December 1961): 494-501.
- ²⁵Bertram J. Black and Harold M. Kase, "Interagency Cooperation in Rehabilitation and Mental Health," Social Service Review 37 (March 1973): p. 28-32.
- ²⁶George H. Wolkon, "Characteristics of Clients and Continuity of Care into the Community," Community Mental Health Journal 6 (June 1970): 215-21.
- ²⁷William Reid, "Interagency Coordination in Delinquency, Prevention and Control," Social Service Review 38 (1969): 418-28.
- ²⁸Martin Rein, "Coordination of Social Services," Social Policy: Issues of Choice and Change (New York: Random House, 1970), p. 22.
- ²⁹Thomas J. Powell and John M. Riley, "The Basic Elements of Community Mental Health Education," Community Mental Health Journal 6 (June 1970): p. 198.
- ³⁰Alfred J. Kahn, "Institutional Constraints to Interprofessional Practices," paper presented at the Doris Siegel Memorial Colloquium, Intereducational Education Practice, New York, 18-19 April 1973, p. 7.

³¹Thompson, p. 56.

³²Alfred J. Kahn, Theory and Practice of Social Planning (New York: Russell Sage Foundation, 1967), pp. 218-83.

³³Basil J. F. Mott, "Coordination and Inter-Organizational Relations in Health," eds. George J. Vlasak and Paul E. White; "Inter-Organizational Research in Health: Conference Proceedings," Johns Hopkins University, U.S. Department of Health, Education, and Welfare, Public Health Service, Health Services and Mental Health Administration (January 1970), p. 55.

³⁴Grace White, "Is Cooperation Worth the Effort?" paper presented at the Second Metta Bean lecture in Milwaukee and Madison Wisconsin, 4-5 March 1968.

³⁵Y. A. Cohen, "Social Bureaucracy Systems," Current Workers 10 (February 1969): p. 110.

³⁶Joseph Soffen, Untitled monograph, School of Social Work, University of Wisconsin, Milwaukee, p. 7.

³⁷Ibid., p. 8.

³⁸Alice M. Stukes, "Working Together Collaboratively with Other Professions," Community Mental Health Journal 1 (Winter 1965): pp. 316-19.

³⁹Ibid.

⁴⁰Sol Levine and Paul E. White, "Exchange as a Conceptual Framework for the Study of Interorganizational Relationships," Administrative Science Quarterly 5 (March 1961): pp. 583-601.

⁴¹Alvin W. Gouldner, The Coming of Western Sociology (New York: Basic Books, 1970) p. 240.

⁴²Ibid., pp. 240-41.

⁴³Thompson, p. 55.

⁴⁴Sylvan S. Furman, "Obstacles to the Development of Community Mental Health Centers," American Journal of Orthopsychiatry 37 (July 1967): pp. 757-65.

⁴⁵Howard P. Rome, Barriers to the Establishment of Comprehensive Community Mental Health Centers in Community Psychiatry, eds. Seymour L. Halleck, Martin B. Loeb, and M. Robert Leigh (Madison: The University of Wisconsin Press, 1966) p. 48.

⁴⁶Ibid., p. 49.

⁴⁷Hubert S. Coffey et al, "Utilization of Applicable Research and Demonstration Results," final report presented to Vocational Rehabilitation Administration, Department of Health, Education, and Welfare, March, 1967.

⁴⁸Jonathan F. Borus, "The Community Mental Health Center and the Private Medical Practitioner: A First Step," Psychiatry 34 (August 1971): pp. 274-88.

⁴⁹S. N. Dubey, "An Analysis of Socio-Cultural Factors in Resistance to Technological Change in Traditional Societies," International Social Work 2 (1968): pp. 1-8.

⁵⁰Encyclopedia of Social Work, Vol. 2, s.v. "Social Planning and Community Organization: Social Science Foundations," by Irwin Epstein and Jack Rothman.

⁵¹Amitai Etzioni, A Sociological Reader on Complex Organizations. (New York: Holt, Rinehart, and Winston, 1969), p. 120.

⁵²Warren, p. 139.

⁵³George J. Vlasak and Paul E. White, "Inter-organizational Research in Health: Conference Proceedings," Johns Hopkins University, U.S. Department of Health, Education and Welfare, Public Health Service, Health Services and Mental Health Administration (January 1970), p. 1.

⁵⁴Etzioni, p. 120.

⁵⁵Warren, p. 398.

⁵⁶Emery and Trist, p. 22.

⁵⁷Shirley Terreberry, "The Evolution of Organizational Environments," Administrative Science Quarterly 12 (1968): pp. 590-613; reprint reprint ed. Readings in Organization Theory: Open-System Approaches, ed. John G. Maurer, (New York: Random House, 1971), p. 70.

⁵⁸Warren, p. 139.

⁵⁹Terreberry, pp. 60-62.

⁶⁰Herman Turk, "Comparative Urban Structure from an Inter-Organizational Structure," Administrative Science Quarterly 18 (March 1973): 37-40.

⁶¹William M. Evan, "The Organization-Set: Toward a Theory of Interorganizational Relations," ed. John G. Maurer, Open-System Approaches (New York: Random House, 1971), pp. 33-44.

⁶²Jerald Aiken and Michael Hage, "Organizational Interdependence and Intra-organization Structure," American Sociological Review 33 (February 1968): pp. 912-14.

⁶³White and Vlasak, pp. 1-167.

⁶⁴Sol Levine, Benjamin Paul, and Paul White, "Community Interorganizational Problems in Providing Medical Care and Social Services," American Journal of Public Health 53 (August 1963): p. 1187.

⁶⁵Ibid., pp. 1183-95.

⁶⁶Burton Gummer, "A Systems Approach to Inter-Organizational Relations Among Social Welfare Agencies," paper presented at the Annual Meeting of the Pennsylvania Sociological Society, Lehigh University, Bethlehem, Pa., 21 October 1972, pp. 1-17.

⁶⁷Lydia F. Hylton and Eugene Litwak, "Interorganizational Analysis: A Hypothesis on Co-ordinating Agencies," Administrative Science Quarterly 6 (March 1962): p. 398.

⁶⁸Ibid., p. 399.

⁶⁹Ibid., p. 400.

⁷⁰Aiken and Hage, pp. 300-1, 320.

⁷¹Henry Assael, "Constructive Role of Interorganizational Conflict," Administrative Science Quarterly 14 (December 1969): p. 573 and 576.

⁷²Turk, p. 37.

⁷³Ibid., pp. 42-43.

⁷⁴Ephraim Yuchtman and Stanley E. Seashore, "A System Resource Approach to Organizational Effectiveness," American Sociological Review 32 (April 1962): pp. 897-98.

⁷⁵James D. Thompson, "Organization and Output Transaction," American Journal of Sociology 68 (November 1962): p. 309.

⁷⁶Evan, pp. 175-78.

⁷⁷Ibid., pp. 178-80.

⁷⁸William J. Reid, "Interorganizational Cooperation: A Review and Critique of Current Theory," eds. George J. Vlasak and Paul E. White, "Inter-Organizational Research in Health: Conference Proceedings," The Johns Hopkins University, U.S. Department of Health, Education, and Welfare, Public Health Service, Health Services and Mental Health Administration (January 1970), p. 99.

⁷⁹Eugene B. Piedmont, "Referrals and Reciprocity: Psychiatrists, General Practitioners, and Clergymen," Journal of Health and Social Behavior 9 (March 1968): p. 31.

⁸⁰Stanley J. Brody, personal communication.

⁸¹Alexander Inkeles, What is Sociology? (Englewood Cliffs, New Jersey: Prentice-Hall, 1964), p. 66.

⁸²Neil Smelser and William Smelser, eds., Personality and Social Systems (New York: John Wiley and Sons, 1970), pp. 1-2.

⁸³Calvin Hall and Gardner Lindzey, Theories of Personality (New York: John Wiley and Sons, 1970), p. 175.

⁸⁴Gerard Huizinga, Maslow's Need Hierarchy in the Work Situation (Groningen: Wolters-Noordhoff Publishing, 1970), pp. 21-23.

⁸⁵Philip Bartow, "Quid-Pro-Quo: An Interactive Workshop for Comprehensive Health Planning," Region 3, Department of Health, Education, and Welfare, February 1972, 16, p. 3 (monograph).

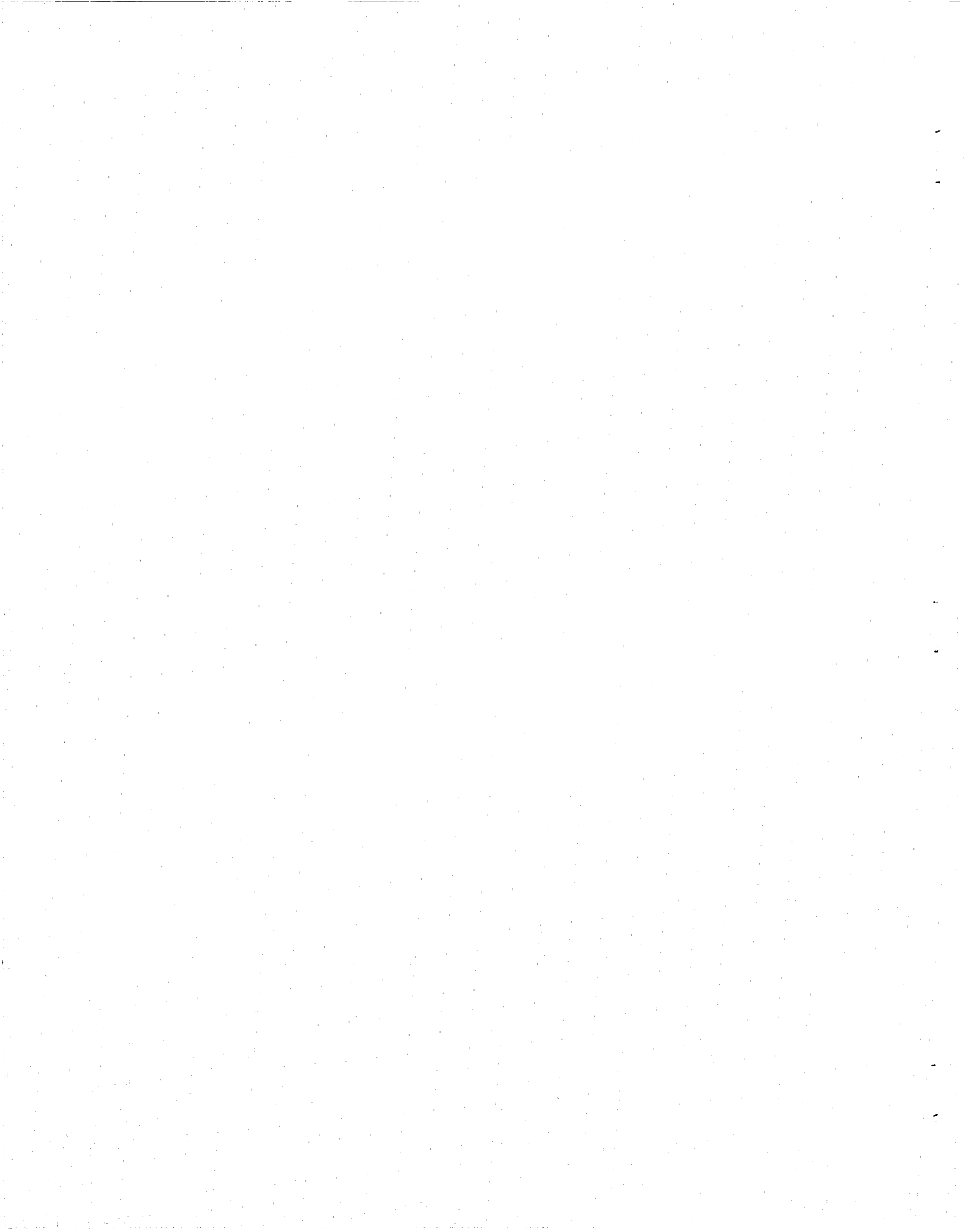
⁸⁶John Aram, Cyril Morgan and Edward Esbeck, "Relation of Collaborative Interpersonal Relationships to Individual Satisfaction and Organizational Performance," Administrative Service Quarterly 16 (September 1971): pp. 289-296.

⁸⁷Salomon Rettig, Frank N. Jacobson, and Benjamin Pasamanick, "The Motivational Pattern of the Mental Health Professional" Psychiatric Research Reports 10 (December 1968): p. 18.

⁸⁸Hall and Lindzey, pp. 174-75.

⁸⁹Ibid., p. 179.

⁹⁰Huizinga, p. 62.



CHAPTER II

CONCEPTUAL FRAMEWORK

In this chapter the study's major hypothesis is stated as well as a number of important sub-hypotheses. To convey the meaning of the hypotheses stated below, as well as to clarify the conceptual path taken in this study, the mapping sentence technique was used because it provides a mechanism for logically organizing the material of the study. This technique was integral to the construction of the hypothesis. As a result, this chapter will describe the construction of a mapping sentence both theoretically and empirically through examples from this study's mapping sentence. Thus, the initial mapping sentence (Figure I) is included in this section. Each item used is then defined in the section following the construction of a mapping sentence.

Once the mapping sentence was constructed, however, a number of changes became necessary. Thus the last section of this chapter presents the new mapping sentence (Figure II) and deals with the rationale for the alterations made in the study's original mapping sentence.

Section I - Major Hypothesis and Sub-Hypotheses

(The reader may find it useful to refer to Figures I and II on pages 39 and 78.)

The major hypothesis of the study states:

The greater the appropriate use of areas of SSR (Facet C) by employing the techniques of SSR (Facet D) to fulfill the role behavior needs (Facet E) of a staff member (Facet F) of a community agency (Facet G) by a focal drug

FIGURE I

MAPPING SENTENCE PRESENTED IN THE STUDY'S PROPOSAL

	A		B		C	
	The appropriate	<u>Action Potential</u> of			<u>Areas of SSR*</u>	by
		(knowing)	(existing)		(input sources)	
		(liking)	(developing)		(network linkages)	
		(doing)	(maintaining)		(articulation of related roles)	
		D	(utilizing)			
Individual (X)	utilizing	<u>Techniques of SSR*</u>				for fulfilling the
(		initiation of contact)			
(		types of contact)			
(		resource accessibility)			
(		provision of expertise)			
(		instillation of cognitive clarity re: program))			
	E		F		G	
	<u>Role Behavior Needs</u>	of a	<u>Referent</u>	in a	<u>Community Agency</u>	by
(	control of information)		(director )	(	mental health services)
(	status)		(supervisor )	(	social services)
(	support)		(line worker )	(	general hospital)
(	task attainment)		(himself )	(	court system)
(	relatedness)		(client's family )	(	vocational rehabilitation services))
(	professional competence)		(significant others)	(	crisis intervention center)
(	funding )			(	focal drug rehabilitation program))
(	power )			(	schools)
				(	health services)
	H		I			
a	<u>Referent</u>	for the appropriate	<u>Purpose of</u>	clients for a drug rehabilitation program		
(	director)		(referring)			
(	supervisor)		(maintaining)			
(	line worker)					
(	himself)					
(	client's family)					
(	significant others)					
		hi				
		_____ .				
		lo				

*SSR - Social System Relatedness

rehabilitation program staff member or other significant individual (Facet H), the greater the securing of appropriate referrals (Facet I), i.e., the higher the number and maintenance of clients, to a drug rehabilitation program.

The independent variable is the use of appropriate SSR (Facets C, D, and E) with appropriate referents from community agencies (Facets F, G, and H). The dependent variable is the securing of appropriate referrals (Facet I) in terms of the number and maintenance of clients for a drug rehabilitation program.

Many sub-hypotheses are implicit in the major hypothesis or from the mapping sentence itself. However, some limiting of the many possible sub-hypotheses must be done. The major hypothesis, as formulated above, necessarily combines a number of facets (A-H) thus leading into the dependent variable (Facet I). Sub-hypotheses can be formulated by combining various elements from the first part of the mapping sentence (Facets A-H) in relationship to the last part of the sentence (Facet I).

The first part of the major hypothesis combines Facets A through E, characterized as SSR, which completes the exchange with Facets F, G, and H, the referents of community agencies. The second part of the hypothesis is Facet I--appropriate referrals--which is concerned with securing a high enough number of clients who are then maintainable in the drug rehabilitation program.

Several important sub-hypotheses which include various combinations of elements in the mapping sentence are stated below:

1. The more appropriate the use (doing, in Facet A) of SSR by program workers, the more clients referred to and maintained (Facet I) in a drug rehabilitation program
2. The more individuals (Individual X) in a drug rehabilitation program utilizing SSR, the more clients secured (i.e., referred and maintained) by the focal drug rehabilitation program
3. The more role behavior needs (Facet E) of a referent (Facet F--except

for "himself") fulfilled in conjunction with techniques of SSR (Facet D), the more appropriate referrals of clients to a focal drug rehabilitation program (Facet I)

4. The greater the direct use of network linkages (in Facet C) by a drug rehabilitation staff member (Individual X) associating more techniques of SSR (Facet D) with fulfilling the role behavior needs (Facet E) of a referent (Facet F--except for "himself"), the greater the number of clients referred to and maintained in (Facet I) a drug rehabilitation program

5. The greater the indirect use of network linkages (Facet C) through a drug rehabilitation staff member associating more techniques of SSR with fulfilling role behavior needs of a referent (e.g., line worker in Facet F) by a referent (e.g., director of that agency), the greater the number of clients referred to and maintained in (Facet I) a drug rehabilitation program

6. The greater the number of community agency input sources (in Facet C) referring clients to a drug rehabilitation program, the greater the number of appropriate referrals (Facet I), in terms of numbers of clients and their maintenance in the program

7. The more developed the direct network linkages of staff members of drug rehabilitation programs, the greater the appropriate referrals, (Facet I) in terms of numbers of clients and their maintenance in the drug rehabilitation program

Section II - Construction of the Mapping Sentence

The following section deals with the construction of a mapping sentence using this study's mapping sentence (Figure I) as a basis for discussion. Described within are the basic issues and terms associated with facet theory. Its importance lies in the use of the mapping sentence for constructing and

refining the conceptual framework of this study.

The theoretical framework for this research is facet theory as developed by Professor Louis Guttman, Director of the Israel Institute of Applied Social Research in Jerusalem.¹ Facet theory proved to be most useful in formulating the conceptual framework of this research, as well as providing a clear basis from which to construct the interview schedule. Figures I and II (p. 39 and p. 78) are mapping sentences that utilize facet theory. The first mapping sentence, Figure I, represents the broad conceptual framework which shows the basic interest of the research. The second mapping sentence, Figure II, represents the facets and elements actually used in designing the interview schedule. For better understanding of the structure of the mapping sentences presented, as well as the utility of facet theory for designing the instruments and analyzing the data, the basic terms used in facet design are discussed and defined below.

In the introduction to Elizur's Adapting to Innovation, Guttman praises the book as "the best single source for learning the basic steps of facet theory as I [Guttman] have been teaching it currently (definition, specification, rationale, and hypothesis) as well as the basic concept of a mapping sentence and its facets."² According to Elizur, "facet theory, as developed by Louis Guttman, is a metatheory for the design of structural and other theories." He also says that facet theory "provides means for the systematic design of the universe of the content."³

Kernberg states that "facet theory, in its most general sense, can be thought of as a conceptual analysis of the content of the research, i.e., a system by which complex concepts or variables are broken down into simple sets of elements called facets." Facet design emanates from facet theory and Kernberg adds that it "seeks to define the universe of content of whatever is being studied."⁴ Several additional statements from Kernberg may assist in

better understanding of facet design:

It is a method for selecting items to be included in a research design in a systematic fashion resulting in parsimony in the selection process as well as offering the possibility of developing new concepts. Facet design starts with a mapping sentence which incorporates a definition of what is to be studied according to a number of sets or facets, consisting of two or more basic elements. Following the construction of the mapping sentence, the variables to be used are defined in terms of facets of the mapping sentence.⁵

The unique contribution of the mapping sentence is in its ability to describe complex variables and their possible interrelationships in one simply read sentence composed of basic sets of elements. Every variable can be defined in terms of this basic framework.

It may be worthwhile at this point to define the basic terms used thus far. They are facet, set, and element. According to Elizur, the term facet was suggested by Guttman for defining "a set that is a component of a Cartesian product." Cartesian analysis is an attempt to interpret experience with as much certainty as is possible through logical means. The term set refers to "a well-defined collection of objects. The individual objects in a set are called elements or members of the set." Elements that do not fit in logically with others to compose a meaningful theoretical framework are to be eliminated. The objects in a set or the elements together form a facet. "All possible combinations of the facets form the Cartesian product of the facets. Together they fill the Cartesian space (Lazarfeld called it the attribute of space)."⁶

Most facets can be given a name which summarizes or identifies an organizing concept for the elements. For example, in the two mapping sentences shown (Figures I and II), all facets are named with the exception of Facet B. Although facet names can be stated in the mapping sentence itself, their full meaning should be clearly explicated elsewhere in the research.

The need to define organizing concepts and elements of a problem is well recognized in social science research. Facet theory can assist the researcher by designating the logical steps to be followed in the construction of a mapping sentence. The result should be well conceived concepts that are interrelated and that can be used in constructing a research instrument. A mapping sentence, then, is one specific tool used in facet theory.

The formalized definition of the facets is crucial to the efficient use of facet theory. Once a research problem is clear and the definition of the facets is formalized, one must examine all areas of research implicit in the conceptual framework, as stated in the mapping sentence. The researcher must then decide whether to reject some elements or facets because of operational limitations of the research. But if the logical possibilities from use of facet theory are not considered, then the researcher may be unaware of many of the ramifications of his research.

Before entering into some of the issues inherent in constructing and utilizing a mapping sentence, let us review briefly the use of facet theory. Facet theory is a device that can be used in theory construction especially when attempting to utilize the theories in empirical data. Facet theory is useful because it provides a means for explication of relevant dimensions both conceptually and operationally.

The first step in formulating the research problem is to present the particular dimensions of the phenomenon to be researched. We then select those dimensions that seem to be essential for our focal research purposes. The initial mapping sentence should therefore attempt to present the relevant dimensions of the original problem with which the research project is concerned.

To use the present study as an example, the first draft of the mapping

sentence developed the differentiations and topics (dimensions or differentials) chosen as relevant for dealing with the phenomenon under study. As draft succeeded draft, we chose several concepts as more relevant to our purposes. In doing this, we recognized the fact that these facets were not the only ones that could be chosen. In fact, other facets would be useful for different purposes. Nevertheless, after combining various elements of the facets and attempting to read them as a sentence, it became obvious that some concepts were nonexistent in the empirical sense or irrelevant for our purposes. Some combinations made sense for the purpose of the research project and other combinations made little sense or contribution. In this phase the utility of the mapping sentence lies in its framework that enables the researcher to find not only those concepts that relate to the focal purpose, but also the combinations of elements that are logical and meaningful.

The "trick" is to get as many combinations of elements as possible to make sense. Some elements are found to be illogical. For example, the element "articulation of related roles" was identified in the initial mapping sentences as pertaining to intra-staff integration issues.⁷ When this element was viewed in the context of other facets, such as Facets G and H, it was seen to be illogical because articulation of related roles is essentially an intra-program element, while the other two elements in Facet C deal on an inter-agency level. Facets G and H provide a differentiation between two types of inter-agency contacts, yet articulation of related roles can only be used to relate intra-agency relationships as they affect intra-agency collaboration. The logic of the mapping sentence shows an inconsistency of articulation of related roles with the other two elements of Facet C in relation to other facets. Although articulation of related roles may be crucial to understanding intra-organizational relationships, it was

eliminated from the context of this tightly focused research.

In order to arrive at logical conclusions regarding the structure and focus of the research, it is necessary to define all the conceptual and operational components of the problems. Elizur points out that "the advantage of facet theory lies in the formalization of this process."⁸ The mapping sentence then is both a tool and an outcome of facet theory. By formalizing the definition for the facets, the clarity of the research is enhanced. If the researcher does not utilize facet theory, then he will not have considered all possible areas of research possible within his conceptual framework. By utilizing facet theory, the researcher can decide to accept or reject possible areas of research implicit within the mapping sentence, depending upon his purpose, interests, and means to carry out the research. It is important to note that if the researcher does not use facet theory, he may be unaware of all the possibilities with his conceptual framework. This contention is based on a principle of facet theory, that each facet and its elements are interdependent with each other and can only be understood and researched in the context of the other facets and elements.

The mapping sentence serves to represent the entire research design of the project in one sentence that can be easily comprehended without any acquaintance with facet theory.

In the present context, by changing some of the facets, the mapping sentence can be used to study other issues. For example, the researcher can specify a different input into the program, such as funding, through changing the last facet, Facet I of Figure I. This demonstrates the versatility of the mapping sentence because by rearranging or by altering some facets the focus, but not the framework, may be altered.

Through utilizing this mapping sentence in a number of inter-organizational settings or through changing the specific input being studied,

the same framework of this mapping sentence can assist us in understanding the potential for generalized application to other inter-organizational research. Thus the conceptual framework developed in this research project could be valuable in other studies. And by presenting those combinations of facets which could be interesting, but not utilized for lack of time and specificity, the implications for further research can also be clearly articulated.

In a further section of this chapter we shall differentiate between the larger mapping sentence (Figure I) which represents the conceptual framework of this research project and the smaller mapping sentence (Figure II) which represents only those elements specifically used for the research project. We shall later attempt to show why elements in the larger mapping sentence were not used in developing the final research instrument.

In a mapping sentence an attempt should be made to name both a facet and the elements of a facet. By naming a facet, the researcher is clear about the entire range and full meaning of the facet. Moreover, through the naming process it is possible to determine the boundaries of what can be put in as elements for that facet. The names of the facets should make it possible to read the facets as a sentence independent of the specific elements.

This process of naming the facets and thereby clarifying the facets' boundaries makes it possible to determine logically what elements should be included in a facet. In short, the facet name must create elements which are appropriate to the name itself. The elements must also correspond logically with the facet.

One of the major problems in developing a mapping sentence is that very often there are facets with no name. When this is the case, there is

no rule to test which element should belong and which should not belong to the facet. Also, there is no rule that allows the researcher to create a definite element in such a case. The only facet which is nameless in this research study mapping sentence is Facet B. We could find no organizing concept with which we could label, and thus define the parameters of that particular facet.

It is worthwhile pointing up several relevant issues pertaining to the naming and development of a mapping sentence. It is characteristic in a mapping sentence for one facet to change an element of another facet. For example, in Figure I if the element himself in Facet F were to be retained in the final mapping sentence, the thrust of the research would be on securing referrals and maintaining clients through fulfilling his own, i.e., the respondent's role behavior needs. In such a case, articulation of related roles, in Facet C, would be retained, since the focus of the research would be upon fulfilling the respondent's own needs. The inclusion or exclusion of the element himself in Facet F would mean retention or exclusion of one of the elements in Facet C. This illustrates how one facet or element can change another facet or element. As a result of the ability to define clearly the parameters of a study, it is possible to delete from a facet those elements which do not fit into the framework of the study. If this is done, then the element which is removed becomes a new facet which can stand alone as a separate facet. By including the new facet in the mapping sentence, the emphasis of the sentence, and therefore the project, would be altered. For example, by including as a facet in this study the articulation of related roles the sentence would pertain to intra-staff relations rather than the original inter-staff relations.

Both the dependent and independent variables are specified in the mapping sentence and are dictated by the purposes of the research. In Figure I the independent variable consists of Facets A through H, while the dependent variable consists of Facet I.

It is helpful to develop a unified range for all the observations one wishes to make. A unified range consists of the parameters of the independent and dependent variables. These independent and dependent variables are defined by the facets and elements of the mapping sentence. To illustrate, Facets A through H of Figure I provide the parameters of the independent variable and Facet I consists of the dependent variable. When combined, these facets form the unified range of the study. Since the questions in the interview schedule for this study are derived from the facets and elements of the sentence, they represent the unified range of the study. To the extent that a unified range is created in a mapping sentence, the respondent's answers help in understanding the relationship between the variables--the construct or the unified range. The unified range may exist implicitly or explicitly in the questions derived from the mapping sentence. For example, all combinations of items in the interview schedule are related to Facet A of the mapping sentence. Therefore, there is and can be a common interpretation for all items.

By determining the important observations in a specific research project, one can thus construct and develop a research project that includes all the relevant variables. The unified range for all observations simplifies the theory construction. Illogical combinations can lead to changes or deletions of facets and elements. Hypothetical sentences that can be read from the mapping sentence must be consistent with the questions the research study attempts to address.

Another way to construct a questionnaire is to ignore for the meanwhile all the above and to think empirically about the kinds of questions one wishes to ask. Initially, this is a simpler method. Its shortcoming is that it is not as helpful for theory construction as the mapping sentence technique. Several of the benefits of mapping sentence technique, as opposed to empirical considerations, include:

1. The mapping sentence assists the researcher in carefully defining the components of the theory. The interaction between the components can be specified in a unified range of specific facets
2. The mapping sentence helps the researcher determine what items to include or exclude. Because of this, it is very easy to change the theory slightly by altering a facet and its elements. An example of this is Facet I of Figure I which designates the purpose of the study as being for improving the appropriate referring of clients. By changing this facet to funding the thrust of the study is altered
3. Because of the above mentioned versatility arising from a change of elements or facets, the mapping sentence allows a researcher to test a theory by using an additional facet. If it proves to be correct, credibility is added to the original hypothesis

By defining the facets, we end up with broader concepts than the elements themselves. For example, Facet C in Figure II consists of input sources and network linkages. The facet itself--areas of SSR--is a broader concept which more than encompasses both elements. See Section III for definition of the above items.

It can be said that the development of every mapping sentence (and series of mapping sentences) is a process which continues until one reaches results. The point of closure depends upon the point of departure in developing the

sentence. In short, the process ends when the sentence comprises meaningful combinations, each of which incorporates the major hypotheses that are the foci of the research project. Moreover, most of the combinations of elements in the mapping sentence must make sense.

The point of departure can be based on specific problems in the field being studied. Or it can test a theoretical construct. In the present context, the research project presented is a combination of both, as it relates to a specific problem in the field as well as tests a theoretical construct. The mapping sentences thus serve a twofold purpose: to define more clearly the theoretical construct and to relate the theoretical construct to a specific problem in the field. Thereby, the dependent and independent variables are shown in their relationship to each other as well as separately.

It is not sufficient merely to find in the mapping sentence a relationship between a dependent and independent variable. The mapping sentence should also allow us to analyze the interaction between the dependent and independent variables. Since the facets are comprised of various elements, which are the range of the facets, the interaction between the dependent and independent variables can be analyzed. In addition, the interaction between the dependent and independent variables can be understood through constructing questions that combine crucial elements of the dependent and the independent variables. Each question must address itself to the relationship between the dependent and independent variables.

In the present research project we have constructed one mapping sentence (Figure I) which represents the theoretical framework of the project and another mapping sentence (Figure II) which uses those facets and elements that went into the construction of the interview schedule. This approach provided us with a framework for identifying not only the relevant concepts, but also that combination of facets and elements which comprises the major

hypotheses of the research project. Each hypotheses must be consistent with the entire sentence. That is, both the major hypotheses and the mapping sentence should be compatible with each other. Each hypothesis should be clearly identifiable as a combination of elements comprising the independent variables as compared to one or more elements of the dependent variable. Thus, a logical basis for each hypothesis can be identified in terms of the mapping sentence.

A further utility of the mapping sentence can be for creating additional hypotheses which may be connected to the major questions previously posed. A firm foundation can facilitate additional research on other aspects of the problem. For example, other elements that have not been utilized in the construction of the interview schedule, but that make sense in terms of the general hypothesis stated for this research project, may provide a basis for further research in this area. These additional findings could then be compared with the findings presented here.

In constructing an interview schedule, one must realize the tremendous number of observations possible from the combinations of various elements of facets from the mapping sentence (Figure I). In the first mapping sentence (Figure I) there are forty-five elements in nine facets, or 622,080 possible combinations of elements. The final mapping sentence (Figure II) eliminates eleven elements, and the number of possible combinations is reduced to 1/12 (8.3 per cent) of the original, or 48,000.

One must therefore set priorities or limit hypotheses. From all possible observations we had to choose a limited number which would allow us to test those relatively important hypotheses. The questions asked were thus related to the most basic interests and hypotheses of the research project.

The tremendous number of questions, based on combinations of elements

in the mapping sentence, which can be generated from the major hypothesis leads to an almost impossible and inhuman research task. One technique to reduce the number of questions asked of a respondent is to divide the interview questions among the respondents. In this way any one respondent would not be required to answer all the questions on the interview schedule. However, very basic and important questions should still be asked of all the respondents. Because we considered the combinations of elements we were interested in to be appropriate and crucial to all respondents we did not use the option of dividing up questions among the respondents. For analysis of the general hypothesis the amount of data to be collected from each individual was viewed as minimal for purposes of shedding light on the interaction between the dependent and independent variables.

In sum, the use of a mapping sentence based on facet theory provides a basic framework for the project. It allowed for logical combinations of concepts that could be related to the goals of the research project. The mapping sentence served as a tool whereby concepts were accepted or rejected in terms of the inter-relations between the concepts and their relevance to the general hypothesis of the project. Specific combinations of facets and elements, as presented here, can allow for analyzing the interaction between components of the independent and the dependent variables. Those concepts that were part of the theoretical framework of the project and not utilized in the instrumentation can thus be specified and utilized for future research. The framework of the mapping sentence also allows for considerable replication of the conceptual framework by changing a small number of facets. Thus, the generalization of the theoretical framework as presented in this mapping sentence can be tested in other fields. The mapping sentence provides the researcher with a tool which can be conceived as a meta-framework useful to the researcher in social science.

Section III

Description of Facets and Elements in the Mapping Sentence

This section deals with the facets and elements used in the mapping sentence and in the major hypothesis developed from it. Below will be found the definitions for the facets and elements used in the study.

For a further discussion of the techniques and needs identified in the mapping sentence (Facets D and E) see the Appendix 2 for the aids presented to the interviewers.

The appropriate amounts of SSR and the appropriate combinations of SSR elements will vary and depend on the situation. For example, the use of SSR may vary according to whether referrals from the agency are being developed or maintained. Compared to the development of the agency as a new referral source, lower amounts of SSR will be necessary to maintain the number of referrals from an agency. When developing the agency as a referral source, considerable amounts of SSR "investments" may be called for. Possibly, SSR should at first be aimed at the agency's director rather than the staff. Indirect use of network linkages may be appropriate to initiate the relationship with a new agency, while some direct contacts may be appropriate once the relationship with the agency staff has begun to develop.

Facet A - Action Potential

The facet of action potential is a behavioral facet included in almost every mapping sentence. Behavior in this framework consists of covert and over-action. This facet is defined by the three elements of knowing, liking, and doing. By using these three elements a researcher will be in a position to do more than differentiate between organizations in terms of whether or not they use SSR behavior appropriately. The three elements give depth and dimension to the facet of action potential and help in determining the

quality of SSR behavior. Sifting through the dimensions or elements of the action potential can help determine what qualities are coming to bear on the situation. One can look at whether the staff members know of a need for the use of SSR but do not like to use it. Or the staff may not know of some, or any, SSR behaviors and, consequently, cannot consciously use them. Moreover, it might not be a matter of knowing or liking, but simply a question of time or skill.

The flexibility and depth which the action potential facet exhibits enhance the study in at least two ways:

1. If the major hypothesis of the study is upheld by the data, we should be able to determine if the drug program staff members are using SSR and with what other elements and combinations
2. If the major hypothesis of the study is not borne out by the data, then the addition of other dimensions might supply the required information to provide answers as to obstacles in the use of SSR and the difficulties in their use

For example, the element of doing in Facet A of Figure I will hopefully provide an understanding of the use of SSR and any difficulties encountered in that use. Additional information or a more inclusive view might be attained by looking at the three elements of Facet A alone and in combination.

By combining scores on these three elements one gets some weightedness on the various obstacles. For example, high knowing but low liking and doing of SSR may be related to low referrals. There might be some weightedness in terms of higher doing of SSR as related to higher referrals.

Facet B

The elements of existing, developing, maintaining, and utilizing in Facet B are concerned with the process of creating and employing certain attitudes

and behaviors to help in securing the appropriate number of clients, and then maintaining them in a drug rehabilitation program. The previous elements of knowing, liking, and doing describe the action potential for existing, developing, maintaining, and utilizing certain attitudes and techniques. More simply, it is necessary to know, like, and use existing areas of SSR behavior in order, for example, to increase referrals by developing a new input source.

"Existing" pertains to those conditions present in the situation. In other words, that which is. "Developing" refers primarily to initiating new elements in areas of SSR. The implication here is that the overall extent of the other areas of SSR should be high if developing is high. "Maintaining" refers to "pumping enough fuel" into the system to keep it going. The use of this element will be appropriate to drug rehabilitation programs that have already developed the use of areas of SSR.

"Utilizing," the last element, concerns what an individual or a program is doing. In that sense, it incorporates the other three elements because utilizing does not specify at which phase (such as developing and maintaining) the program is operating. As a result we were interested in what the person was doing, whether it was in existing, developing, or maintaining areas of SSR (Facet C).

Facet C

Social System Relatedness or SSR emphasizes the major areas, which we have identified, that influence the interaction between a drug rehabilitation program and its environment. The areas stressed are input sources, network linkages, and articulation of related roles. It is emphasized here that areas of SSR (Facet C) relates to behavioral strategies while the techniques of SSR (Facet F) pertain to tactics. Within that context, the inter-organizational strategies and techniques which hold out the most promise should be utilized for fulfilling referral or any other organizational objectives.

The terms strategy and tactics are normally applied to military ventures; however they have been useful in the conceptualization of this study. The distinction between the two is according to the level at which they operate. Strategy refers to the "art of the general" and is the strategem or artifice of planning where and how to fight. Tactics refers to the operations or the actual movements that are set in motion by the strategy or the fighting itself.⁹

Areas of SSR, and their modification by other facets, indicate certain concepts and aspects of organizations which influence interaction and which the staff of organizations may find useful in achieving goals. Areas of SSR do not prescribe behavior directly nor tell one what to do; rather, the SSR facets and elements conceptualize the areas or characteristics of the social system which are then operationalized in the techniques. The techniques prescribe types of behavior and aspects of interaction which should be manipulated or guided to achieve desired results. The distinction lies in the difference between the levels of abstraction of the areas and techniques of SSR. Areas of SSR are conceptually abstract, and general in nature, in contrast to the techniques which are more practical and action oriented.

The areas and techniques of SSR, e.g., securing appropriate referrals (Facet I) for a drug rehabilitation program, are likely to be responsive to the use of open systems theory. These areas consist of the inter- and intra-organization arrangements and structures which activate and formalize potential channels for securing appropriate numbers of referrals and maintaining clients in a drug rehabilitation program.

The elements of areas of SSR are directly influenced by their derivation from open systems theory. They emphasize the interdependency of the organization on the environment and necessitate a clear conception of how the total system operates.

Input Sources

Drug rehabilitation programs traditionally receive referrals from a limited number of sources, which include primarily "street"(self) and court system referrals. Increasing the appropriateness of referrals often follows hand in hand with increasing the size and number of referral sources. Although referrals come primarily from the street and the courts, other agencies and people come in contact with drug abusers. It is posited that many potential clients to drug programs have relationships with individuals from other community service agencies. Through their relationship with the client, these workers from other agencies could assist potential clients both in reaching the drug program and remaining in it. Also, relevant agencies related to criminal justice could be helped to refer clients more appropriately to a drug rehabilitation program. It is realized that some programs are organized so that certain workers having "boundary spanning roles" primarily handle the intake of clients and are responsible for increasing both the number of clients and the number of referral sources to the program. However, other staff workers also have contact with the staff of other agencies that can or are referring clients. These contacts, although not specifically for intake, may affect the sources of referral. Conceivably, then, the individual staff members' contacts can influence the number of clients and the number of sources making referrals as well as reinforcing the maintenance of clients in drug programs. In this way, the utilization and effectiveness of the drug program is affected and could expand if staff members realized their potential for securing and maintaining referrals. The staff can use both their direct and indirect contacts to secure referrals. The use of a staff member's network to secure referrals will be discussed in the next element, network linkages.

Expanding the referral network to include various sources can have the effect of increasing the spectrum of clients reaching the program.

It would be expanded in 2 ways:

1. By increasing the number of clients referred from various community service agencies
2. By increasing the diversification of clients by expanding the number of referral sources

Although we have distinguished above between two types of workers in drug rehabilitation programs--those who handle intakes and those who are primarily counselors--we would like to minimize this distinction in terms of the part each can play in securing referrals to the program. Every staff member's contact with other agencies can have a significant effect upon the securing of referrals.

Another distinction was made between types of contact for securing referrals; contacts for immediate, present (actual) referrals and contacts for possible, future (potential) referrals. Contact for actual referrals pertains to the individuals one contacts regularly to inquire about referrals. Thus, contacts for actual referrals are always, although not always exclusively, about referrals. Contacts for potential referrals involve the awareness by the individual that his contacts with the staff of other agencies can be utilized to increase the number of clients and/or the number of referral sources to the program.

By looking at the contacts a staff member has for securing potential or actual referrals, we are able to get some idea about the kinds, number, and need of input sources.

By expanding the sources of referral to a drug program, it is possible that many of the drug abusers who have gone unnoticed will be referred to the drug rehabilitation program. The program is also more likely to receive different types of clients. The implication is that if a program's referrals

are almost totally court related the client is involuntarily attending a drug program, and probably has previously committed a number of crimes. This suggests that these referrals represent those who are "chronic" or "long term" drug abusers. Clients who have not yet reached the court system or have not yet been identified as drug abusers may be missed. In attempting to alter the behavior of drug abusers the use of drug program facilities has, until very recently, been a last resort for the criminal justice system and other agencies. As the legitimacy and effectiveness of a program's treatment is established, the trend moves toward sending the abuser immediately to a drug rehabilitation program.

Expansion of the sources of referral and the consequent increase of the number of referrals through contact of drug program staff with other agencies might lead to increasing drug program utilization and, thus, through increased appropriateness of referrals, its effectiveness.

Network Linkages

In the input source section, the focus was on a program's need for clients and the efforts they must make to acquire them. This section involves both direct and indirect contacts which drug rehabilitation program staff may find of benefit to the program.

"Network linkages" pertains to the lines or channels of communication that are interrelated or articulated by the drug rehabilitation program staff with appropriate referents (Facets F and H) of community agencies. This concept is illustrated by Barnes, using the analogy of a Norwegian Island Parish which he studied. Barnes pictures the network as "The image I have is of a set of points some of which are joined by lines. The points of the image are people or sometimes groups, and the lines indicate which people interact with each other."¹⁰ Epstein contends the network is not consistent or even throughout, but

tends to be more dense or concentrated at some points and extended in other areas. The dense areas of the network will be those in which individuals interact intensively with each other, while having narrow or unsubstantial relationships with others.¹¹ The extended network will consist of those linkages which are not usually activated, but do exist and can be utilized when needed. It can be seen that the concept of network linkages is very similar to open systems theory which emphasizes the interconnectedness of the system. To clarify how a network exists and is interconnected, Hammer states:

To the extent that a given interaction has necessary implications beyond the immediate situation, it must involve, indirectly, other individuals with whom each of the original participants interacts at other times. A divorce, for example, does not merely alter the relationship between one man and one woman. It also alters the relationships with landlords, neighbors, and other family members, decreases the frequency of contact with some of the people they generally saw together, increases the frequency of contact with the people each of them saw separately, and so on.¹²

The importance of the above and its understanding by individuals operating in an organization is the utilization that can be made of the network linkages. Utilization of network linkages depends on the understanding of individuals operating in an organization. Such utilization demonstrates the importance of the above. Knowledge of these inter and intra-social network linkages and their nature provides an important basis for intervention or, in other words, an attempt to affect the outcome of the situation. Interaction at those levels can have an effect, communicated within the relevant social network, on the results of interaction.

For example, identifying the network links to and from the policy-making level and studying the network links the policy makers themselves have can be crucial knowledge for determining whom to establish and maintain contact with and thereby whom to attempt to influence.

The staff of a drug rehabilitation program may have contact with workers from their program, staff of community agencies, members of the community, as

well as family and friends who are not directly involved in securing referrals.

These contacts may be formal or informal. Formal contacts may take place at staff meetings, conferences, regional meetings, training sessions, and the like. Other contacts may be more informal and of a social nature, taking place at parties, social gatherings, chance meetings, and the like. Both formal and informal contacts may be used to influence a relevant individual's opinion about a drug rehabilitation program. Moreover, the contacts an individual has and uses may be both direct and indirect. The former are those contacts which an individual has with one other person to secure referrals to a drug rehabilitation program. For a direct contact, only two people are necessary. Indirect contacts must include three people and can involve more. With indirect contacts an individual uses a third person to influence another agency or individual to refer clients, immediately or eventually to a drug program.

An overall comprehension of the complexities of the system is necessary to discern when to use which linkages for a particular purpose. A determination must also be made if a desired result is worth the work of achieving it in comparison to future needs.

Articulation of Related Roles

This element of areas of SSR requires the clear definition and explication of the respective roles of those individuals in an organization who are relevant regarding continued treatment with the client. Network linkages relates to the articulation of related roles, in that an understanding of the network linkages implies a knowledge of how the system operates and the lines of communication and influence. If one has knowledge of the organization and the existing network linkages, it would necessitate articulating related roles.

To pull together the knowledge of the staff to improve services, there must be considerable integration of the staff to make effective, concerted, and

non-contradictory use of the linkages. This leads to and necessitates an articulation of related roles, open channels of communications, and support.

A thorough understanding of related roles precludes the use of network linkages and the informal as well as formal relationships within an organization. Professional gossip is a significant source of information and provides insight into the network linkages and channels of influence in an organization as well as the roles and functions of the members of the organization.

In summary, this element relates to the intra-program allocation of tasks. A limited number of people decide who will interact with whom to accomplish the purpose (Facet I) of referral and maintenance of clients in the focal drug rehabilitation program. This is a social system task allocation related to accomplishing securing of appropriate referrals (Facet I).

Facet D - Techniques of SSR

"Techniques of SSR" refers to the specific behaviors used by workers in their contact with staff of other agencies. They delineate areas of the sub-system that have a crucial effect on inter-organizational relationships. The approach of this study is to use areas of SSR in analyzing inter-agency collaboration, while using techniques of SSR to indicate the specific means for using the areas of SSR. The techniques of SSR include: initiation of contact, types of contact, resource accessibility, provision of expertise, and instillation of cognitive clarity regarding the program. The elements of Facet D operate on various levels and relate to areas of SSR but not necessarily on a one-to-one basis. A number of techniques may apply and others may not, for any one of the given areas of SSR.

The following is an explanation of the five techniques of SSR.

Initiating Contact

In order to utilize areas of SSR--especially, but not only, at the developmental stage--the drug rehabilitation program staff must initiate contact with a considerable number of relevant referents (Facets F and H). For the purposes of this study we are interested in the individual in terms of his beginning or opening interaction with others, primarily those outside his own agency. In Israel a rehabilitation program called Moadon Shalom has made extensive use of area and techniques of SSR, succeeding very well in securing a large number of referrals and maintaining them in a rehabilitation program for ex-mental patients. In the rehabilitation program it was found that over 75 per cent of all contacts with professionals from other community service agencies were initiated by that program's staff.¹³

Types of Contact

Here we are interested in an individual's engagement in different types of contact with one individual, rather than a dependence on any one form of contact. The various forms of contact range from formal to informal, direct to indirect, and they differ in the number of people reached by the type of contact. These different types and levels of communication include: "shooting the bull," face-to-face, phone, lecture, and media.

1. "Shooting the Bull"

This sub-element includes using social contact to enhance the SSR areas of input sources and network linkages. Through using "informal ideological discussions" workers can enhance the area of SSR, thus leading to more referrals and better maintenance of clients in a drug rehabilitation program. Closely related to this is the importance of staff joining in on "the professional gossip." By taking part in the gossip, the worker is enhancing his network linkages and input sources and thereby becoming a more integral part of the system

2. Face to Face

This sub-element has more of a formalistic aspect to it than "shooting the bull." Face-to-face contact denotes direct meetings between a drug rehabilitation staff member and relevant referents. These face-to-face meetings may involve other techniques, such as providing expertise or resource accessibility

3. Phone

The telephone is a quick and easy way to maintain contact with other agencies' staff members. It has dynamic and flexible potential for enhancing areas of SSR

4. Lectures

Lectures provide a means of reaching and interacting with large numbers of people. They help develop and expand one's network linkages. Some drug rehabilitation program directors in Virginia have characterized lectures as a way of "keeping a high profile" with the professional and lay communities

5. Media

As in lectures, the use of the media, newspapers, radio, and television, can be used to reach large audiences in fulfilling task-related needs of various referents. Communication through the media can contribute to utilization of areas of SSR in different ways than face-to-face contact, for example. Using the media provides an individual with access to a larger audience than is usually obtained through face-to-face contact. The media is one way to a "high profile"

Resource Accessibility

This element pertains to the ease with which clients, potential clients, or referral makers are structurally able to receive services from a drug rehabilitation program. We are interested in a drug rehabilitation pro-

gram's use of certain arrangements or behaviors which facilitate others, both client and personnel of outside agencies, in contacting staff members and receiving those services required from the program. Techniques to use are: staff accessibility, staff availability, efficient intake process, and sharing the patient.

1. Staff Accessibility

This is a series of structural arrangements which can be made to enhance the program's efforts to secure referrals. The appropriate staff should be accessible to potential referral making personnel outside of the focal organization. This could mean setting up adequate phone facilities and arranging for a receptionist who will help the caller. Personalized service to the caller helps break down barriers to the organization, "binds in" the caller, and reinforces successive calls. A routine of quickly answering incoming calls and mail is also well advised.

The same personalized phone service should also be arranged for the visiting professional or lay community member. Because first impressions are so important, the efficient and personalized way the visitor is received contributes generally to the impression made and his appetite is thus whetted for referral collaboration

2. Staff Availability

Concomitant with staff accessibility is making appropriate personnel available for any interaction concerning referrals. The need for an open channel of communication between drug program staff and personnel from other agencies is of basic importance for securing referrals. The ability to move quickly and flexibly to meet other agency staff members at their time and place of convenience can be of significant importance, especially at the initial stages of developing contacts for the purpose of securing

referrals (the referral system). Stuart and Baker point out the need for "the assignment of one person in each agency who could function as a liaison or resource consultant for purposes of discussing the needs of special cases."¹⁴ The needs of a beginning or existing mental health service providing organization will usually justify the allocation and function of such a referral specialist. This, though, is not enough. Other staff members should be potentially available for referral work. Two kinds of potential use of this staff availability will illustrate our point.

- a. A referral specialist can get sick, take a vacation, or simply quit
- b. Some workers receiving referrals simply get "burned out" with some referral-making workers

The availability of a referral specialist and an "alternate" entails a decision about allocations of a valuable resource by the organization

3. Efficient Intake Process

Intake information should be limited to ascertaining the appropriateness of the client to the program and providing the base from which treatment can begin. The referral intake process should be designed for screening and binding in the patient, rather than imposing barriers to the client and worker. Collecting large amounts of unusable information about the client for the sake of having it merely endangers chances for a successful referral. More usable information may be accumulated through staff observation of the client's interactions during his initial participation in the program. Staff integration of those observations is essential for forming an effective treatment plan

4. Sharing the Client

Sharing the client is part of the larger issue of continued interaction between staff after referral. Continued interaction can be highly significant

as a motivational factor for the staff member to continue referring clients.

Through the sharing of a client, a staff member may satisfy some of the role behavior needs of the staff member who referred the client. For example, if a probation and parole officer has a client who is also a drug user and in a drug program, the fact that the drug program might help the client to stay off drugs and not break the law helps the officer do his job

5. Provision of Expertise

Teaching, consulting, and other means are used by drug rehabilitation program staff to impart to referents (Facets F and H) in other agencies knowledge that they need to operate more effectively. Provision of expertise does not include discussing procedures of one's particular program. Instead, it is a process whereby the referent receives relevant information which helps him in improving his skills.

Other benefits accrued in forming consultation-teaching relationships with referral workers consist of learning about others' perceptions and of gathering important information that would not be available otherwise.

6. Installation of Cognitive Clarity regarding the Program

This technique entails clarification to referents by drug program staff of the ways in which the program functions and whom they serve. Through the use of this technique of SSR the referent (Facets F and H) will have an understanding of the program to thus enhance the securing of an appropriate number of clients and their appropriate maintenance in a drug rehabilitation program.

Very specifically, a program cannot merely send out referral forms tailored to the operation and then assume they will be completed. Nor can a program have program specific procedures and assume they will be followed. Some forms or procedures will undoubtedly be followed incorrectly or with

inappropriate information; thus the procedures must be explained to the proper individuals. In effect, one is providing the know-how to referents and assisting them in gaining a clearer understanding of whom the program is intended for and how the program may be used.

Facet E - Role Behavior Needs

The behavior of staff members is largely determined by their personality and by the role they fill in an organization. Although individual staff members may have comparable job descriptions, the way they carry out their roles in an organization will also depend on their needs and personality. This facet describes the role behavior needs of an individual occupying a role (referents in Facets F and H) in a community agency. The needs of an individual in the work situation then will be determined by his role in the organization, the organization's own role needs, and by the individual's existential needs. The hierarchy of the individual's role behavior needs will differ according to the factors described above. The following is an explanation of the role behavior needs found to be most salient in a work situation. A discussion of theories on personality and how the needs used were derived can be found in Chapter II.

Control of Information

An organization consists of people filling specified roles. The actions individuals make in the organization are communicative acts or information exchanges. Thus, according to Katz and Kahn, communication can be viewed as the essence of a social system or an organization.¹⁵ Yet communication and information at random have no meaning. Hence the necessity of channeling the information so that it is available in an easily accessible form. Incorporated in the concept of control of information is the idea that the referent has a desire to know what is happening in an organization and wants to be aware of any changes within the organization. Securing the

from the program worker to the agency worker who referred the client regarding the clients' progress in the program can be highly significant as a motivational factor for the agency staff member to continue referring clients.

Through the sharing of a client, a staff member may satisfy some of the role behavior needs of the staff member who referred the client. For example, if a probation and parole officer has a client who is also a drug user and in a drug program, the fact that the drug program might help the client to stay off drugs and not break the law helps the officer do his job

5. Provision of Expertise

Teaching, consulting, and other means are used by drug rehabilitation program staff to impart to referents (Facets F and H) in other agencies knowledge that they need to operate more effectively. Provision of expertise does not include discussing procedures of one's particular program. Instead, it is a process whereby the referent receives relevant information which helps him in improving his skills.

Other benefits accrued in forming consultation-teaching relationships with referral workers consist of learning about others' perceptions and of gathering important information that would not be available otherwise.

6. Installation of Cognitive Clarity regarding the Program

This technique entails clarification to referents by drug program staff of the ways in which the program functions and whom they serve. Through the use of this technique of SSR the referent (Facets F and H) will have an understanding of the program to thus enhance the securing of an appropriate number of clients and their appropriate maintenance in a drug rehabilitation program.

Very specifically, a program cannot merely send out referral forms tailored to the operation and then assume they will be completed. Nor can a program have program specific procedures and assume they will be followed. Some forms or procedures will undoubtedly be followed incorrectly or with

information may be highly relevant to his accomplishing his roles and providing services to clients.

Control of information then subsumes two ideas:

1. An individual's desire to have knowledge concerning what is occurring in an organization
2. The need to have a means to get one's hands on desired materials and information without having to learn haphazardly of new developments

Means for information control include specific channels of communication--memos, staff meetings, reports, professional literature, and so on.

Funding

The need for funding is a constant and very fundamental requirement of an organization. Without the necessary funds to support the organization, it will not continue. Related to funding are some of the other bureaucratic needs including status, power, relatedness, and professional competence. For example, if an individual has a high level of power and status, he will be able to command those who are in charge of finances to give him and his agency the necessary funds.

Power

Power implies the possession of the ability to wield coercive force-- a possession of control, authority, or influence over others. Power then is the ability to influence others directly for one's own ends. Individuals vary in their need to have and exercise power over others as part of a specific role. Because having certain skills, abilities, and prestige implies a degree of power over others, this may again be related to the status and professional competence needs.

In the field we looked for the referent's need for power and the respondent's or indirect contact person's ability to satisfy that need.

Professional Competence

Professional competence concerns specialized knowledge or skills which a few individuals possess. It refers to professional skill. On filling a particular role in the organization, an individual becomes part of a class in the organization. The classes are ordered and arranged hierarchically according to the professional competence of the group and the reward system.¹⁶ Issues associated with professional competence are group identity and, hence, relatedness, derived from the affiliation, and status as a result of being part of a particular professional group.

One finds people attempting to develop their professional skills and have them recognized by others. These were attitudes we were looking for in the field--the behavior of those who went beyond getting the job done and were concerned with doing it well in a professional sense. Professional competence may well lend the individual a sense of personal security.

Relatedness

Relatedness refers to becoming a part of the social network. It is a state in which the referent is affiliated with other individuals or groups. Relatedness involves a sense of belonging, a "we feeling" resulting from common experiences, identity, cohesion, and division of roles.

A similar background, working together, or bonds pre-existing the immediate situation can be drawn upon to engage others quickly in interaction--thus developing a feeling of belonging, affiliation, or relatedness. Relatedness differs from support in terms of the level at which one is speaking. Support is more of an emotional response which individuals share, whereas relatedness is less emotional or personal and involves the unit of a group. Relatedness can include the idea of two people working toward the same goal of rehabilitation.

Status

Status is formed on the basis of common amounts of socially ascribed prestige or honor. In behavioral terms, it involves deferential and respectful behavior based on a ranking of positions according to comparable levels of prestige. In other words, in interaction, either by its very occurrence or by the deferential behavior exhibited, an individual's status will be established.

The concept of status is closely tied to that of professional competence, relatedness, and support. For example, if a group is willing to back or support an individual, it is indicative of both personal and role-related status.

In the field we looked for those referents who showed a need for receiving deferential behavior.

Support

The element of support refers to the referent's need for assistance or aid, and the function of the respondent or indirect contact person as a prop for that referent. Support is an emotional response between the referent and the respondent. It can involve such behaviors as spending time with a referent, expressions of empathy, verbal support, or agreement with some position the referent has taken.

The concept of positive concern helps us understand relationships characterized in part by a reciprocation of support. "The concomitants of positive concern may include greater intimacy as well as persistence."¹⁷ The idea is to build up the investment of relationship, as well as a symbiotic need, based not only upon common need, but upon mutual fulfilling of these common needs. Various types of support are thus in the work situation as a result of a positive concern relationship.

Task Attainment

What is meant by task attainment is the achievement or completion of assigned work or "one's job." This can involve mastery of skills to complete the general tasks of one's job, efficiency in a position, and a good performance in completing a task. Therefore, it is necessary not only for an individual to occupy a position, but for him to achieve some of the objectives or to complete assigned tasks. Every individual has some degree of need for task attainment to provide him with a feeling of satisfaction in what he is doing, and to maintain or improve his status.

Facet F - Referent

The following individuals are targets of SSR:

- (1) Director
- (2) Supervisor
- (3) Line Worker
- (4) Himself (Individual X)
- (5) Client's Family
- (6) Significant Others

The difference between the first three elements is the place of the referent in the organizational hierarchy. The fourth element relates to Individual X. He may be directly meeting his own role behavior needs (Facet E) through utilizing (Facet B) areas of SSR (Facet C). The fifth element emphasizes the client's family as a significant category of potential referral. The sixth element relates to friends and community lay individuals who may have relevant contact with potential clients for the drug rehabilitation program. These are individuals the drug program staff is utilizing SSR with to attempt to influence their referral behavior. The use of SSR might be in a direct or in an indirect form by the respondent. In other words, the respondent might be using SSR with the target individual himself, or he might be using his indirect contacts to influence the target individual.

CONTINUED

1 OF 3

Facet G - Community Agency

The community agencies listed below were chosen in consultation with staff members of Virginia's Bureau of Drug Rehabilitation. These agencies come into contact with the largest number of potential clients for drug rehabilitation programs. The focal drug rehabilitation program, which is the drug program employing Individual X, is included in this facet because the element (himself in Facet F) refers to Individual X who works for a community agency. The elements of the facet are:

- (1) Mental Health Services
- (2) Social Services
- (3) General Hospital
- (4) Court System
- (5) Vocational Rehabilitation Services
- (6) Crisis Intervention Center
- (7) Focal Drug Rehabilitation Program
- (8) Schools
- (9) Health Services

The target individuals (Facet F) who are also called referents come from agencies similar to those listed above.

Facet H - Referent II

This facet pertains to the referent who is fulfilling the needs of the community service agency staff member (Facets F and G). As such, it can pertain to two groups, either the respondent or the indirect contact person, depending upon which section of the interview schedule is being used. This facet would apply to the respondent when the subject matter is the direct contact between the respondent and the target individual. When the issue is the use of indirect contacts to fulfill role behavior needs, the referent in Facet H refers to the "indirect contact person" while the referent in Facet F remains the target individual.

Facet I - Referrals

This last facet represents the dependent variable of the study.

Appropriate referrals represent an input from the environment without which no drug rehabilitation program can exist. It is hypothesized that more appropriate clients for a drug rehabilitation program will be referred by human service organizations than those coming directly from the street (self referrals). At least two reasons lie behind this hypothesis:

1. Other-agency staffs may be expected to be knowledgeable regarding the drug rehabilitation program's client acceptance criteria and treatment philosophy. If the client is self-referred, he may have received information about the program from the "client grapevine." The agency-referred client, however, has the advantage of both the other-agency workers and the client grapevine's knowledge as to the potential for his being appropriate for the specific drug rehabilitation program
2. The other-agency worker can provide a crucial added support for the client to remain in the program once he has been referred. This may be especially true if the referring agency worker has a predating or previous relationship with the client at the time of referral. This worker can provide support for the client who enters the program when (and not if) he encounters difficulties in taking on the role of a "drug abuse rehabilitatee" Outside supports may be crucial in helping the client remain in the program. Such supports may be less forthcoming to a "street" referral

The two elements of this facet--number and maintenance--will be operationally defined in Chapter III Section IV - Methodology for the Dependent Variables. Specific measures for these elements will also be explicated, but some brief discussion may be appropriate at this juncture.

Number

The appropriate number of clients referred to a drug rehabilitation

program will vary from time to time. If all treatment slots are filled, it may be appropriate to receive few or no new clients at that time. New referrals then may not be accepted. Yet, the reality for drug rehabilitation programs is that many treatment slots remain unfilled. A high volume or number of referrals will be one condition for increasing program utilization.

Maintenance

Sheer numbers of referrals may be helpful, but not sufficient. If few clients remain in the program after entry, program utilization will drop. The program's effectiveness with clients may be called into question and may be penalized through the limiting of funds to that program.

Appropriate maintenance of clients may vary from one type of program to another. Generally, the time necessary for treatment in drug programs is not considered to be of short duration. Most drug rehabilitation programs cited a treatment period of one year for a drug abuser. Short-term drug rehabilitation is non-existent in Virginia. Moreover, the locus of treatment of the client is in the community, thus lowering the danger of desocialization due to long institutionalization. Therefore high maintenance may be a crucial element of program utilization and also a measure of its effectiveness. In fact, the existence of the program may depend upon its ability to secure an appropriate number of clients and maintain them in the program.

It is emphasized here that Facets A through H must all be measured by the extent to which the various combinations of the elements of those facets are associated with "securing" appropriate referrals in terms of number and maintenance of clients--for a drug rehabilitation program.

Section IV - Restructuring of the Mapping Sentence

The last section of this chapter traces the development of the study's mapping sentence from Figure I to Figure II. An explanation.

FIGURE II
 MAPPING SENTENCE REFLECTING THE CONSTRUCTION
 OF THE STUDY'S INTERVIEW SCHEDULE

	A	B	C
The appropriate	<u>Action Potential</u> of		<u>Areas of SSR*</u>
	(knowing) (doing)	(existing) (utilizing)	(input sources) (network linkages)
	D		
Individual (X) utilizing	<u>Techniques of SSR*</u>		for fulfilling the
	(initiation of contact) (types of contact) (resource accessibility) (provision of expertise) (instillation of cognitive clarity re: program)		
E	F	G	
<u>Role Behavior Needs</u>	of a	<u>Referent</u>	in a
(control of information) (status) (support) (task attainment) (relatedness) (professional competence) (funding) (power)		(director) (supervisor) (line worker)	Community Agency by (mental health services) (social services) (general hospital) (court system) (schools)
H	I		
<u>Referent</u>	for securing appropriate	<u>Referrals</u>	of clients for a drug rehabilitation program
(director) (supervisor) (line worker) (client's family) (significant others)		(number) (maintenance)	

hi
 .
 lo

in terms of the appropriate use of SSR (Facets C, D, and E).

*SSR - Social System Relatedness

is given for the deletion of various "illogical" elements. In addition, there is a discussion of the focus of the study and its reflection in the second mapping sentence (Figure II).

The final mapping sentence used (Figure II) represents a process that was begun in the earliest states of developing the study's conceptual framework. The original mapping sentence (Figure I) of 10 October, 1973, used in the development of the interview schedule, incorporated many of the available avenues of study. During the process of developing the theoretical framework of the study, the focus was narrowed to a discreet number of salient variables. Certain facets or elements were deleted because of the illogical combinations they made with other parts of the sentence or because they did not add any further insight to the study. In choosing those facets and elements of the sentence to be studied, we isolated those portions which were of significance to the theoretical framework and, thereby, established the parameters appropriate to the study.

The new mapping sentence (Figure II) is a result of pretesting, working with, and isolating those particular variables we were able to explore. Furthermore, as the concepts and areas of interest were refined it was necessary to make the sentence reflect the changes in approach. Since the original mapping sentence was altered to a sentence representing the theoretical framework of the study, it will be helpful to discuss the rationale behind each deletion.

Generally, the changes can be characterized as resulting from a narrowing of the focus of the study to look strictly at inter-organizational relationships. In addition, the concern of the study was primarily with determining exactly what existed at the time of the study

in the way of inter-agency collaborating. The behavior of the staff, not their understanding or feelings about SSR, was the issue. As a result, certain of the elements as discussed below were deleted.

For field study purposes in Facet A of the new sentence, the element of "liking" was dropped from the original three elements of "knowing, liking, and doing." The interview schedule used in the field asked questions about the respondent's knowing and doing of SSR. In asking what was happening at the present time, we were asking in essence what the staffs of drug programs were doing. In some cases they were using network linkages with both direct and indirect contacts. Frequently they were using only direct contacts for securing referrals but could think of situations in which the use of indirect contacts could be helpful in securing referrals, and we called this a potential network linkage. By asking about potential network linkages, we were discovering the extent of their knowledge of network linkages even if they were not using them. We did not, however, ask about the element of liking. This was a result of two considerations:

1. We were constrained by time in terms of the length of an interview and the breadth of subject matter that the study could handle adequately
2. Because this research is in a relatively new area of study, it was necessary to weigh the relative importance of various approaches and determine which avenues of study would provide the most clarity. The conclusion drawn was that the focus of the study had to lay a solid foundation from which more intensive research could be conducted and the concepts refined. Future studies can take up the various avenues available to be followed, one of these being the element of liking. It seemed

most important for the present project to determine what behaviors were operating. Thus, future studies may include the element of liking to explain obstacles to staffs doing SSR or to interpret the effectiveness of a staff's use of SSR.

Facet B in the original sentence contained the four elements of "existing, developing, maintaining, and utilizing." Of these four elements only existing and utilizing were not deleted. As stated above, the study's primary interest involves determining what is and is not being done in terms of SSR. Moreover, it was not designed as a longitudinal study. Since developing and maintaining refer to processes occurring over-time, it was not possible to include these ideas in the revised sentence. Moreover, a differentiation between those programs engaged in the development and maintenance stages would have necessitated a larger sample of programs, and this was unfeasible.

The areas of SSR (Facet C) concern those aspects of an organization which are relevant to inter-organizational relations. The areas of SSR are much like a strategy, while the techniques of SSR (Facet F) pertain to tactics. It is a strategy in the sense that it refers to the overall perspective assumed by the study.

Originally, the elements of Facet C included "input sources, network linkages, and articulation of related roles." The term input sources comes from open system theory and the literature on exchange or reciprocity theory. Exchange theory emphasizes the interchange or interrelationships which occur between organizations. As these approaches indicated, an organization does not operate alone, but is dependent on energy from the environment. This energy is both an

input to the organization and an exchange between the organization and the environment. As these theories mention, input to an organization is essential to its existence, and herein lies the importance of input sources.

Network linkages is a very important concept because in application it involves the ability to understand the system and how it operates. This entails a knowledge of both the formal and informal structures of an organization and how to use both to their best advantage. These two elements are retained in both the original and the revised mapping sentences because they are concepts that are quite important to the framework of SSR.

On the other hand, the element of articulation of related roles (ARR) in the areas of SSR (Facet C) refers to the internal clarification to its staff of a program's function and operation. This area's emphasis is on the articulation or clarification of the division of labor within a program. After attempting to operationalize ARR by using the mapping sentence, it was discovered that ARR does not fit into the unified range of the mapping sentence as do the other two elements of SSR. The emphasis of the project is upon inter-organizational, not intra-organizational, issues; therefore, the behaviors on an intra-organizational level are not of primary concern here. Satisfactory ARR may be a prerequisite to inter-organizational relations, but this is not the project's hypothesis or sub-hypotheses, and we have not attempted to prove or disprove it.

We are aware of the importance of articulation of related roles and, therefore, of the significance of these for a strong, cohesive program. However, to ask what needs of individuals are being met as a result of internal clarification of role functions does not fit within the framework of the study. Further, it does not fit logically with the other

facets, such as F, G, and H. That is, internal clarification of a program's functions might or might not meet some unknown individual's unknown needs. But our interest has been in direct actions by individuals in the inter-organizational sphere to achieve a particular result or input resource to the program, whether or not that result is projected for the short or the long run.

Articulation of related roles has not been retained as a facet. It is our intent to maintain the emphasis upon the external relations, while keeping in mind the importance of internal relations. The consistent use of the mapping sentence logic assisted us in arriving at the above conclusion to eliminate the element of articulation of related roles.

The next two facets of techniques of SSR and role behavior needs remain intact. They appear to be theoretically and operationally sound in the mapping sentence. The specific techniques were chosen on the basis of a literature review, experience and numerous field observations at the initial phase of the study. A discussion of role behavior needs can be found in Chapter I and definitions of the specific needs chosen can be found in Section III of this chapter.

Facet F, referring to the first referent, has been altered since the original mapping sentence was developed. The first list of referents was as follows: "director, supervisor, line worker, himself, clients's family, significant others." In its new form, the last three referents of the list have been deleted. The deletion comes as a result of the specific inter-agency focus which the project assumed. Within this context the referent is the target individual, defined operationally as the individual with whom the respondent is in most frequent contact. This target individual, according to the conceptual framework of the project,

must be working in a community service agency and he cannot be the same referent as in Facet H. Because of this, the elements of "himself, client's family, and significant other" do not apply.

In Facet G no substantial change was made in the list of elements; rather the intent of the list was altered. Initially the list was to serve as an encompassing example of community agencies to which this framework in drug rehabilitation might apply. Rather than attempting to cover all contingencies, it seemed appropriate to use the list as illustrative of the community agencies which a drug program might relate to.

The second facet of referent pertains to a totally different concept and set of individuals than the first facet of referent. The referent (Facet H) applies to that individual (according to position) who is relating to the target individual or referent (Facet F). That is, the referent of Facet H is either the respondent in the interview schedule or the indirect contact person who fulfills the needs of the target person. The category of himself in Facet H is inappropriate in this context because we are not concerned with what personal needs of his own the respondent or indirect contact person satisfies.

In our attempts to develop a clearly defined dependent variable, we viewed the appropriate securing of referrals (Facet I) to a drug rehabilitation program as a definable outcome of effective inter-organizational relationships. This is a further refinement of the mapping sentence (Figure I) which spoke to the appropriate purpose of referral and maintenance of clients for a drug rehabilitation program. Securing appropriate referrals of clients was considered from two operational viewpoints--number and maintenance. Since the

programs selected for the study would be comparable in size, the number of referrals could be compared according to each program and a selected referral source. None of the programs selected for inclusion in the study was so completely utilized that it was not attempting to secure additional clients. Maintenance of clients was retained as an element. This facet was explicated in the previous section of this chapter.

Hi - lo in terms of appropriate areas of SSR (Facet C), as stated in Figure I, is erroneous. SSR consists of facets and elements of C, D, and E in the context of other facets (A, B, F, G, and H) and their elements. The correction appears in Figure II.

FOOTNOTES

¹Relatively little has been written about facet theory and mapping sentences. And when material is published in monographs, it is often unavailable. We were unsuccessful in our attempts to secure some early writings of Professor Louis Guttman on facet theory and mapping sentences. The Library of Congress, University of Pennsylvania Library, University of Virginia Library, Virginia Commonwealth University Library, and State Library of Virginia were unable to secure the material for us. Much of the material presented here is based on a book by Dov Elizur, Adapting to Innovation (Jerusalem: Jerusalem Academic Press, 1970). Other material is based on personal study with Mark Spivak of the Israel Institute of Applied Social Research and an unpublished monograph in Hebrew presented by Dr. Spivak to the Israel Ministry of Transportation. This monograph discusses the development of a mapping sentence for studying Israel's transportation needs as perceived by Israelis.

²Dov Elizur, Adapting to Innovation (Jerusalem: Jerusalem Academic Press, 1970), p. 6.

³Ibid., p. 44.

⁴Otto Kernberg et al., "The Application of Facet Theory and Multi-dimensional Scalogram Analysis to the Quantitative Data of the Psychotherapy Research Project," Part 2, Bulletin of the Menninger Clinic 36 (January-March 1973): p. 91.

⁵Ibid., pp. 91-92.

⁶Elizur, pp. 44-45.

⁷A term related to reducing structural and cultural opposition to coordination as coined by Mervyn Susser, Community Psychiatry (New York: Random House, Inc., 1968), p. 266.

⁸Elizur, p. 46.

⁹International Encyclopedia of the Social Sciences, 1968 ed., s.v. "Strategy," by Bernard Brodie.

¹⁰J. A. Barnes, "Class and Committee in a Norwegian Island Parish," Human Relations 7 (February 1954): p. 43.

¹¹A. L. Epstein, "The Network and Urban Social Organ," Rhodes Livingston Journal 29 (1961): p. 56.

¹²Muriel Hammer, "Influence of Small Social Networks as Factors on Mental Hospitals Admissions," Human Organization 22 (Winter, 1963-1964): p. 244.

¹³Personal communication with Dr. Mark Spivak, Director of Moadon Shalom, Jerusalem, Israel, June 1970.

¹⁴Paul Baker and Elizabeth Stuart, "Coordination of Local Mental Health and Mental Health Related Services," (Sacramento: Department of Mental Health, December 1965), p. 22.

¹⁵Robert Kahn and Daniel Katz, The Social Psychology of Organizations (New York: John Wiley and Sons, Inc., 1966), p. 223.

¹⁶Ibid., p. 84.

¹⁷Bert N. Adams, "Interaction Theory and the Social Network," Sociometry 30 (March 1967): p. 70.

CHAPTER III

METHODOLOGY

Chapter III on the Methodology of this study outlines the process of data collection. This chapter is divided into five sections which explain both the development and implementation of the interview schedule, discuss the criteria for inclusion of programs and respondents in the study, as well as explain the methodology for the dependent and independent variables. From this chapter can be gathered a clear conception of how the study was implemented.

Section I - Developing the Interview Schedule

In the previous two chapters we described the construction of a mapping sentence and showed its potential for social science research. Then we outlined and defined all terms in the conceptual framework of the study. It might be beneficial to reiterate at this point that all questions asked must implicitly or explicitly reflect an element from each of the facets in the mapping sentence. The answers to all questions can then be analyzed within a unified range of facets. The thrust of the questions should be based on the combinations of those elements reflecting the study's hypotheses.

The interview schedule for the staff of the drug rehabilitation programs studied combines elements of Facets A-H as they relate to securing appropriate referrals (elements - number and maintenance) of clients for a drug rehabilitation program. Facets A-H reflect the independent variables and Facet I, the dependent variable. All questions to staff relating to their utilization of SSR were asked in relation to securing appropriate

referrals. The more objective and verifiable the data collected, the better. Considerable efforts were made to objectify the interview schedule. In order to remove any bias, we collected objective data regarding the securing of appropriate referrals (Facet I). We then related this to data on drug rehabilitation program staff's utilization of SSR. The manner in which the data for the dependent variable was collected will be presented in Section IV of this chapter. Upon finalization of the study's mapping sentence, it was possible to construct a questionnaire. This task was simplified in many aspects because of the focus and detail the mapping sentence provided.

Nevertheless, the format or style of the questions had to be determined. Ideally, the study's mapping sentence structure could be used to formulate direct questions by explicating as many of the facet elements as possible in the format of the questionnaire. This turned out to be an unfeasible approach for three reasons: 1. A question comprising the explicit expression of an element from each facet would be far too cumbersome. 2. An initial pre-test of a closed questionnaire with the staff of a Richmond Methadone program indicated that many respondents felt too "locked in" by the highly specific wording of the questionnaire. They tended to react on an ideological basis to the questions or enter into lengthy discussion as to exactly what was meant by the terms used. 3. In addition, other staff answered the questions with "ideal responses." That is, by explicitly using at one time all elements of the study's mapping sentence, we were showing the respondent our precise hypotheses. Moreover, some of the respondents tended to give the answers they were sure we wanted.

An open ended instrument was then called for. It was still necessary that the instrument reflect the structure of the study's mapping sentence, yet not be cumbersome. It had to achieve highly specific, not general and ideal, responses. An interview schedule was then constructed which

met these conditions. The items could be individualized by tailoring the question for each respondent. This open approach entailed avoiding highly specific questions, yet setting the parameters or areas of interest with the respondent by relating to the items in his language. (See Interviewing Aids for Administering the Interview Schedule in Appendix 2.) This provided time for the interviewer to discuss with the respondent his understanding of the item, yet also ensure that the response was within the intended context of the study's mapping sentence. The open-ended structure of the items enabled the interviewer to ensure that the items were understood by the respondent and that they were within the unified range of the conceptual framework comprising the study's mapping sentence. As a result of the structure of the interview schedule, the need for skilled interviewers to accomplish the goals of the interview was a necessity. Thus, the interviewer training increased in importance. The mapping sentence, shown in Figure II, was used in the construction of the study's interview schedule. A copy of the interview schedule is to be found in Appendix 1.

The introduction to Section I (p.3) of the interview schedule implies much of the structure of the mapping sentence. Facets D and E are not explicitly stated. To have done so would have revealed to the respondent what we were hoping to find, and possibly could have resulted in "ideal responses." Yet the entire focus of the interview schedule is placed upon efforts to secure referrals (Facet I). All questions posed are within the unified range of "doing" for securing referrals.

From the first section, questions 1-7, as well as from the information requested on the cover sheet, we collected some background data regarding the respondent. This data was to be used in the analysis to find out under what conditions and by whom SSR may be utilized. The length of the interview and name of the interviewer were recorded to understand better the effects of

interview schedule administration. Insufficient time for an interview and interviewer bias could provide insight for the future administration of this instrument, as well as suggesting limitations of the study. Data regarding the profession of the respondent was secured ex post facto and added to the general information variables appearing in the interview schedule (p.4).

The interview schedule is divided into two sections: direct contacts and indirect contacts. Both sections deal with the two elements of areas of SSR (facet C). The distinction between direct and indirect contacts is explained below by discussing them in relation to network linkages.

At this juncture it was decided to collect data from the same agencies from which data for the dependent variable (Facet I) was collected. This was to ensure the unified range characteristic of the mapping sentence. Also it ensured that meaningful data was collected with which to test the hypotheses. The procedure for designating agencies 1, 2, and 3 for each drug rehabilitation program included in the study will be described below. From this point on, data collected in the interview schedule pertains to agencies 1, 2, and 3.

Direct contact entails using one's network linkages directly with a target individual, e.g., staff member of another agency who may refer clients. The contact with the target individual may include Hi or Lo techniques of SSR (Facet D) and/or fulfilling his role behavior needs (Facets E). A considerable amount of contact is probably necessary in order to utilize SSR. Techniques of SSR (Facet D) are designed to increase contact with the target individual and set the stage from which the respondent can fulfill the target individual's role behavior needs (Facet E).

As a result, this section includes items on the amount of contact with staff of other agencies, role behavior needs fulfilled, techniques of SSR, and role behavior needs specifically associated with techniques of SSR--all asked within the unified range, relating to the dependent variable of securing

appropriate referrals (Facet I).

The data on the amount of contact enables us to learn whether or not for Hi SSR a large quantity of contact with the target individual must be associated with the elements of area of SSR, techniques of SSR, and role behavior needs. An opportunity is also afforded whereby Hi or Lo contact by a respondent, or by all program staff members, with the staff of another community agency can be measured against relative success in securing referrals (in terms of Facet I). Finally, it can be seen if SSR is more highly associated with securing referrals (Facet I), as compared to the quantity of contact.

The next series of questions focused on direct contacts through network linkages or input sources (Facet C) by the respondent using techniques of SSR (Facet D) for fulfilling role behavior needs (Facet E) of the target individual (Facet E) of a community agency (Facet G) for securing appropriate referrals (Facet I). The target individual, as designated in the interview schedule, is that individual for each agency (1, 2, and 3) with whom the respondent had the highest quantity of contact. The interviewer was then to probe for the role behavior needs (Facet E) the respondent felt he was fulfilling in his contact with the target individual within the broad context of securing referrals for the program (See Appendix 1, p.3, for the context within which the probing was done). Interviewers were to be assisted in choosing their probing questions by consulting their Interviewing Aids and using their own discretion in the choice of probing questions. Their choice depended upon their own preferences and their sizing up of the respondent's style. An array of probing questions was preferred to one direct question. It was felt that any one question might tend to be too "closed" or "open" for any one respondent. We did not want to use the term role behavior needs, nor explain what we meant by it, for fear of generating ideal or ideologically based responses. Interviewers were to cite the "existence" of any of the role behavior needs satisfied in the respondent's

contact with target individuals. They were to write a sentence or quote providing the basis upon which they cited each specific role behavior need.

Frequencies of the use of the five techniques of SSR were then asked. Definitions of classification range and of techniques themselves were available for reference to the interviewers in the Interviewing Aids.

Role behavior needs associated with each of the techniques of SSR (in the context of both elements of Facet C) were probed for in the same manner described above. In the direct contact section, role behavior needs were designated both before and after the questions or techniques of SSR.

There are two reasons for this:

1. The techniques of SSR were conceived as having the potential for fulfilling role behavior needs. There were two options available for measuring this. We could ask about the role behavior needs satisfied in the context of techniques of SSR. Alternatively, we could probe for role behavior needs satisfied as a result of contact in general. Because of the centrality of this issue, we chose to include both options in the interview schedule. It can be argued that the mapping sentence is imprecise for not choosing one specific approach. If anything, we feel that the mapping sentence technique is not at fault, but our own conceptual imprecision. However, it is also possible to claim that by using both approaches we may be able to shed additional light upon the most appropriate conceptual composition of SSR
2. Probing for the role behavior needs associated with each technique of SSR can be extremely time consuming as compared to probing for only one set of role behavior needs at the outset. The pretest indicated that this was the case. However, the ability to collect sufficient data for the three target individuals, regarding role behavior

needs associated with each technique of SSR, was in question. Thus it was decided to leave both options in the interview schedule. If too little data was gathered from the second option (RBN associated with each technique of SSR), it would be possible to delete that information and yet still have the data from the section on role behavior needs alone. This could be done by falling back on the first option (or set of RBN), thus retaining Facet E and keeping the integrity of the approach of the study as outlined in the mapping sentence

Section II of the interview schedule deals with the indirect contacts the respondent uses through his (Facets A and B) network linkages or input sources (Facet C) by employing the techniques of SSR (Facet D) for fulfilling role behavior needs (Facet E) of the target individual (Facet F) from a community agency (Facet G) through "an indirect contact person" (Facet H) for securing appropriate referrals (Facet I). "Indirect contact" relates to the contact the respondent or drug program staff has with what the study calls "an indirect contact person." He is a member of the network and may be used immediately or eventually to influence the behavior of some target individual (also a member of the network). It is called indirect contact because the staff member of the drug program does not necessarily have contact with a target individual to influence his behavior, but instead uses another member of the network (the indirect contact person) to influence the target individual. It also relates to the use of old or new input sources for securing appropriate referrals of clients for the drug rehabilitation program. The respondent may have to meet the role behavior needs of the "indirect contact person" in order to influence him to meet the role behavior needs of the target individual. The role behavior needs of the target individual will have to be met by the "indirect contact person" in order for the former to generate referrals (in terms of Facet I) for the drug rehabilitation program.

We had two options for measuring the indirect contacts of SSR leading to Facet I: A. We could measure the SSR of the respondent with the "indirect contact person" who then influences the target individual to help secure referrals to the program. Emphasis is on meeting the needs of the indirect contact person who appears as Facet F. B. We could measure if the target individual's needs are met by the indirect contact person. Here emphasis is on the target individual and his needs. He is Facet F and the indirect contact person is now Facet H. The respondent still uses SSR to meet the indirect contact person's needs, but our concern is actually with indirect meeting of the target individual's needs. Option B is better for using a larger range of facets, from the mapping sentence. Option A deals with the doing or utilization (Facets A and B) of SSR (Facets C, D, and E) with an indirect contact person.

Facet H "comes into life" when the indirect contact in reference to Facet C is needed. Thus the referent in Facet H is a means of utilizing SSR with the referent in Facet F. As previously stated, it is hypothesized that utilizing SSR with the target individual (referent in Facet F) through the "indirect contact person" (referent in Facet G) of a community agency (Facet H) is one means of securing appropriate referrals (Facet I).

It is to be noted that the target individual in the second section is to remain the same as in the direct contact section. Again, this could provide a unified range of analysis in the context of the entire mapping sentence for direct and indirect contacts as relating to Facet C. The first, second, and third agencies have corresponding results in both the direct and indirect contact section.

The pre-test demonstrated that in some instances respondents could actually utilize SSR with the target individual through the indirect contact person. In other cases, respondents could identify an "indirect contact

person" they could use who would influence the target individual to refer clients, yet the respondents had not actually used that "indirect contact person." We decided to record those potential network linkages as well. In such a case the element of "knowledge" in Facet A would enter as a unit of analysis.

In this section questions were asked regarding the use of indirect contacts by the respondent utilizing network linkages (Facet C, areas of SSR) for fulfilling role behavior needs and by using techniques of SSR (Facet E). Although we might show the extent to which the two are related, yet we could shed no light on the relationship between the two. The pre-test also showed that the indirect contact nature of this section would not generate the highly specific data of the role behavior needs associated with each technique of SSR.

Questions could be and were asked regarding the role behavior needs the "indirect contact person" satisfies for the target individual. Meeting the role behavior needs of the target individual would result from the respondent's attempts to influence the target individual. Some knowledge (Facet A) would also be necessary on the part of the respondent as to what role behavior needs of the target individual the "indirect contact person" was potentially able to meet or was actually meeting in order to secure appropriate referrals. Questions regarding techniques of SSR focused on the techniques used by the respondent with the "indirect contact person," thus enhancing the indirect contact person's contact with the target individual while also meeting the latter's role behavior needs. The indirect contact person could potentially or actually utilize his influence with the target individual to refer appropriate clients to the drug rehabilitation program. In order to keep the utilization of techniques of SSR in the indirect contact section within the

range of the mapping sentence, the technique questions had to be directed at the "indirect contact person," yet be in the context of influencing the referral behavior of the target individual. The pre-test showed that respondents had little or no knowledge as to which techniques an "indirect contact person" employed nor the extent of their use with a target individual.

In summary, the mapping sentence provided considerable structure and a unified range for the questions and "probes" included in the questionnaire. At times, operational realities and imprecise conceptualization forced us into decisions not entirely guided by the mapping sentence. Yet, the interview schedule does reflect the structure of the mapping sentence and enabled us to collect considerable amounts of usable data for the analysis of the hypotheses.

Section II - Implementing the Interview Schedule

A. Training and Debriefing - As described in the previous section, considerable interviewing skill was necessary to administer the relatively "open" interview schedule. Emphasis was placed upon ensuring a high degree of interview skill. Interviewer training and other means were employed in order to achieve a high level of uniformity or agreement in scoring role behavior needs and assigning frequencies to techniques of SSR.

Four interviewers and one "reserve" interviewer were selected. All were considered to have a high degree of interviewing skill as well as flexibility in their interviewing approach. Besides the "reserve" interviewer who subsequently carried out only two interviews, the four interviewers were blinded as to the specific hypotheses of the study. The services of a professional trainer were enlisted to secure as high a degree of interviewing proficiency as possible. The packet of interviewing aids (Appendix 2) was compiled to secure for the interviewers a concrete resource in the field, a resource that would supplement the training they received. The training

attempted to familiarize the interviewers with the interview schedule and the concepts of the mapping sentence. After initial introduction to the study's instrument, each interviewer carried out a number of supervised and unsupervised interviews with drug rehabilitation staff members of a Richmond Methadone program. Group and individual sessions were used as a means to discuss the practice interviews and resolve any difficulties. This "full-dress" pre-testing and review led to constructive comments which were incorporated into the final version of the interview schedule. Some of the improvements to the interview schedule, coming from the comments of the interviewers, included the substance of the introduction and discussion in Sections I and II and certain stylistic changes in the wording of questions and probes.

We accompanied the interviewers into the field during the week most of the interviews were carried out. We were also available to assist the interviewers with any difficulties relating to administering the interview schedule. In addition we met with each interviewer as soon as possible after each interview was completed. The purpose of the meeting was to "debrief" the interviewer. This debriefing process enabled us to deliver additional on-the-spot training. Also, we were able to "catch" and correct interviewer misconceptions at the very early stages of the actual interviewing. The debriefing also provided us with a check as to the accuracy of the interviewers since every classification and frequency was checked for consistency with the definitions provided the interviewers and the statements they wrote in as the basis for their classification.

B. Population Interviewed - The five programs included in the study have already been described. Criteria for including a specific staff member in the study was that he:

1. Had worked in the program for at least one month

2. Was employed in a role that included direct treatment of clients. Program directors were excluded from this criteria and were interviewed
3. Received payment for services
4. Was employed in a role that allowed for outside contacts with the staff of other community agencies

The director of each of the programs verbally related to us how the above criteria applied to each of his staff members. In addition, a programmatic or demographic questionnaire (Appendix 3) was administered to each director, thus providing us with a means of validating the program director's verbal designation as to who met the criteria and would therefore be interviewed. Of the sixty-two interviews actually carried out, three staff members were found not to meet the criteria established and were deleted from the analysis of the data. In all three instances, the respondents were found not to meet criterion no. 4.

Most interviews were carried out in a highly intensive one-week period. Each program was revisited by one or two interviewers in order to include in the study those respondents who had been ill, on vacation, or unavailable to us during the initial week of interviewing. Three respondents who were not interviewed were still not available for interviewing during this second visit and were deleted from the study. (One was on a lengthy vacation, another was unavailable to us, and another experienced a death in the family.) In all, 95% of those staff members meeting the criteria for inclusion in the study were interviewed.

C. Determining Target Agencies and Individuals - As mentioned before, the interviewers asked respondents to relate their answers to three predetermined agencies. These three agencies provided the highest number of referrals during the three months preceding the interviewing (i.e., October, November, and December). We chose these agencies because we felt that a greater frequency

or larger quantity of contact might be taking place between a drug rehabilitation program and that agency. This higher amount of contact could provide a better setting within which to test our hypotheses regarding SSR. Not only was sheer contact a pre-condition for SSR with a target individual, but it was also seen as a component of SSR.

In retrospect, it may have been unwise to use a three-month period (October, November, and December) preceding the interviewing (which took place in January) as the criterion for choosing the three target agencies. The dependent variable data relates to July, August, September, and October of 1973. Data on the dependent variable relates then to those clients referred during the months stated above and followed up for an additional three-month period. The reasons we chose the latter three-month period for determining the three target agencies were:

1. We wanted the data on the three target agencies to come from a time period close to the actual interviewing so that client data was as up to date as possible
2. It turned out that information from Renaissance was unavailable for the earlier period. Data could uniformly be collected from all the programs for the three-month period immediately preceding the interviewing. This option was chosen

Possibly the more consistent approach would have been to use the same time period to gather the data for both the dependent and independent variables. The only major problem this decision posed was that changes in referral patterns led in some cases to fewer referrals associated with the target agencies. This contrasted with more referrals from some agencies having a higher frequency of referrals from the earlier period. This, therefore, led to some target agencies having a lower number of referrals during the earlier period, while they had a larger number during the later period, and vice versa.

The target individual was the same person in both the direct and indirect contact sections of the interview schedule. We hoped the larger amount of contact would supply the interviewer with a better opportunity for "ferreting out" the SSR of the respondent with that target individual. The same approach was used for agencies one, two, and three. If the respondent had no information regarding a target individual for either of the three designated agencies, the interviewer collected the data regarding another non-designated community agency. This was done as a last priority in the interview, only when time was available. It is to be noted that the staff and the interviewers were "blinded" as to the hierarchy of agencies one, two, and three in terms of the number of referrals. The data relating to the number of referrals was collected by an individual who was unaware of the interviewing procedures and conceptual framework. This was done in order to prevent any bias in the interviewing or debriefing which would relate the independent variable favorably with the dependent variables.

Role behavior needs were scored if the interviewer identified any one role behavior need as being satisfied in the contact between the respondent and the target individual. The interviewer justified his circling a specific role behavior need by a statement providing the basis for this classification. Each classification was checked during the debriefing by an individual thoroughly familiar with the study. During the debriefing sessions very few differences of opinion occurred as to classification of role behavior needs by the interviewers. In a number of instances the written justification for the classification was insufficient and the interviewer verbally provided some additional data for justifying the classification. In the handful of differences of opinion between interviewers and debriefers, a third judge was brought in to make the final

classification. The same procedure was used for checking the frequency of each technique of SSR.

A codebook was compiled for transferring the data onto computer cards. Nineteen computer cards per case were used for recording the raw data.

The coding of the data proved to be relatively accurate. A sample of eight interviews was chosen and double-checked by the coder and another person for accuracy. A total of nine coding errors were found for the eight interviews checked. Less than 1.1 errors were found for each sample interview which consisted of 850 coding units. An edit program was run on the data using SPSS (Statistical Package for the Social Sciences), Version V. All additional coding errors identified through this procedure were corrected.

Section III - Criteria for Programs Selected for Inclusion in the Study

As the final construction of the mapping sentence and its subsequent operationalization in the form of an interview schedule were being completed, the programs to be studied had to be chosen.

Since the study was sanctioned and supported by the Commonwealth of Virginia's Bureau of Drug Rehabilitation of the Department of Mental Health and Mental Retardation and the Division of Justice and Crime Prevention, only drug-related programs in Virginia could be considered. Most of the thirty-seven drug programs in the state were immediately removed from consideration by using the following criteria:

- A. Direct services had to be provided
- B. Each program had to be a comprehensive program and have two treatment modalities or more
- C. Continuity of care had to be provided
- D. All had to be established programs and have been fully

functioning for at least six months

- E. No one program could be twice as large as any of the other programs included in the study, based on the criterion of number of staff members and clients
- F. All programs had to have some form of recording data so that clients meeting the criteria of this study could be identified. Either the client's record or an appropriate staff member had to be available for securing follow-up data on clients included in the study
- G. All of the programs included had to be in a relatively stable state at the time the client and staff data was collected, as attested to by the program's directors
- H. All programs had to be agreeable to participating in the study.

The above criteria eliminated all but five programs from the original thirty-seven drug programs in Virginia. The five programs that met the criteria at the time we began collecting data were:

1. Prelude in Arlington, Virginia
2. Crossroads in Fairfax, Virginia
3. Alexandria Drug Abuse Control Program in Alexandria, Virginia
4. RADACC (Roanoke Area Drug Abuse Control Council) in Roanoke, Virginia
5. Renaissance in Norfolk, Virginia

It should be noted that the information used to determine if the programs met the above criteria was provided by the five program directors. The information was also verified by the directors of the three state agencies charged directly with funding and monitoring drug

rehabilitation programs throughout Virginia. They were the directors of the Bureau of Drug Rehabilitation of the Department of Mental Health and Mental Retardation, Bureau of Methadone Studies of the Department of Health, and the Drug Abuse Coordinator of the Division of Justice and Crime Prevention. We further verified this information through an initial field visit to all five programs prior to collecting data. At the time the study administered the interview schedule to the programs' staff, each of the program directors was given a demographic or programmatic data questionnaire (Appendix 3). The purpose of the questionnaire was to document whether or not the programs met the criteria outlined above. Also, the additional demographic and programmatic data was needed to provide a framework for describing the major similarities and differences among the programs.

Description of Programs

A concise description of the basic similarities and differences among drug programs studied is presented in this section. As noted above, thirty-two drug-related programs were rejected for participation in the study. The five programs that remained and that were included in the study, we feel, are adequately homogeneous according to the major criteria specified. On other issues there is more heterogeneity among the programs. The lack of more homogeneity among the five programs may be a limitation of this study. We feel, though, that in working with the limited number of programs in the Commonwealth of Virginia, we chose an acceptable number of programs that were sufficiently homogeneous to compare on most of the issues researched here.

The major criteria for comparing the five programs are presented below. Information is based on the demographic or program-

matic data questionnaire as well as upon the initial field interview for each of the programs.

Continuity of Treatment for Clients

- A. Direct Services to Clients. These services provided continuity of care for clients. Regarding time needed for rehabilitation, most treatment programs were generally open-ended and did not have a set time schedule. The therapeutic communities tended to define their length of treatment as one year
- B. Years of Program's Existence. Although not all the components of a program were established at the same time the program itself commenced its activities, the five drug programs studied were among the oldest in Virginia. Prelude, Crossroads, and Alexandria opened in 1970. Renaissance began in 1971. RADACC also began in 1971, but only became a multimodality and comprehensive program in March, 1973
- C. Number of Clients Served. Four of the programs reported serving relatively the same number of clients at the time the questionnaire was administered. The range of clients served by the four programs was from 121-133. Prelude reported serving seventy-one clients. This lower figure is probably due, at least in part, to Prelude's case definition, which was the most stringent among the five programs. (This point will be further explained in Section IV of this chapter.) For Prelude those clients who had not visited the program at least three times were not considered enrolled in the program. A more stringent case definition could lead to se-

curing fewer referrals, but on the other hand higher maintenance of clients once they are participating in the program

- D. Staff Size. Four of the program's staffs, including administrative, treatment, and part-time personnel, ranged from 14 to 20 people. RADACC employed thirty-one staff members. Very few part-time personnel were employed. Generally, those employed part-time were nurses
- E. Percentage of Paraprofessional Staff. All the programs employed paraprofessionals, ranging from 23 to 55 per cent of the staff members. We defined paraprofessionals as those who were employed in a treatment capacity but who had no college degree associated with a helping profession or the social sciences. Some programs employed them only in the therapeutic community, others in all phases of the program. Many of the paraprofessionals in drug programs were ex-drug addicts. The philosophy of all the programs called for utilizing the ex-drug addict in the "professional" or "line" capacity role in one or more parts of the program. A small number of staff members who were neither professionals nor ex-addicts were found at random in the programs
- F. Budget Size. The current budgets of the five programs vary in proportions of federal, state, and local funds. Prelude's, Crossroads' and Alexandria's drug rehabilitation program budgets range from \$194,000 to \$229,000. The Renaissance and RADACC budgets are considerably higher, \$505,000 and \$372,000, respectfully. The higher budget size of the latter two programs is also reflected in the

higher number of staff members in the programs and, therefore, the greater number of interviews administered in those programs

G. Program Modalities. Three major categories of program modalities were defined which provided for continuity of treatment. They were:

1. Day and Evening Care
2. Therapeutic Community
3. Methadone

Intake and evaluation, administration, community education, and hotlines were not considered as modalities for the present purpose of comparing continuity of care-providing modalities

Presented below is a table showing Program by Modality:

TABLE I
TREATMENT MODALITY OFFERED BY PROGRAMS

<u>Program</u>	<u>Day & Evening Care</u>	<u>Therapeutic Community</u>	<u>Methadone</u>	<u>Total</u>
<u>Prelude</u>	x	x	-	2
<u>Crossroads</u>	x	x	-	2
<u>Alexandria</u>	x	-	x	2
<u>RADACC</u>	x	x	x	3
<u>Renaissance</u>	x	-	x	2
<u>Total</u>	5	3	3	11

It can be seen from Table I that all the programs have at least two treatment modalities. Four have two and RADACC has three. All the programs have a day and evening component, while three programs have a therapeutic community and three

have methadone.

H. Catchment Area Description and Size. The five programs are operating in urban areas. Three, Arlington County, Fairfax County, and Alexandria, are thickly populated city suburbs of Washington, D.C. Roanoke is a city in a predominantly rural setting and Norfolk is a city surrounded by other Tidewater cities. All five programs are in cities or urban areas, although some are more urban than others. Two of the programs, Alexandria and Renaissance, have other drug rehabilitation programs (under other auspices) within the catchment area they serve. Each of the programs accepts clients from areas adjacent to the immediate catchment area. Alexandria serves an immediate population of 110,000. Prelude serves 175,000, RADACC serves 242,000, Renaissance serves 300,000, and Crossroads serves 450,000

I. Client Demographic Characteristics

1. Sex. All programs treated more males than females. The range was from 60 to 75 per cent males for the five programs
2. Age. For all programs the primary age range was the 19 to 30 year old group. In no case did this age group account for less than 50 per cent of the clients served. The range for this age group was from 55 per cent to 85 per cent of clients served
3. Race. Four programs estimated the percentage of blacks they serve at 33 per cent or less. Only Renaissance differed from this pattern, with 95 per cent of its clients being black

4. Socio-Economic Level. Prelude, Crossroads, and RADACC served clients who have or whose families have primarily middle and upper incomes. Alexandria and Renaissance were the exact opposite, with their clients coming from primarily poor or lower income families

J. Staff Turnover. Staff turnover for the four programs for which we have data (excluding Renaissance) during the preceding year was about zero. In each of the programs new staff members were added as a result of new monies for additional staff positions. Prelude hired three new staff members, Crossroads one, Alexandria six, and RADACC twenty-eight. The high figure for RADACC results from the large NIMH grant and other monies received, as of March, 1973. Only one of the programs reported any staff vacancies (Renaissance has three positions open). We see here a picture of a non-existent staff turnover and a development of new staff positions at all the programs

In summary, we identified five drug rehabilitation programs in the Commonwealth of Virginia that were sufficiently homogeneous for adequate comparison and that were thus included in this study.

Section IV - The Dependent Variables

The dependent variables included securing appropriate referrals i.e., numbers and maintaining of clients, for a drug rehabilitation program (see Figure II). We have already defined these elements in Chapter II, Section III, Description of Facets and Elements. This section will describe the operational measures developed and show how they were complied.

One approach for measuring numbers of clients was to determine the ratio of the number of "treatment slots" available for clients as compared to the number of clients actually participating in the program. This might be a more meaningful measure of success at securing appropriate numbers of clients than mere numbers of clients alone. It is a measure of program utilization and indicates the program's ability for securing clients from the environment according to the program's capacity, or need for such inputs.

The program utilization approach described above has its limitations when used by itself and this would have been our only alternative. Our purpose here is to develop one or more dependent variables for studying the effects upon clients of SSR between staff. Programs would also have their program utilization capacity problems solved if clients stayed longer. Reliance upon the program utilization approach (potential capacity compared to actual number of clients) would not provide the level of specificity we hoped to achieve for the dependent variable. The program utilization approach alone does not specify what happens to clients. Many clients may be referred and few maintained, or vice versa. From the program utilization approach we could only infer that numbers of referrals or client maintenance is accounting for high or low program utilization. One could not know which is true or to what extent numbers of clients or their maintenance in the program was accounting for the degree of program utilization. Our limited resources forced us to choose between the program utilization or the number of referrals and maintenance approach. The latter approach seemed more specific and more closely related to client outcome than the program utilization approach.

As already mentioned above, having an appropriate number of clients for a drug program entailed securing more, not fewer, clients. None of the programs we studied were so completely utilized that they had a waiting list or refused to accept more client referrals. All programs were interested to a greater or lesser extent in securing additional clients.

All forms of treatment provided by the programs entailed involving the client in the program for a considerable length of time. Generally a twelve-month period of treatment was anticipated.

In keeping with the limitations of our financial resources, we decided to collect "maintenance" data on each client for a period of three months, beginning once the client entered the program. In order to collect the data, each client was followed up over a three-month period. The preceding four-month period was determined as the designated admissions period for the study. Referrals to any of the five programs during the four months of admissions studied were measured for numbers of client referrals and their maintenance in the programs. The methodological attributes of a four-month cohort study, we felt, were preferable to a sample procedure over a longer period of time. For the five programs, a cohort study more accurate since an entire population is studied rather than a random sample. The cohort is viewed as being generalizable. A four-month period was chosen because an initial field survey of programs showed that a four-month period would generate enough data on a sufficient number of clients for the study. Only including the months of July, August, and September would place a very strong emphasis on summer months, misrepresenting the relative proportion of referrals from schools to drug rehabilitation programs.

Clients entering the program during the months June, July, August, and September of 1973 were included in the study. The three-month follow-up lasted until December, 1973. The data was collected during late December and early January, 1974. The exception to this procedure was the Renaissance Program in Norfolk. A crisis entailing considerable internal turmoil led to the shutdown of referrals during July, August, and September of 1973. As a result, the cohort period for this program was June, October, November, and December. Some clients were followed up for less than three months. Those clients entering the program in late October, November, and December were followed up for two and one months respectively, with "no information" scored for their last months. In general, the dependability of the data decreased from this program regarding the "maintenance" of clients. During the months following the crisis, reporting procedures did not soon stabilize and thus left some question in our minds as to the reliability and consistency of the data. Nevertheless, Renaissance data was included in the analysis.

Any client admitted to one of the programs during the four-month period was included in the study. The operational definition for client admission was the opening of a file for the client at the program. The criteria for client admission varied from program to program. Prelude "admitted" a client after he had visited the program at least three times during a one-month period. Crossroads admitted a client when counselors felt that the person would be able to stick out the program, RADACC admitted clients when they first came in. And, in addition, information for the file might in some cases come from a telephone call with the client or parent. Thus, definition of client admission varied considerably from program to program. Programs with more stringent admission criteria might record fewer

admissions to the program, but might succeed more in maintaining those clients since many "inappropriate" or "unmotivated" clients would be weeded out without ever having been recorded. It is interesting to note, though, that the program with the highest number of referrals had the highest maintenance rate for clients (with the exception of a program set up entirely to dispense Methadone).

The client data comes, for the most part, from the agency files. In instances when specific items were not recorded in the files, forms requesting the specific information were given to the client's counselor.

Names of clients were not requested by us, nor received, for reasons of client confidentiality. Instead, we gave each client a sequential identification number. The lists identifying the names and identification numbers of the clients included in the study were left with each program.

Among the data collected for each client was his referral source. The component in which the client spent most of the three-month period was also recorded. The type of court coercion, if any, was also recorded for each client. The latter item will be explained at some length in Chapter IV, Section I.

Each client included in the study was given a maintenance score reflecting the extent to which he was maintained in the program for the three-month period following his admission. The maintenance score was composed of his scores on three variables: A. Length of Stay, B. Average Level of Participation, and C. Direction of Stay. These variables will be described below, as well as the basis we found for combining them into one maintenance score.

In the case of a missing value for any of the three monthly

unit scores used for constructing each of the above mentioned variables, data from the two remaining months was used for determining the client's score. If only one month's data was available, that score was used alone. Seven clients were dropped from the study because no data was available for any of the three months.

A. Length of Stay. The range for length of stay was from zero to three months. Zero length of stay was given to a client with a "terminated" status for all three months. The client would have initially been admitted but did not subsequently participate in the program. His score would then be zero. A client admitted to a program yet receiving a zero was included in the cohort. If a client attended the program for his first month of stay, but did not subsequently do so during his second and third month, his score would then be one. If he attended the program during the second month, his score was two. And if, in addition, he attended during the third month, his score was three.

B. Average Level of Participation. Four criteria were determined for measuring the client's participation in a program. They were: "terminated", "minimal", "irregular", and "good." The following items were used for determining a client's monthly level of participation:

1. Client has left from the drug rehabilitation program
2. Client has minimal contact with at least one and up to half of his monthly scheduled appointments kept
3. Client has irregular participation with at least half of his appointments kept
4. Client has kept almost all appointments and could acceptably account for those missed

5. No information available

"Terminated" referred to a client who either left the program during any one of the three months, did not attend at all during that month, or whose case was closed by his counselor for that month. The client was scored as "terminated" if for that thirty-day period he was considered by his counselor to have left the program. Otherwise, the client was scored as having "minimal" participation, but if he did not subsequently return, he was scored as "terminated" during the next month. This method was used as standardized measure to minimize the effects of files which improperly recorded termination and then later showed that the client was still enrolled.

A score was given for each of the three months 0= "terminated," 1= "minimal," 2= "irregular," and 3= "good." Each client's score for the three months was averaged to give each a single rating of his average level of participation.

C. Direction of Stay. This measure was based on the client's level of participation for each of the three months. We used his numerical score for each month's level of participation (as explained immediately above). Direction of stay shows "deterioration," "stability," or "improvement" in a client's level of participation over a three-month period. A client, for example, could have missed most of his counseling appointments during the first month (level of participation = 2), but kept all of his appointments for the next two months (level of participation for each month = 4). In this instance, the client would have received an "improved" direction score for the second month and "stable" for the third. His pattern of direction of stay would be represented as number 8 below.

In all, nine basic patterns of "direction of stay" were

identified and later collapsed into four direction categories from low to high (1-4). The nine basic patterns of direction of stay are presented below. M stands for level of participation for one month.

- | | |
|---------------------|---------------------|
| 1. $M1 = M2 = M3$ — | 6. $M1 = M2 < M3$ — |
| 2. $M1 > M2 > M3$ \ | 7. $M1 > M2 < M3$ ∨ |
| 3. $M1 > M2 = M3$ \ | 8. $M1 < M2 = M3$ / |
| 4. $M1 = M2 > M3$ / | 9. $M1 < M2 < M3$ / |
| 5. $M1 < M2 > M3$ ^ | |

The two patterns in numbers 5 and 7 were unclear in their direction. Because of their ambiguity, those clients with those patterns were assigned a missing observation for this variable. There were six clients with those two patterns. Their maintenance scores were compiled from their scores for variables A and B. Four other cases were dropped because they had missing information which made a direction category impossible. Pattern number 1 was subdivided into two values for a client's direction of stay score. Direction pattern $M1 = M2 = M3$ was scored as one, when each month equalled one or two. When each month equalled three or four, the value was four; this was the highest direction.

Patterns 2, 3, and 4 were considered to be medium-low in their pattern of program participation direction and were given a value of two. At least the client had a pattern of an initially higher level of participation which turned downward. Patterns 6, 8, and 9 were determined to be medium-high in their pattern of direction and were given a value of three. In each of these three patterns the client initially participated in the program at a lower level and subsequently improved in varying degrees.

TABLE 2
 CROSS-TABULATION OF AVERAGE LEVEL OF
 PARTICIPATION BY LENGTH OF STAY

		LENGTH OF STAY				
		0.	1.	2.	3.	TOTAL
AVERAGE LEVEL OF PARTICIPATION						
0.		100.0% (69)	0.0% (0)	0.0% (0)	0.0% (0)	100% (69)
1.		0.0% (0)	76.7% (66)	18.6% (16)	4.7% (4)	100% (86)
2.		0.0% (0)	7.3% (3)	41.5% (17)	51.2% (21)	100% (41)
3.		0.0% (0)	4.7% (4)	7.1% (6)	88.2% (75)	100% (85)
COLUMN TOTAL		69 24.6	73 26.0	39 13.9	100 35.6	281 100.0

KENDALL'S TAU B = 0.86861 SIGNIFICANCE = .00

TABLE 3
 CROSS-TABULATION OF LENGTH OF
 STAY BY DIRECTION OF STAY

		LENGTH OF STAY				
		0.	1.	2.	3.	TOTAL
DIRECTION OF STAY						
1.	94.3% (66)	0.0% (0)	0.0% (0)	5.7% (4)	100% (70)	
2.	0.0% (0)	59.2% (71)	30.8% (37)	10.0% (12)	100% (120)	
3.	23.1% (3)	0.0% (0)	0.0% (0)	76.9% (10)	100% (13)	
4.	0.0% (0)	0.0% (0)	0.0% (0)	100.0% (68)	100% (68)	
COLUMN	69	71	37	94	271	
TOTAL	25.5	26.2	13.7	34.7	100.0	

KENDALL'S TAU = 0.81370 SIGNIFICANCE = .00
 NUMBER OF MISSING OBSERVATIONS = 10

TABLE 4
 AVERAGE LEVEL OF PARTICIPATION
 BY DIRECTION OF STAY

	1.	2.	3.	4.	TOTAL
AVERAGE LEVEL OF PARTICIPATION	95.7% (66)	0.0% (0)	4.3% (3)	0.0% (0)	100% (69)
1.	4.7% (4)	95.3% (82)	0.0% (0)	0.0% (0)	100% (86)
2.	0.0% (0)	62.9% (22)	14.3% (5)	22.9% (8)	100% (35)
3.	0.0% (0)	19.8% (16)	6.2% (5)	74.1% (60)	100% (81)
COLUMN TOTAL	70 25.8	120 44.3	13 4.8	68 25.1	271 100.0

KENDALL'S TAU B = 0.82684 SIGNIFICANCE = .00
 NUMBER OF MISSING OBSERVATIONS = 10

Tables 2, 3, and 4 represent cross-tabulations of the three variables described above. Each table represents a combination cross-tabulating two out of the three variables. Table 2 cross-tabulates length of stay by average level of participation. Table 3 represents average level of participation by direction of stay. Table 4 is length of stay by direction of stay.

As can be seen from the tables, each of the three measures is highly associated with the other two. The levels of significance are at the .00 level of Kendall's Tau B.

The correlation coefficients of the three variables are shown in Table 5.

TABLE 5
CORRELATION COEFFICIENTS FOR AVERAGE LEVEL OF
PARTICIPATION, DIRECTION OF STAY AND LENGTH OF STAY

	AVLEVEL	DIRECT	LENGTH
AVLEVEL	1.00000	0.84936	0.91479
DIRECT	0.84936	1.00000	0.83564
LENGTH	0.91479	0.83564	1.00000

Table 5 shows very high correlation coefficients for the three variables. The lowest correlation is between length of stay and direction of stay at .84. Here there is further justification for combining the three variables into one maintenance score for each client.

It is worthwhile noting that the three measures count "termination" as the lowest category for all three variables. This procedure has generated a considerable number of ties. Still, upon inspection of Tables 2, 3, and 4, as well as of the very high correlation coefficients, it can be seen that the lower category accounts only in

part for the high correlation and level of association. The high level of association continues into all the other categories. It is striking to note that very few clients with one high level vary from the trend of high length of stay, along with high average level of participation and direction of stay. Seemingly, clients who are "bound in" to the program (high average level of participation) also stay longer (high length of stay) in the program, at least for the three-month period.

A factor analysis was run to cross validate the above findings. The orthogonal method of factor analysis was used.

Table 6 shows a factor matrix for the three variables—average level of participation, direction of stay, and length of stay.

TABLE 6
FACTOR MATRIX FOR AVERAGE LEVEL OF
PARTICIPATION, DIRECTION OF STAY AND LENGTH OF STAY

	FACTOR 1
AVLEVEL	-0.96352
DIRECT	-0.88134
LENGTH	-0.94884

As can be seen from Table 6, the three variables load very highly on one factor. The range is from -.88 to .96. This is further justification for assigning a unified "maintenance" score, compiled from the three variables stated above, for each client of the cohort.

The factor score for each of the three variables was computed by:

$$\text{FACTOR SCORE} = F_i$$

$$F_i = \text{ith Factor Weight}$$

$i = \text{ith Standard Score}$
 $\text{of variable } X_i$

$$= \frac{(X_i - \bar{X}_i)}{S_i}$$

S_i

Each client's factor weights for the three variables were then added to comprise a maintenance score. This Factor Score and maintenance of clients is referred to as "Depfact."

It can be seen by referring to Table 6 that the sign for each of the variables is negative. The reason is that the variables included in the factor analysis were measuring "shortness of stay and direction of stay." A highly inverse association was found by cross-tabulating each of the three variables with the maintenance score. Thus it was necessary to reverse the sign for each client's maintenance score. This was done by multiplying the maintenance score of each client by -1.

Since the three variables mentioned above are so highly associated with each other and load high on one factor, a client's maintenance score (Depfact) was used in analyzing the maintenance (Facet I) of clients to the independent variables rather than individually to the three maintenance variables.

Section V - The Independent Variables

Factor analysis was also used in attempting to arrive at a single SSR factor. We had two reasons for doing so:

- a. Some clarity could be gained as to the structure of the conceptual framework embodied in the mapping sentence. Factor analysis would show if the components of the conceptual framework comprise one or several factors
- b. Arriving at a single factor would enable us to represent

SSR in a concise way for analysis of the hypothesis.

Instead of cross-tabulating each SSR variable with each of the dependent variables, one factor comprising SSR could be used

In order to organize the data for factor analysis, a set of seven variables was compiled comprising the SSR data for each of the three target agencies designed for the respondents from each program included in the study. As previously explained in Section I of this chapter, the bulk of the data related to a target individual from that agency with whom the respondent had the greatest frequency of contact. Thus, the seven variables were composed for each respondent, vis a vis the first, second, and third agency designated by the study (i.e., 59 respondents 3 agencies = 177 sets of data).

The seven variables were:

1. Dirrbn - role behavior needs in the direct contact section
[Note: The seven variables were given abbreviated names that were suitable for computer use.]
2. Dirtech - Techniques of SSR in the direct contact section
3. DirrbnI - Role behavior needs associated with techniques of SSR in the direct contact section
4. Dircon - Frequency of contact the respondent has with the entire agency
5. Dirconx - Quality of contact the respondent has with the target individual (by definition the most frequently contacted individual) of target agency designated by the study in the direct contact section
6. Indrbn - Role behavior needs in the indirect contact section
7. Indtech - techniques of SSR in the indirect contact section

Each of the above variables was computed in the following manner:

1. Dirrbn - Each of the eight role behavior needs was recorded as being fulfilled or not fulfilled by the respondent in his contact with the target individual. The role behavior needs recorded for each target individual were added, giving the respondent a Dirrbn score for that target individual. A range of zero to eight was possible for this variable
2. Dirtech - Each technique of SSR was included in this variable. A frequency of 1-4 was assigned for each technique, ranging from low to high. When combined, a range of 5-20 was possible for this variable
3. Dirrbn I - Role behavior needs, identical to those used in Dirrbn, were used in association with each technique of SSR. The five sets of role behavior needs provided a range of 0-4 for each respondent in regard to his contact with the target individual.
4. Dircon - A sum total of the respondent's frequency of contact was computed for the same target agency for which data was secured for the respondent's target individual. The respondent was asked for the name of any individual staff member he could name from the target agency. He was then asked to assign a frequency for his contact with each individual he named. In order to reflect the relative frequency of contact, the following values were assigned for each frequency. We based the numerical value on a standard unit of the number

of working days in one month. Daily contact was assigned a value of 21; twice a week was assigned 8; once a week, 4; once in two weeks, 2; and monthly, 1. Contact less often than once a month was not computed in the variables

5. Dirconx - By definition, the target individual from each target agency was that individual with the highest frequency of contact. Whether or not the respondent had the same frequency of contact with two or more individuals was not relevant for the computation of this variable. The maximum frequency of contact with any individual from the target agency was recorded as the frequency for this variable. The potential range for this variable was from 0-21
6. Indrbn - This variable was computed in precisely the same manner as Dirrbn. The range, also, was identical
7. Indtech - This variable was computed in precisely the same manner as Dirtech. The range, also, was identical

A factor analysis of the 177 cases, comprising seven variables was run. The same orthogonal procedure was used as for maintenance (one of the two dependent variables). Table 7 depicts the mean and standard deviation for the seven independent variables described above.

Table 7 is presented in order to show the reader the mean and standard deviation for each of the variables. Table 8 represents the correlation coefficients for the seven independent variables.

Table 8 shows the correlation coefficients for all 177 cases each with seven variables. These patterns emerge from the data. 1. Dirrbn, DirrbnI, Dirtech, and Dirconx are generally highly

TABLE 7
MEAN AND STANDARD DEVIATION FOR
SEVEN INDEPENDENT VARIABLES

Variable	MEAN	STANDARD DEV.	CASES
Dirrbn	2.1469	2.0507	177
DirrbnI	4.4859	5.6479	177
Dirtech	7.8701	6.7074	177
Dircon	7.0508	12.8573	177
Dirconx	3.1243	2.5014	177
Indrbn	1.9943	11.6397	177
Indtech	3.6045	12.3634	177

correlated with each other; 2. Indrbn and Indtech are very highly correlated with each other while having a slight inverse correlation with all the other variables; 3. Dircon had a low correlation with four variables, Dirrbn, Dirtech, DirrbnI, and Dirconx, while having a small inverse correlation with Indrbn and Indtech.

TABLE 8
CORRELATION COEFFICIENT MATRIX FOR SEVEN
INDEPENDENT VARIABLES

	<u>DIRRBN</u>	<u>DIRRBN I</u>	<u>DIRTECH</u>	<u>DIRCON</u>	<u>DIRCONX</u>	<u>INDRBN</u>	<u>INDTECH</u>
DIRRBN	1.00000	0.65262	0.70114	0.38307	0.62222	-0.11589	-0.05170
DIRRBN I	0.65262	1.00000	0.70421	0.17070	0.42281	-0.13661	-0.6359
DIRTECH	0.70114	0.70421	1.00000	0.25545	0.62848	-0.13661	-0.5359
DIRCON	0.38307	0.17070	0.25545	1.00000	0.48987	-0.06587	-0.05506
DIRCONX	0.62222	0.42281	0.62848	0.48987	1.00000	-0.14419	-0.08310
INDRBN	-0.15589	-0.07792	-0.13661	-0.06587	-0.14419	1.00000	0.94255
INDTECH	-0.05170	-0.01790	-0.05359	-0.5506	-0.08310	-0.94255	1.00000

Table 9, representing the Varimax Rotation of the seven independent variables, further substantiates the above interpretation.

TABLE 9
VARIMAX ROTATED FACTOR MATRIX FOR
SEVEN INDEPENDENT VARIABLES

	FACTOR 1	FACTOR 2
DIRRBN	0.86284	-0.03346
DIRRBN1	0.71011	-0.00254
DIRTECH	0.85454	-0.04346
DIRCON	0.40630	-0.04370
DIRCONX	0.73060	-0.07694
INDRBN	-0.09974	0.96685
INDTECH	-0.01809	0.97215

Table 9 shows that Dirrbn, Dirtech, Dirrbn, and Dirconx load highly on Factor 1; Indrbn and Indtech load very highly on Factor 2; and Dircon loads relatively low on Factor 1. Dircon is of a different type than the other six variables. That is, Dircon measures a different unit, as noted in Section I of this chapter, than the other six variables. Dircon measures the sum of the frequency of contact with the entire staff of a target agency, while the other six variables essentially measure frequency and various qualities of contact directed at one target individual. As previously noted, frequency of contact with a target individual (Dirconx) is considered to be a component of quality. The factor analysis shows that Dirconx is in fact measuring the same factor or quality of contact as Dirrbn, Dirtech, Dirrbn1. Since Dircon measures a different unit than the other variables (and loads relatively low compared to the other four variables) on Factor 1,

it will not be included in Factor 1.

The factor analysis indicates that the six variables comprising SSR, as operationalized by the interview schedule, constitute two factors and not one. In the analysis, SSR must be considered as measuring two qualities of contact with staff of other agencies. The two qualities for any respondent can be summed up as his score on Factor 1, comprising four variables, and Factor 2, consisting of two variables. The six variables constitute the study's major independent variables. The four variables in the Direct contact section of the interview schedule are shown in Table 9 as Factor 1 (Indfact I). The two variables in the indirect contact section are shown in Table 8 as Factor 2 (Indfact II).

Factor weights were used for computing a respondent's score on the direct contact variables and the indirect contact variables (Indfact I and Indfact II). The same formula used for arriving at a client's Depfact (maintenance of clients in drug programs, as described in Section IV of this chapter) was employed for computing a respondent's score for the direct and indirect components of SSR--Indfact I and II. Table 10 shows the factor score coefficients used in computing a respondent's Indfact I and II scores. Factor score coefficients shown in parenthesis indicate they were not used in computing that factor.

The same formula and procedure described in Section IV of this Chapter, for maintenance of clients (Depfact), was used in computing the factor comprising Indfact I and II. The factor weights gleaned from the factor analysis were used for this computation.

The methodology used in preparing the data for relating the dependent and independent variables described in this chapter will be presented in introducing the Sections III, IV, and V of the

TABLE 10
 FACTOR SCORE COEFFICIENT
 FOR COMPUTING FACTORS

<u>INFACT I and II SCORES</u>		
	FACTOR 1	FACTOR 2
DIRRBN	0.40623	(0.02510)
DIRRBNL	0.09299	(0.00980)
DIRTECH	0.37950	(0.02670)
DIRCONX	0.17406	(0.00092)
INDRBN	(-0.04331)	0.49439
INDTECH	(0.08320)	0.50905

following chapter.

Description of Respondents

Information for this study was gathered from five drug programs in the Commonwealth of Virginia. The staff of these programs, selected according to a number of criteria outlined below, were asked about their collaboration with staff of other community agencies. In addition, a number of questions in the interview schedule concerned the background of the respondents, such as their length of employment with the drug program, educational level, and professional training. From the responses to those questions, a description of the staff is possible and helps provide a better understanding of the staff members.

Of the fifty-nine staff members who were interviewed, Radacc and Renaissance had fifteen respondents each, Prelude and Crossroads had ten each, and Alexandria had nine.

Figuring the five program staffs together, managers made up 37.2 per cent of the group and counselors 62.7 percent. Managers were defined as program directors, component or administrative directors,

and assistant directors. It is highly possible however that managers, besides administering, are also involved in the treatment of clients. Thus, although their roles in the program do not call exclusively for treating clients, they will counsel. Of the managers, 45.5 percent have had at least some graduate studies, 31.8 percent have had some undergraduate studies up to a bachelor's degree, and 22.7 percent have had no formal training past high school. Thus 77.3 percent of the managers have had at least some college or university training.

Most of the counselors also had some educational training beyond high school. Within this group, those with some formal education past high school made up 78.2 percent of the counselors. For the categories of undergraduate studies and graduate studies, 39 percent of the respondents fell into each of these categories. 22 percent of the respondents had no formal training past high school. It seems reasonable to state therefore that the educational level of the treatment staff is high in the five drug rehabilitation programs from which data is available.

The five program directors were asked about the percentage of paraprofessionals on their staff. Paraprofessionals have been of interest in mental health and particularly in drug rehabilitation where they have been used in various capacities. The paraprofessionals in drug rehabilitation programs are often ex-drug addicts. The use of para or non-professionals has been questioned as to their effectiveness in relation to the professionals. Only one director cited all of the program's staff as professional. Interestingly, the other four directors estimated the percentage of paraprofessionals among their staffs as ranging from 1 to 55 percent. Only two directors in this group defined paraprofessionals. Their definitions used

academic training and professional degrees as necessary for a professional. The number of paraprofessionals as stated by directors is seemingly contradictory to our findings on the education level of the treatment staff. Yet, if they followed their own definitions, then a master's degree would almost be necessary. It is thus that the findings on education level are not contradictory to the response concerning paraprofessionals.

The directors were also asked to specify the professional training of the respondents. Professional training was defined in terms of the studies the respondents had pursued. We broke down this category into two parts--studies that related to the helping professions, such as counseling, social work, or corrections, and studies that did not necessarily relate to the helping professions, such as secretarial training, education, or liberal arts. Of the fifty-nine respondents, 54.2 percent have had some training in a helping profession and 45.8 percent have had training in a non-helping profession.

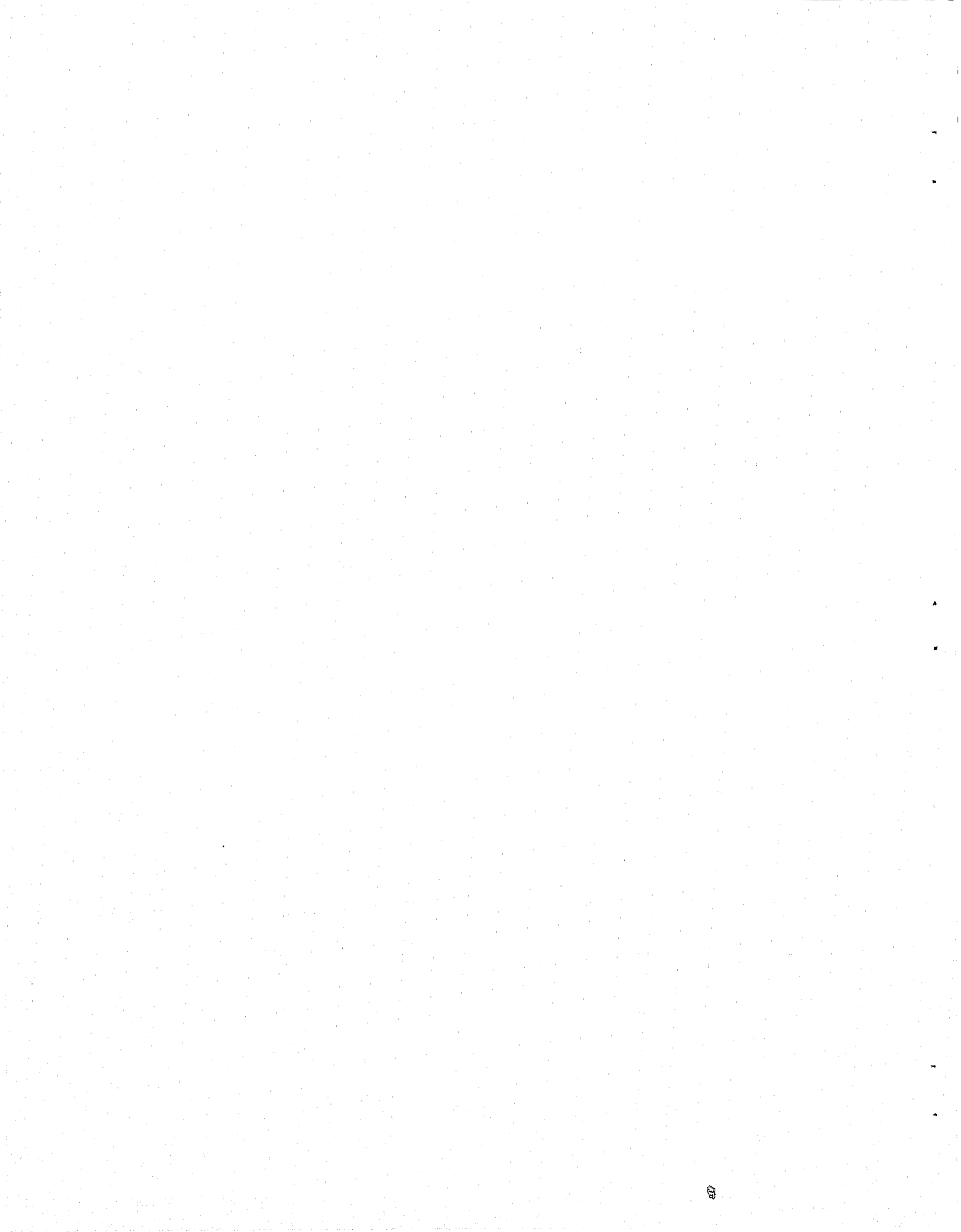
In terms of the type of employees, 89.8 percent of the respondents were fulltime employees, the remainder had some sort of part-time arrangement with the programs, such as working up to twenty hours per week or simply being on call. The majority of the respondents, 55.2 percent, had been employed in the drug program up to one year. Another 22.4 percent had worked in the program between one and two years. This is a very important finding as it indicates that employment of treatment staff in the five drug programs under study was stable. It is important to remember that these programs are often chaotic. Moreover, most of the drug programs in the Commonwealth of Virginia have been in operation for less than two or three years.

Thus the longevity of the programs themselves and their chaotic nature makes employment of one year a substantial time period.

Five components were identified as part of the treatment modalities of the drug programs. These components included: intake, evaluation, and outpatient; therapeutic community; day-evening care and outpatient; methadone and day out-patient and methadone; and overall administration. The day-evening care and outpatient component employed 37.9 percent of the respondents. The overall administration component employed approximately 17.2 percent. Both the therapeutic community and the methadone and day out-patient and methadone component each used 15.5 percent of the respondents. Finally, intake and evaluation used 13.8 percent of the respondents.

Respondents were also asked to determine approximately how much time they spent in an average month on securing referrals to the program from agency and non-agency sources. Generally, both for agency and non-agency sources the respondents replied that between 1 and 25 percent of their time in a one-month period was occupied in securing referrals. The figures were 78 percent and 86.4 percent, respectively, of the respondents' time.

In summary, one can conclude that the respondents were generally well educated with some training in a helping profession. They were primarily counselors, working full time, and spending up to 25 percent of their time on securing referrals.



CHAPTER IV

RESULTS

The results of this study are discussed and analyzed in Chapter IV. A detailed exploration of the relationship between the dependent and independent variables is included. The chapter is divided into sections including: Relation of Coercion to Maintenance of Clients (Depfact), Number of Referrals in Relation to SSR, Maintenance in Relation to SSR, and Other Findings. The discussion of the results hopefully will provide a more thorough understanding of the use and operation of SSR.

Section I - Relation of Coercion to Maintenance of Clients (Depfact)

At the time of planning and maintenance variables, it became apparent that we should anticipate additional variables which might influence the relationships between the study's dependent and independent variables. One possible variable was the extent of coercion from the criminal justice system. However, it is recognized that there are other forms of coercion potentially influencing clients' behavior. Coercion may come from the client's family or peers. We felt court coercion might be a key influence in keeping the client in a drug rehabilitation program. If this were the case, SSR might be a weaker factor than court coercion in relation to the maintenance of clients in a drug rehabilitation program (Depfact). Court coercion would have to be studied as a possible mediating variable or as an independent variable having a greater association with maintenance than did SSR with maintenance.

Initially we interviewed two of the five program directors

for an in-depth understanding of the various types of court-related coercion present in the criminal justice system in Virginia. Several different kinds of court-related coercion are used to refer and keep drug abusers in drug rehabilitation programs. It did not seem logical to attempt to study court coercion as a factor in obtaining referrals for drug rehabilitation programs. Examining the existence of court coercion in determining if more or fewer clients were referred to drug rehabilitation programs did not seem meaningful to us. On the other hand, court coercion would be a factor in keeping clients in drug programs once they were referred. Clients entering a drug rehabilitation program through coercion by the criminal justice system could be compared to those entering without court-related coercion.

The in-depth interviews resulted in clearly defining six distinct types of court-related coercion for clients entering drug rehabilitation programs. The six types of court-related coercion are:

- A. Direct sentencing of a client to the program by a judge
- B. Referral to the program as a condition of probation without the client necessarily going to prison if he broke probation
- C. Referral to the program as a condition of probation with the client being told he would definitely go to prison if he did not stay in the program
- D. "Plea-bargaining" with the Commonwealth Attorney. The client was told he would have to go to trial if he did not remain in the program
- E. Referral to the program as a condition of early prison release (parole), in lieu of a long sentence
- F. Referral to the program through the parent's appeal to the court for an incorrigible child

Included in the demographic or programmatic data questionnaire (Appendix 3) is a listing of the six categories of coercion. The five program directors were asked to rank each court-related coercion category in a hierarchy from high to low according to its effect on keeping a client in a drug rehabilitation program. Each category was assigned a ranking ranging from most coercive (one) to least coercive (six).

Table 11 shows the hierarchical rankings assigned to the six court coercion categories by the five program directors.

TABLE 11
HIERACHICAL RANKINGS FOR COURT COERCION BY DRUG
REHABILITATION PROGRAM DIRECTORS

<u>Rankings</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>V</u>
A	2	3	5	2	2
B	6	6	4	5	6
C	1	1	1	3	1
D	5	4	2	4	5
E	3	2	3	1	4
F	4	5	6	6	3

A coefficient of concordance was then computed in order to represent the level of agreement among the five program directors on the hierarchical ranking of court coercion. The ranking indicated from Table 11 is C, E, A, D, F, B. We had two reasons for doing so:

1. A relatively high level of agreement among the directors would lend legitimacy to the distinctiveness of the court coercion categories themselves. A high coefficient of concordance would indicate that the categories are commonly communicable and understood among drug rehabilitation staff. Each counselor

would be given a list of the court coercion categories to be filled out for each of his clients. Drug programs would be given questionnaires to categorize clearly whether or not the clients were coerced by the courts into entering and remaining in the program. The two distinct categories (coercion and non-coercion) would be used legitimately for measuring their association with maintenance ratings (Depfact).

2. A subsidiary research objective could be examined by measuring whether or not a perceived ranking of the effects of court coercion on clients, made by the program directors, is in fact borne out by the data.

Kendall's coefficient of concordance was completed as follows:

$$W = \frac{12S}{M^2(N^3-N)} = \frac{3378}{.25(216-6)} = \frac{3378}{5250} = .64$$

W = Coefficient of Concordance

M = Number of Rankers

N = Number of Categories Ranked

S = Sum of squares of Actual Deviation from Means

The coefficient of concordance of .64 was found to be significant at less than .01. The high coefficient of concordance found to be significant was interpreted as lending legitimacy to the hierarchical ranking of court-related coercion presented above for the five Virginia drug rehabilitation programs.

Included in the data collected for the dependent variable was an item for the extent of court coercion for each client included in the cohort. The data was taken from the client's record if the extent of court coercion was clearly indicated in it. If not, the client's counselor was asked for the information. The wording of the

categories used for recording the extent of court-related coercion is identical to the six types of court coercion listed above.

Table 12 presented below shows a cross-tabulation of client maintenance (Depfact) by ranked court coercion. Depfact, representing the weighted maintenance factor for clients during a three-month period, has been divided into four categories ranging from low to high. Ranked court coercion from absent to present appears in the table in accordance with the hierarchical ranking agreed upon by the five program directors.

Table 12 shows a significant positive correlation between clients referred with court coercion and having high maintenance in a drug rehabilitation program. TAU B is .29 and $p = .01$. It is worth noting that 21.4% of those clients with lowest court coercion were in the lowest maintenance category as compared to 0% of those with the highest court coercion being maintained at a low maintenance level. At the same time, 53.8% of those clients with highest court coercion were in the highest maintenance category as compared to 14.3% of those with lowest court coercion being maintained at a high maintenance level.

An exception is F category (incorrigible child) in which a low coercion ranking is associated with high maintenance of clients throughout. A possible explanation of that discrepancy might be that the procedure for securing a designation of an incorrigible child by the court differs markedly from the other coercion categories, with the exception of C. An appeal to the court for an incorrigible child designation entails an unusually high degree of involvement of the court personnel with the child, which may lead to a higher degree

TABLE 12
 CROSS TABULATION OF MAINTENANCE SCORE (DEPFACT)
 BY RANKED COURT COERCION FOR COERCED CLIENTS

		RANKED COERCION LOW COERCION				HIGH CORRECTION		TOTAL
		C	E	A	D	F	B	
MAINTENANCE								
LOW MAINTENANCE	-2	60.0% (6)	0.0% (0)	30.0% (3)	0.0% (0)	10.0% (1)	0.0% (0)	100% (10)
	-1	36.8% (7)	31.6% (6)	15.8% (3)	5.3% (1)	0.0% (0)	10.5% (2)	100% (19)
	1	44.0% (11)	16.0% (4)	8.0% (2)	4.0% (1)	12.0% (3)	16.0% (4)	100% (25)
HIGH MAINTENANCE	2	14.8% (4)	18.5% (5)	7.4% (2)	3.7% (1)	29.6% (8)	25.9% (7)	100% (27)
	COLUMN TOTAL	28 34.6	15 18.5	10 12.3	3 3.7	12 14.8	13 16.0	81 100.0

KENDALL'S TAU C = 0.28819 SIGNIFICANCE = 0.0001



of influence on the part of court personnel with the child. This influence, which differs from coercion, may explain the higher than anticipated maintenance for the incorrigible child category.

When the above data was interpreted, it indicated a trend of higher court coercion leading to high maintenance. Indeed, upon comparing the maintenance scores of clients who were coerced by the courts into remaining in a drug program with those who were not coerced, the two variables are associated with each other and are significant.

TABLE 13
CROSS-TABULATION OF MAINTENANCE SCORE (DEPFACT)
BY RANKED COURT COERCION FOR ALL COHORT CLIENTS

	COURT COERCION		ROW TOTAL
	COERCION ABSENT	COERCION PRESENT	
LOW MAINTENANCE			
-2	85.1% (57)	14.9% (10)	100% (67)
-1	74.7% (56)	25.3% (19)	100% (75)
+1	58.3% (35)	41.7% (257)	100% (60)
HIGH MAINTENANCE			
+2	58.5% (38)	41.5% (27)	100% (65)
COLUMN TOTAL	186 69.7	91 30.3	267 100.0

KENDALL'S TAU B = 0.21 SIGNIFICANCE = 0.01
NUMBER OF MISSING OBSERVATIONS = 14

As in the previous table, maintenance has been divided into four categories ranging from low to high. In ranked court coercion, the non-coerced clients appear in the category coercion absent while all the coerced clients (coercion categories A-F) are in the category coercion present. Table 13 shows that court coercion is significantly associated with the maintenance level of clients for the initial three-month period following acceptance into the program. The moderate level of association on Kendall's Tau B is .21, but significant at the .01 level.

In sum, court coercion is a factor which must be dealt with when analyzing the relationship between maintenance of clients (Depfact) and SSR (In facts I and II). It has been shown that court-related coercion, as well as the level of coercion of clients by the criminal justice system, is significantly associated with maintaining those clients in the five drug rehabilitation programs studied. Court coercion, the n, is an independent variable significantly associated with maintenance of clients (Depfact) for the cohort studied.

Section II - Number of Referrals in Relation to SSR

In this section we shall view the evidence for a lack of association between SSR (In facts I and II) and the dependent variable, number of referrals. We hypothesized that the greater the SSR (Facets C, D, and E) with a target community agency, the greater the appropriate securing of numbers of clients for a drug rehabilitation program from the target agency.

In order to test this hypothesis, a matrix of the five programs by their respective target agencies (i.e., clients and the agencies from which they were referred) had to be constructed. The matrix is shown in Table 14.



TABLE 14
 MATRIX OF FIVE DRUG REHABILITATION
 PROGRAMS BY THEIR RESPECTIVE TARGET AGENCY

PROGRAM	TARGET AGENCY								TOTAL
	SCHOOLS	MENTAL HOSPITAL	OTHER DRUG REHAB. PROGRAMS	JAIL	ADULT COURT	JUVENILE COURT	ADULT PROBATION	JUVENILE PROBATION	
PRELUDE	0.0% (0)	0.0% (0)	0.0% (0)	22.6% (7)	0.0% (0)	0.0% (0)	41.9% (13)	35.5% (11)	100% (31)
CROSSROADS	19.0% (4)	0.0% (0)	0.0% (0)	0.0% (0)	42.9% (9)	38.1% (8)	0.0% (0)	0.0% (0)	100% (21)
ALEXANDRIA	0.0% (0)	9.1% (1)	81.8% (9)	9.1% (1)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	100% (11)
RADACC	16.7% (2)	0.0% (0)	0.0% (0)	50.0% (6)	0.0% (0)	0.0% (0)	33.3% (4)	0.0% (0)	100% (12)
RENAISSANCE	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)	42.9% (3)	0.0% (0)	57.1% (4)	0.0% (0)	100% (7)
COLUMN TOTAL	6 7.3	1 1.2	9 11.0	14 17.1	12 14.6	8 9.8	21 25.6	11 13.4	82 100.0

In Table 14 the number of clients referred to a drug program by a community agency appears in the cells. This matrix enables us to dichotomize (by assigning high or low values) the fifteen programs by target agency combinations from which clients were referred to a program. Seven programs by target agency combinations ranging from 6 to 13 client referrals each were considered high on number of referrals. Eight programs by target agency combinations ranging from 0 to 4 client referrals each were considered as low.

Table 15 represents a cross-tabulation of the four independent variables of the direct contact component of SSR (Indfact I) by the number of referrals. Both variables are dichotomized to allow for a large enough N, or number of cases in a category to be of any use.

TABLE 15
CROSS-TABULATION OF INDFACT I
BY NUMBER OF REFERRALS

	NUMBER OF REFERRALS		
	LOW	HIGH	TOTAL
INDFACT I			
LOW	71.4% (5)	28.6% (2)	100% (7)
HIGH	37.5% (3)	62.5% (5)	100% (8)
COLUMN	8	7	15
TOTAL	53.3	46.7	100.0

KENDALL'S TAU B = 0.33929

SIGNIFICANCE = 0.0295

Table 16 represents a cross-tabulation of two independent variables of the indirect contact component of SSR (Indfact II) by the number of referrals. Once again, both variables are dichotomized due to the small N.

TABLE 16
 CROSS-TABULATION OF INDFACT II
 BY NUMBER OF REFERRALS

	NUMBER OF REFERRALS		
	LOW	HIGH	TOTAL
INDFACT II			
LOW	25.0% (2)	75.0% (6)	100% (8)
HIGH	85.7% (6)	14.3% (1)	100% (7)
COLUMN TOTAL	8 53.3	7 46.7	15 100.0
KENDALL'S TAU B = 0.60714 SIGNIFICANCE = 0.0004			

Table 15 shows a strong association between the direct contact component of SSR (Indfact I) and number of referrals. Kendall's Tau B = .34 and $p = .03$. Table 16 shows quite the opposite results. In this case, there is a very strong inverse association between the indirect contact component of SSR (Indfact I) and number of referrals. Kendall's Tau B is $-.61$ and $P = .00$.

The data indicates that the greater the utilization of the direct contact component of SSR by a drug program staff with a community agency's staff, the greater the number of clients secured from that agency for the program. On the other hand, the lower the utilization of the indirect contact component of SSR by a drug program staff member with a community agency's staff, the greater the number of clients secured from that agency for the program. The hypothesis relating the utilization of SSR and number of referrals is accepted for the direct component of SSR but rejected for the indirect component. It is not enough to note the striking contradiction between the two SSR components.

Rather, an attempt to interpret these findings may shed further light upon the construct of SSR. A number of alternative explanations are discussed below:

1. There was a very small percentage of respondents able to identify a potential or actual network which could be used indirectly to influence a target individual. A maximum of 177 networks could be recorded consisting of the fifty-nine respondents multiplied by the three target agencies in the indirect contact section of the interview schedule. Only 44 of 177 (25%) networks were cited. Of these, 25 (14%) were actual networks, and 19 (10%) were potential networks which the respondent might use if he chose to do so. Of all the networks cited by the respondents 57% were actual and 43% potential. Also, the indirect contact section was in the last third of the interview schedule when fatigue of respondent and interviewer was at its highest. The number of direct contacts identified by respondents was 122 or 68%. The indirect contact component of SSR (Indfact II), then, is based on considerably less data than the direct contact component (Indfact I). Moreover, the limitations of the interview schedule itself may account for the inverse association presented for Indfact II. Nevertheless, this interpretation cannot be easily accepted. The inverse association of $-.61$ between Indfact II and number of referrals is highly significant and cannot be "explained away" in such a manner. If the reasoning suggested above is to be accepted, it would be logical to find a low degree of association between the variables which would be non-

significant. It has been demonstrated above that this is not the case in the association between both the direct and the indirect contact component (Indfact I and II) and maintenance of clients (Depfact).

2. The indirect component of SSR may be utilized to a greater extent by respondents who find it preferable to using direct means for influencing other community agency staff to refer clients. The indirect approach may be less effective than the direct one for influencing the staff of a target agency to refer an appropriate number of clients. In the case of a respondent utilizing the direct component of SSR, the reciprocal "arrangement" between the respondent and target individual may be the fulfillment of the latter's role behavior needs in return for actually or eventually referring clients to the drug program. (The target individual may or may not influence others to refer clients.) The reciprocity inherent in direct contact serves as an equalizer, which may not exist in the indirect contact. There may well be a reciprocal relationship between the respondent and indirect contact person, i.e., fulfillment of role behavior needs in return for influencing the target individual to refer clients to the drug program. The above reciprocal relationship may not stretch far enough to include the respondent and the target individual. Fulfilling the role behavior needs of the target individual through the indirect contact person may not lead to the target individual referring clients to the drug rehabilitation program. Not only is the target individual not included in the reciprocal relationship but he may resent being manipulated in-

directly by the respondent. He may feel he is being used. The data may well indicate that the direct component of SSR is more effective than the indirect component of SSR for the appropriate securing of clients for drug programs. Reciprocity may be the key factor here.

3. The direct contact component of SSR (Indfact I) may be positively associated with number of referrals, while the indirect contact component (Indfact II) is inversely associated with number of referrals because Indfact II may be a prelude to Indfact I for securing referrals. That is, initially, indirect contacts may be used to secure referrals in the absence of direct contacts with a target community agency. These indirect contacts seem to be singularly unsuccessful, as evidenced by the strong inverse association between the number of referrals and the indirect contact component (Indfact II). Once direct contact has been established, indirect contact may be minimal because direct contacts are more effective for securing clients for the drug program, as evidenced by the association between number of referrals and direct contact component (Indfact I). Only this last interpretation (C) is amenable to being tested by our data

Table 17 represents a cross-tabulation between the mean sum of frequency of contact between an entire drug program's treatment staff and a community agency staff (Dircon) and the indirect component of SSR (Indfact II). If interpretation C is correct, we would expect to find an inverse relationship. That is, low Dircon should be associated with high Indfact II and vice versa. This would mean that when there is little contact between drug program staff and community agency staff, the former will use indirect contacts. When there is more frequent

contact between the drug program staff and the staff of a community agency, the use of indirect contact will decline.

Both Dircon and Indfact II for the fifteen agencies were dichotomized into low and high. The fifteen cases once again represent the fifteen programs by community agency combinations for which we have SSR data. The inverse association of $-.20$ is in the expected direction but is not significant ($P=.14$). The low significance may be due, at least in part, to the small number of cases.

A cross-tabulation similar to that of Table 17 is presented below. Here, Dircon and Indfact I have been dichotomized and crosstabulated.

TABLE 17
CROSS-TABULATION BETWEEN DIRCON
AND INDFACT II FOR FIFTEEN AGENCIES

	INDFACT II		
	LOW	HIGH	TOTAL
DIRCON			
LOW	42.9% (3)	57.1% (4)	100% (7)
HIGH	62.5% (5)	37.5% (3)	100% (8)
COLUMN TOTAL	8 53.3	7 46.7	15 100.0
KENDALL'S TAU B = 0.19643 SIGNIFICANCE = 0.1371			

Table 18 shows the association between the frequency of contact between an entire drug program's staff and a community agency's staff (Dircon) and the direct component of SSR (Indfact

I). It is highly significant. Kendall's Tau B is .46 and $p = .00$. High Dircon, then, is associated with high Indfact I and vice versa. This evidence points towards accepting interpretation C as explaining, at least in part, the positive association between Indfact I and Depfact, while showing a negative association between Indfact II and Depfact. The negative association between the indirect component of SSR and frequency of contact indicates that not only is indirect contact highly ineffective, but elements of interpretation B may be operating here.

Both cross-tabulations mentioned above are in the expected direction for accepting interpretation C. They show strong measures of association in the expected direction and are highly significant. We have no data for accepting or rejecting interpretation B.

TABLE 18
CROSS-TABULATION BETWEEN DIRCON
AND INDFACT I FOR FIFTEEN AGENCIES

	INDFACT I		
	LOW	HIGH	TOTAL
DIRCON			
LOW	71.4% (5)	28.6% (2)	100% (7)
HIGH	25.0% (2)	75.0% (6)	100% (8)
COLUMN TOTAL	7 46.7	8 53.3	15 100.0
KENDALL'S TAU B =	0.46429	SIGNIFICANCE =	0.0049

Section III - Maintenance in Relation to SSR

The computation of the dependent and independent factors (i.e., Depfact and Indfacts I and II) was described in Chapter III on methodology. We related Depfact, which consists of "maintenance" in Facet I, to Indfacts I and II, which consist of the direct and indirect SSR factors.

All clients not referred from one of the three target agencies for each program were dropped from this phase of the analysis. Data was available for the 281 clients comprising the cohort. By dropping all referral sources which were non-target agencies, eighty-two cases were left. Of those 199 cases deleted, 127 were personal referrals, sixty-six were referred from community and criminal justice related agencies, and six were from the miscellaneous category. The analysis which follows relates to those eighty-two clients referred by target agencies to the five drug rehabilitation programs included in the study.

SSR scores, operationalized as Indfacts I and II, then had to be related to client's maintenance score, i.e., Depfact. The client's Depfact for each target agency (referral source) was an outcome measure of the program's ability to maintain a client from that particular target agency.

The methodology of the study prescribed that we provide Indfact I and II scores for each respondent. Referring to Table 19, for each of the agency - program combinations Indfact I and Indfact II scores represent the two components of SSR between target agencies and programs. All cases from a target agency sent into a given program were assigned the SSR scores for that combination. For example, all clients referred to

the Prelude program from Adult Probation were assigned scores of .712 and -.051 for Indfact I and Indfact II respectively.

TABLE 19
SSR SCORES FOR EACH
PROGRAM - AGENCY COMBINATION

<u>Program</u>	<u>Target</u>	<u>Indfact 1</u>	<u>Indfact 2</u>
A	Adult Probation	0.712	-0.051
A	Correctional Institution	0.319	-0.171
A	Juvenile Probation	0.235	-0.179
B	Juvenile Court	0.754	-0.175
B	Adult Court	0.278	-0.146
B	Elem or High School	-0.450	-0.121
C	Mental Hospital	-0.647	0.668
C	Other Drug Rehab. Programs	-0.354	-0.178
C	Correctional Institution	-0.016	0.736
D	Adult Probation	0.614	-0.053
D	Correctional Institution	-0.589	-0.148
D	Elem. or High School	-0.243	0.321
E	Adult Probation	0.112	-0.145
E	Adult Court	-0.183	-0.007
E	Correctional Institution	-0.339	-0.142

SSR scores were divided into two components based on factor analysis described in Chapter III, Sections IV and V.

Indfact I and II scores for an entire program with a target agency were the independent variables that would be related to the Depfact (maintenance) of each of those clients.

The client then through his Depfact score seemed to be the most appropriate unit to relate maintenance with SSR. The client has measures of both the SSR (denial from his agency - program combination), and also his Depfact, (maintenance) value.

Rather than use aggregates for representing the Indfact I and II res of each program as representing its SSR for each target agency, it was decided to use the mean Indfact scores. The rationale for this decision to use means rather than aggregates was to neutralize the effect of a larger drug program staff accounting for higher scores as

compared to a smaller staff. The mean Indfact I and II scores were computed as well as the means of six independent variables used for computing those scores and mean contact (Dircon) for each of the program by agency combinations. There were fifteen such combinations in all--five programs by three agencies. Each client was scored with the appropriate set of Indfact I and II scores and the other "original" independent variables in accordance with the combination of the target agency from which he was referred and the drug rehabilitation program he entered. A total of eighty-two clients were scored with the Depfact and mean program SSR factors (Indfact I and II) for each target agency referral source.

Table 20 represents the correlation coefficients for the original seven independent variables (six of which subsequently comprised SSR) and the three dependent variables (maintenance of clients).

Table 20 shows that Dirrbn, Dirrbn I, Dirtech, and Dirconx (the four SSR variables from the Direct Contact Section) are positively associated with average level of participation, direction and length of stay (the three measures comprising maintenance). The correlation is generally close to the .20 level. The four independent variables mentioned above are most highly correlated with length. The correlation of .20 is interpreted as being moderate, yet it indicates a consistent correlation between the above-mentioned independent variables and the three dependent variables.

Dircon, the mean frequency of contact the entire treatment staff of a drug rehabilitation program has with a target agency, is poorly correlated with the three dependent variables at about the .02 level. The qualitative measures of the direct contact component of SSR are correlated with dependent variables comprising the maintenance

of clients in a drug rehabilitation program at a considerably higher level.

On the other hand, the two independent variables (Indrbn and Indtech) comprising the indirect contact component of SSR are, for the most part, inversely correlated with the four direct contact independent variables comprising the indirect contact component of SSR at about $-.15$. Indrbn and Indtech are uncorrelated with the three dependent variables. The low correlation is interpreted as indicating that no relationship exists between Indrbn and Indtech with the three dependent variables appearing in Table 20.

The insertion of Table 20 and the ensuing discussion of data at this juncture were presented in order to show the general correlation trend of the SSR-independent variables of the study with the maintenance-dependent variables. Both the factor analysis in Chapter III, Section V, and the correlation coefficients presented in Table 20 show two highly loaded factors and two highly associated sets of independent variables. The two sets are what has previously been designated Indfacts I and II. Maintenance has been shown to comprise one set (Depfact). We believe these contentions have been amply legitimized by the data. For purposes of clarity, the analysis, following below, of the relationship between the two independent variables and the dependent variables (maintenance) will be represented, for the most part, by Indfacts I and II and by Depfact respectively.

The Pearson correlation coefficient for Indfact I with Depfact is $.20$ ($p \leq .05$). (This is interpreted as indicating a moderate relationship.)

Another statistical procedure, cross-tabulation, is used in the analysis below as further corroboration of the findings of the various

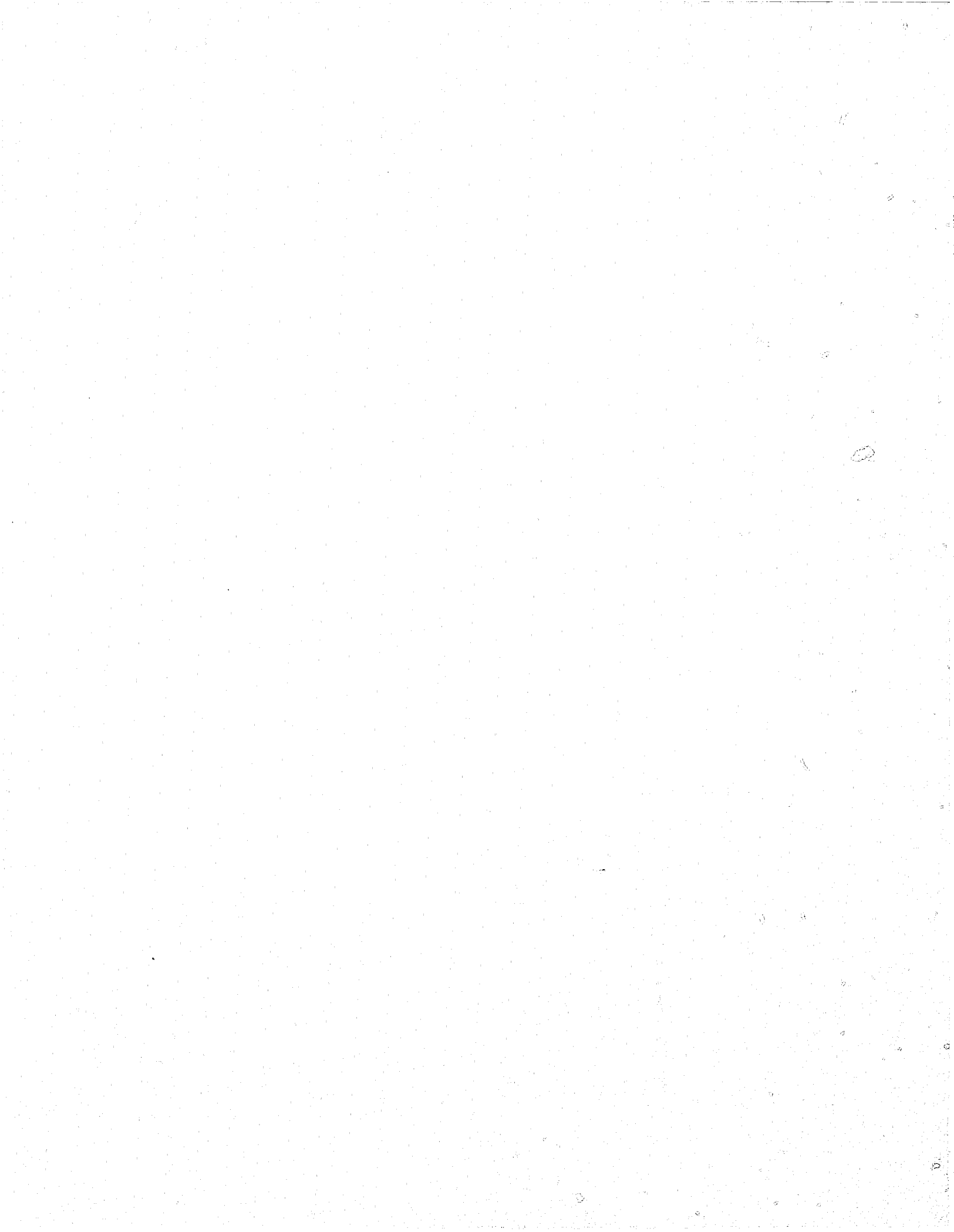


TABLE 20
CORRELATION COEFFICIENTS FOR SEVEN INDEPENDENT AND
THREE DEPENDENT WEIGHTED VARIABLES

	DIRRBN	DIRRBNL	DIRTECH	DIRCON	DIRCONX	INDRBN	INDTECH	AVLEVEL	DIRECT	LENGTH
DIRRBN	1.00	0.92	0.93	0.64	0.87	-0.87	-0.14	0.13	0.05	0.19
DIRRBNL	0.91	1.00	0.97	0.61	0.82	-0.17	-0.16	0.20	0.14	0.26
DIRTECH	0.93	0.97	1.00	0.68	0.88	-0.19	-0.04	0.19	0.12	0.24
DIRCON	0.64	0.16	0.68	1.00	0.79	-0.30	-0.17	0.00	-0.02	0.04
DIRCONX	0.87	0.82	0.88	0.79	1.00	-0.11	-0.03	0.15	0.10	0.19
INDRBN	-0.18	-0.17	-0.10	-0.30	-0.11	1.00	0.93	0.02	0.01	0.00
INDTECH	-0.14	-0.16	-0.04	-0.17	-0.03	0.93	1.00	0.03	-0.00	-0.02
AVLEVEL	0.15	0.20	0.19	-0.00	0.15	0.02	0.03	1.00	0.74	0.93
DIRECT	0.05	0.14	0.12	-0.02	0.19	0.01	-0.00	0.74	1.00	0.78
LENGTH	0.19	0.26	0.24	0.04	0.19	0.00	-0.02	0.93	0.78	1.00

correlation coefficients presented above.

Table 21 represents a cross-tabulation between Indfact I and Depfact. Both variables have been dichotomized.

TABLE 21
CROSS-TABULATION BETWEEN INDFACT I
AND DEPFACT

	<u>DEPFACT</u>		
	<u>LOW</u>	<u>HIGH</u>	<u>TOTAL</u>
INDFACT I			
LOW	61.4% (27)	38.6% (17)	100% (44)
HIGH	39.5% (15)	60.5% (23)	100% (38)
COLUMN	42	40	82
TOTAL	51.2	48.8	100.0

KENDALL'S TAU B = 0.21838 SIGNIFICANCE = 0.0016

Table 21 shows a moderate association between Indfact I and Depfact which is highly significant. Kendall's Tau B = .22 and $p = .01$.

It would thus appear that using both ordinal and interval measures that the direct component of SSR (Indfact I) is associated with the maintenance of clients in drug rehabilitation programs. The Pearson correlation coefficient and the cross-tabulation between the direct SSR component and the maintenance of clients in drug rehabilitation programs both lead us to accept a hypothesis that the two are associated.

The picture for the association of Indfact II with Depfact is quite different. The Pearson correlation coefficient, as mentioned above, was .01 (n.s.). This finding of no association is further corroborated in the cross-tabulation presented in Table 21.

The data in Table 22 is dichotomized. A low non-significant inverse association is found between the indirect component of SSR and

the maintenance of clients in drug rehabilitation programs and is not significant. Kendall's Tau B = $-.10$ (n.s.). Analysis of the association between the indirect component of SSR and maintenance of clients, utilizing Pearson's correlation coefficient and cross-tabulation, forces us to reject a hypothesis that they are associated.

TABLE 22
CROSS-TABULATION BETWEEN
INDFACT II AND DEPFACT

		<u>DEPFACT</u>		
		<u>LOW</u>	<u>HIGH</u>	<u>TOTAL</u>
INDFACT II	LOW	45.7% (16)	54.3% (19)	100% (35)
	HIGH	55.3% (26)	44.7% (21)	100% (47)
	COLUMN	42	40	82
	TOTAL	51.2	48.8	100.0

KENDALL'S TAU B = -0.09504 SIGNIFICANCE = 0.1001

It has already been demonstrated in Section I of this chapter that court coercion is associated with maintenance of clients (Depfact) for the cohort studied. In analyzing the relationship of Indfacts I and II with Depfact, the effects of court coercion should be taken into account. As a result, a partial correlation coefficient controlling for court coercion was computed for Indfacts I and II with Depfact. The partial correlation was based on the seventy-three of the eighty-two clients for which data on all the variables was available. The partial correlation coefficient for Depfact and Indfact I is $.20$ ($p = .05$). For Depfact and Indfact II, the partial correlation is $.01$ (n.s.).

Thus, we find that when controlling for the effects of court coercion by using partial correlations, Indfact I (the four weighted independent variables comprising the direct contact component of SSR) is moderately correlated with Depfact (maintenance of clients factor) and is significant. On the other hand, Indfact II (indirect SSR) has a non-significant relationship.

To what extent is court coercion a mediating variable for associating Indfact I and Depfact? Tables 23 and 24 address this issue.

TABLE 23
CROSS-TABULATION BETWEEN INDFACT I AND DEPFACT
CONTROLLING FOR COURT COERCION (CLIENTS WITH COERCION ONLY)

		<u>DEPFACT</u>		
		<u>LOW</u>	<u>HIGH</u>	<u>TOTAL</u>
INDFACT 1	<u>LOW</u>	58.8% (10)	41.2% (7)	100% (17)
	<u>HIGH</u>	35.5% (11)	64.5% (20)	100% (31)
	COLUMN TOTAL	21 43.8	27 56.3	48 100.0

KENDALL'S TAU B = 0.22501 SIGNIFICANCE = 0.0105

Both variables presented in Table 23 have been dichotomized. There are nine clients for whom we have no court coercion value, and thus have been listed as missing observations.

Table 23 cross-tabulates Indfact I and Depfact for the forty-eight clients coerced by the courts into participating in the drug rehabilitation programs. The level of association and significance remained similar when not controlling for the effects of coercion. Kendall's Tau B = .23 for Indfact I by Depfact (vs. .22 when not controlling data) and $p = .01$ (vs. $p = .00$ when not controlling data).

On the other hand, Table 24 which cross-tabulates Indfact I and Depfact for the twenty-five non-court coerced clients shows a non-significant lower association (though still in a positive direction) than for those clients with court coercion. (Kendall's Tau B = .12 and $p = .19$.) The results of the latter table contradict the evidence.

TABLE 24
CROSS-TABULATION BETWEEN INDFACT I AND DEPFACT
CONTROLLING FOR COURT COERCION. (CLIENTS WITHOUT COERCION ONLY)

		<u>DEPFACT</u>		
		<u>LOW</u>	<u>HIGH</u>	<u>TOTAL</u>
INDFACT 1	LOW	55.0% (11)	45.0% (9)	100% (20)
	HIGH	40.0% (2)	60.0% (3)	100% (5)
	COLUMN TOTAL	13 52.0	12 48.0	25 100.0

KENDALL'S TAU B = 0.12010 SIGNIFICANCE = 0.1899

NUMBER OF MISSING OBSERVATIONS = 9

THE EFFECTS OF COURT COERCION ON DEPFACT:

There is surprising evidence that court coercion is not associated with maintenance (Depfact) for the eighty-two clients for which we have SSR data. The Pearson product moment correlation coefficient for court coercion and Depfact is $-.09$ and is not significant. A slightly negative, not significant, correlation is shown in this finding.

Table 25 further corroborates the lack of a relationship between court coercion and Depfact for those clients, for which we have SSR data.

TABLE 25
 CROSS-TABULATION BETWEEN COURT COERCION AND DEPFACT
 FOR CLIENTS REFERRED BY FIFTEEN TARGET AGENCIES

	COURT COERCION		TOTAL
	COERCION PRESENT	COERCION ABSENT	
DEPFACT			
1.00			
LOW	46.7%	53.3%	100%
	(7)	(8)	(15)
2.00	73.7%	26.3%	100%
	(14)	(5)	(19)
3.00	85.7%	14.3%	100%
	(12)	(2)	(14)
4.00	60.0%	40.0%	100%
	(15)	(10)	(25)
COLUMN	48	25	73
TOTAL	65.8	34.2	100.0

KENDALL'S TAU C = -0.05606 SIGNIFICANCE = 0.2060
 NUMBER OF MISSING OBSERVATIONS = 9

The coercion variable presented in Table 25 has been dichotomized, while Depfact has been divided by quartiles. The results approximate those of the Pearson correlation mentioned above. Kendall's Tau C is -.06. Again, the slightly inverse association is not significant.

The evidence presented indicates that there is a relationship between Indfact I and Depfact, but not between court coercion and Depfact for the subset of clients referred from the fifteen target agencies.

A discussion explaining the contradictory findings of an association between court coercion and Depfact for the cohort studied and yet no association between the same two variables for the sub-population studied in this section is presented below.

Our position is to argue for accepting the evidence that shows that Indfact I is positively associated with Depfact for the SSR sub-

population, with court coercion not affecting or mediating that association. Several arguments are advanced to support this position:

A. The partial correlation (showing a .20 partial correlation between Indfact I and Depfact) is a stronger statistical measure than controlling by cross-tabulations. According to Bert, Hall, and Nie:

Partial correlation provides the researcher with a single measure of association describing the relationship between two variables while adjusting for the effects of one or more additional variables. Conceptually then, at least, partial correlation is analogous to cross-tabulation with control variables. In cross-tabulation the control is accomplished by examining the joint frequency distribution of two variables among two or more categories of one or more control variables (e.g., education's relationship to income, controlling for the effects of age). With cross-tabulation the control is literal; i.e., one simultaneously locates each observation according to the values it takes on three or more variables. This is indeed one of the major problems with cross-tabulation analysis, for each additional category of each variable in the relationship exerts a tremendous drain on the average cell frequencies. It takes a very large sample to execute even relatively simple controls.

In partial correlation, on the other hand, the control is statistical rather than literal and is based on the simplifying assumptions of linear relationships among the variables. In essence, partial correlation enables the researcher to remove the effect of the control variables from the relationship between the independent and dependent variables without physically manipulating the raw data.¹

The partial correlation is based on a product moment which is a more powerful statistical test than an ordinal one (cross-tabulation). Also, cross-tabulation controlling for court coercion has a considerably fewer number of degrees of freedom because many cases are deleted because of the controlling procedure. On the other hand, partial correlations have very few degrees of freedom removed and deal statistically with all cases

B. The partial correlation was run on continuous data, while the cross-tabulation was dichotomized. The continuous is more desirable than the dichotomized approach

C. A partial rank order coefficient (a partial Tau) was performed to measure the association between Indfact I and Depfact I adjusting for the effects of court coercion. The partial rank order correlation was .21. According to Kendall,² no tests of significance are yet known for a partial rank order correlation. It is clear that there is virtually no difference between this partial rank order coefficient and the partial correlation utilizing a Pearsonian product moment. The decision for preferring the Pearsonian partial correlation coefficient to controlling by cross-tabulation for relating Indfact I to Depfact is thus further legitimized

Depfact for the target agency referred clients is due to variations in the composition of the sub-population (eighty-two clients). The variations in the characteristics of the two populations seem to account for the different statistical findings. The variations result in a statistical artifact showing a positive association for the entire population and no association for a sub-population.

It can be argued that a sub-population may differ from an entire population regarding a correlation coefficient under certain conditions.

According to McNemar:

The magnitude of the correlation coefficient varies with the degree of heterogeneity (with respect to the traits being correlated) of the sample. If we are drawing a sample from a group which is restricted in range with regard to either or both variables, the correlation will be relatively low.³

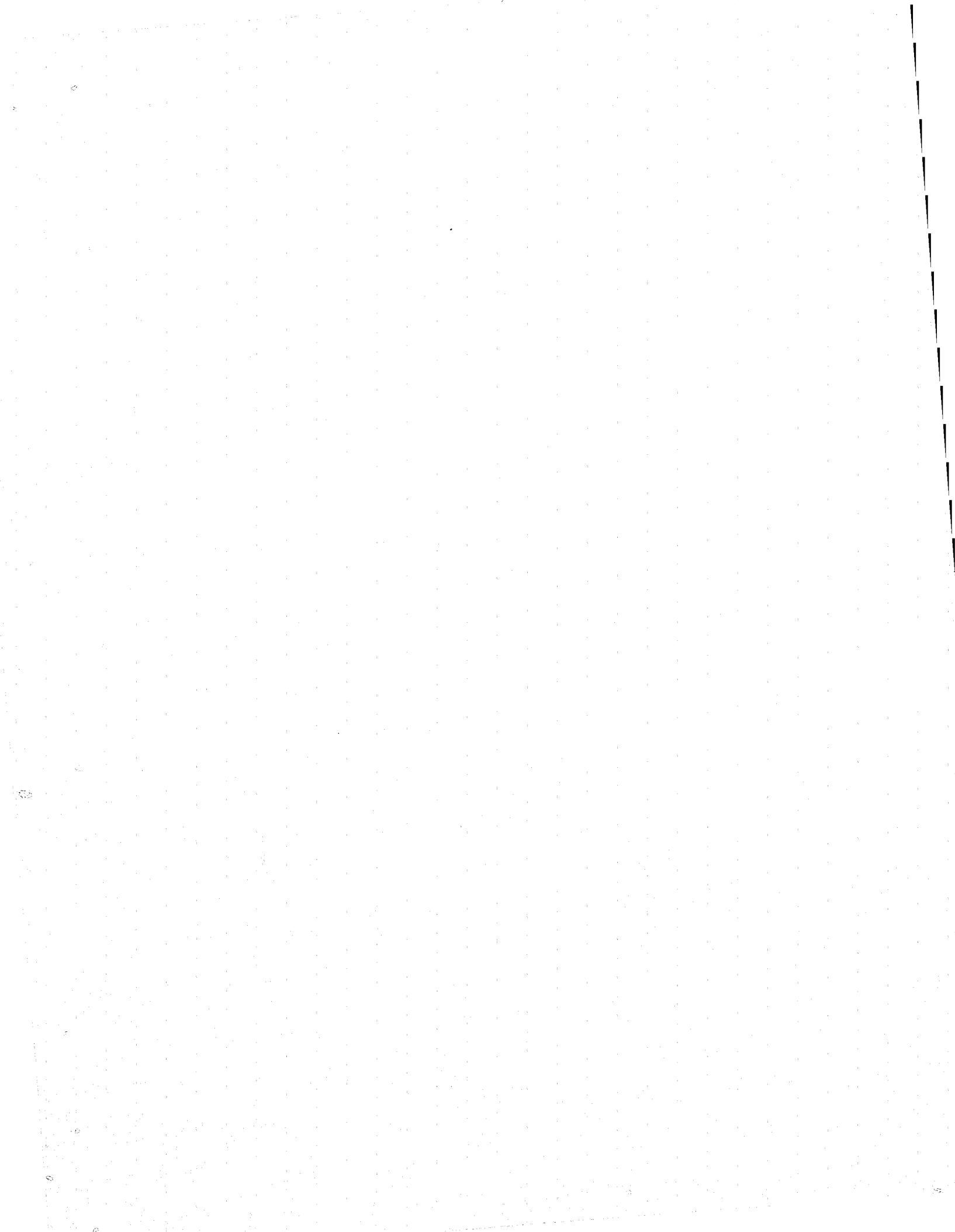
The sub-population differs substantially from the entire cohort population in two respects--the proportion of court coercion cases and Depfact

More specifically, it is argued that the 127 personal referral clients have showed the effects of court coercion for the cohort. Personal referrals have proportionately fewer court coercion cases and a relatively low Depfact has placed many clients (primarily personal referrals) into the low-low cells, thereby enhancing the association between the two variables for the cohort. However, clients included in the target agency referred sub-population had no personal referrals. Once the personal referrals were excluded, the strong association between court coercion and Depfact disappeared. Tables 26 and 27 present data for supporting the above contentions.

Table 26 shows that only twelve, or 9.4%, of the 127 personal referrals were coerced by the courts into remaining in a drug rehabilitation program as compared to sixty-seven, or 52.7%, of the 134 clients referred with coercion from community agencies and the criminal justice system. The twenty missing observations result from fourteen clients for which no coercion data was available and six clients who were referred from miscellaneous referral sources.

In Table 27 personal referrals as a group have the highest percentage of clients in the low Depfact (maintenance) category. Seventy-eight clients, or 61.4%, of all personal referrals were low in Depfact, while 56.4% of community agency referrals and 43.0% of criminal justice system referrals were in the low maintenance category.

It is noted that the 127 personal referrals are 46.2% of the entire cohort population. (Six clients were in miscellaneous categories and not included here.) We have previously demonstrated in Section I that most court coerced clients have relatively high maintenance in programs, while the non-coerced have lower maintenance. Our contention is that



CONTINUED

2 OF 3

TABLE 26
CROSS-TABULATION BETWEEN TYPE OF
REFERRAL SOURCE AND COURT COERCION

	COURT COERCION		TOTAL
	COERCION ABSENT	COERCION PRESENT	
TYPE OF REFERRAL SOURCE	92.6%	7.4%	100%
COMMUNITY AGENCIES	(50)	(4)	(54)
CRIMINAL JUSTICE SYSTEM	21.3%	78.7%	100%
	(17)	(63)	(80)
PERSONAL REFERRALS	90.6%	9.4%	100%
	9115)	(12)	(127)
COLUMN	182	79	261
TOTAL	69.7	30.3	100.0

NUMBER OF MISSING OBSERVATIONS = 20

TABLE 27
CROSS-TABULATION BETWEEN THREE TYPES OF REFERRAL
SOURCE MAINTENANCE CLIENTS (DEPFACT)

	DEPFACT		
	LOW	HIGH	TOTAL
TYPE OF REFERRAL SOURCE			
COMMUNITY AGENCIES	56.4%	43.6%	100%
	(31)	(24)	(55)
CRIMINAL JUSTICE SYSTEM			
	43.0%	57.0%	100%
	(40)	(53)	(93)
PERSONAL REFERRALS			
	61.4%	38.6%	100%
	(78)	(49)	(127)
COLUMN	149	126	275
TOTAL	54.2	45.8	100.0

NUMBER OF MISSING OBSERVATIONS = 6

personal referrals account for this finding. Personal referrals have relatively few coercion cases and a relatively low maintenance level of clients. The personal referrals then account to a great extent for the low-low cells of coercion by Depfact for the entire population. Personal referrals have low coercion and low Depfact. When those 127 cases are deleted, together with other non-target agency referred clients, coercion will no longer be associated with Depfact. The sub-population is not representative of the heterogeneous cohort population. Court coercion is no longer a predictor of Depfact, but Indfact I is.

Section IV - Other Findings

1. Number of Referral Sources and the Number of Referrals

Hypothesis No. 6 states:

The greater the number of community agency input sources (in Facet C) referring clients to a drug rehabilitation program, the greater the number of appropriate referrals (Facet I), in terms of numbers of clients and their maintenance in the drug rehabilitation program.

The above hypothesis relates explicitly to the Facet C element of input sources. The more input sources utilized in association with other SSR elements in Facets C, D, and E by a drug rehabilitation program, the greater the number of clients secured for that program from other community agencies (Facet F). We were unable to test fully the above hypothesis by means of the interview schedule. To test this hypothesis would have necessitated the insertion of additional items into the already lengthy interview and would have extended it beyond the planned two-hour time limit. By making it this long, the respondents' attention span was already being drawn to their limits. Moreover, this hypothesis was considered lower in priority than that of the other hypotheses.

Nevertheless, the data collected for compiling the dependent variables allowed for a partial testing of the hypothesis. Essentially, the data allows for the number of referral sources to be related to the number of clients referred to a drug rehabilitation program. Utilization of more input sources can be related to securing more clients for a drug program. Yet, data has not been collected that relates the greater utilization of other SSR components such as network linkages, Facets D and E, to the greater utilization of more input sources. The data does, however, allow us to relate the number of referrals to the number of referral sources (input sources) secured by the drug rehabilitation programs included in this study. The unified range of other SSR components in the mapping sentence cannot be used in this phase of the analysis.

Table 28 shows the number of referrals and the referral sources by program. Referral sources, included in Table 28, relate to referral sources and clients referred from community agencies only. Family, friends, and self-referrals are deleted.

TABLE 28
NUMBER OF REFERRALS AND NUMBER OF REFERRAL SOURCES BY PROGRAM

Program	No. of Referral Sources	Percentage	No. of Referrals	Percentage
Prelude	12	24	47	32
Crossroads	14	29	38	26
Alexandria	5	10	18	12
RADACC	12	24	24	16
Renaissance	6	12	22	15
Total	49	100%	149	100%

An indication as to the greater number of referral sources being associated with the greater number of referrals can be seen, for the most part, from Table 28.

Also presented is a cross-tabulation of the number of referrals by number of referral sources for the five programs included in the study. Each program is rated high or low on each of the variables, based on a median from Table 28 presented above. A program rated high is at the median or above, while low is below the median.

TABLE 29
CROSS-TABULATION OF NUMBER OF REFERRAL SOURCES
BY NUMBER OF REFERRALS FOR FIVE PROGRAMS.

<u>No. of Referrals Sources</u>	<u>No. of Referrals</u>	
	Low	High
Low	2	0
High	0	3

A distinct distribution is seen in Table 29. Programs rating high for number of referral sources rate high for number of referrals, and vice versa. Using Fisher's Exact Test for calculating the hyper-geometric distribution, a correlation of .10 is received. Nevertheless, we have predicted in the hypothesis the direction of the relationship. Using the one tail test, the Fisher's Exact Test for Table 29 is significant at the .05 level.

This data indicates that for the programs included in the study, the greater the number of referral sources, the greater the number of clients referred to the program. This is a partial validation of the hypothesis analyzed in this section. It is suggested that further

research may indicate whether or not other components of SSR directed at the expansion or enhanced utilization of community agency input sources do indeed lead to a greater number of referrals.

2. Comparing Agency vs. Personal Referrals

The thrust of this study has been to research a conceptual framework (SSR) designed to enhance the securing of the appropriate referrals (Facet I), in terms of numbers of clients and their maintenance in a drug rehabilitation program. The focus was on the contact between drug program staff and community agency personnel rather than upon "street" or other personal referrals. We did this for two reasons:

- A. Community agency personnel were potential resource people for referring drug abuse clients with whom they were in contact. They could use this contact to assist the client in remaining in the program during the inevitable crisis he would encounter during his stay in the drug program. Personal referrals would usually not have such a person to help him remain in the program. Thus, community agency referrals. In such a case, the use of SSR could further enhance the effectiveness of community agency referrals.
- B. It would have been almost impossible to test the study's hypotheses with personal referrals. The conceptual framework of the study was not geared to the worker-client relationship nor to techniques of direct client "recruitment" or "binding in." Also, drug rehabilitation program staff could not be expected to have on-going contact with large numbers of families who

might potentially refer other family members. The community agency forms seemed most appropriate for the study. A further requirement of Table 30 in Section III of this chapter affords us an opportunity to examine the effectiveness of community agency vs. self referrals in terms of clients' maintenance (Depfact) in drug rehabilitation programs. Table 30 represents the 281 clients comprising the study's original cohort. (See Chapter III Section IV for the procedures used in selecting the cohort and the computation of the maintenance factor termed Depfact.)

TABLE 30
CROSS-TABULATION BETWEEN TWO TYPES OF
REFERRAL SOURCES AND MAINTENANCE OF CLIENTS (DEPFACT)

	TYPE OF REFERRAL SOURCE		
	PERSONAL REFERRAL	AGENCY REFERRAL	TOTAL
LOW	52.7% (79)	47.3% (71)	100% (150)
HIGH	38.6% (40)	61.4% (78)	100% (127)
COLUMN TOTAL	128 46.2	149 53.8	277 100.0

KENDALL'S TAU B = 0.14076 SIGNIFICANCE = 0.0002

NUMBER OF MISSING OBSERVATIONS = 4

The 128 personal referrals in Table 30 consist of family, friend, or self-referrals. The community agency referrals include those clients referred by the criminal justice system as well as all other community service agencies. Four clients were referred from miscellaneous referral sources and are listed as missing observations.

Kendall's Tau B is .14 and $p = .01$ indicating a low yet significant association. Clients referred from community agencies tended to have a higher maintenance value than did personal referrals. Of the 127 clients with high maintenance values, seventy-eight (61.4%) were agency referrals compared to forty-nine (38.6%) which were personal referrals. Agency referrals seem to be more effective referrals, in terms of maintenance, than personal referrals. Several interpretations for this finding is advanced below.

1. Agency referrals in this study are more effective because of SSR between drug program staff and community agency staff. As it has been conceptualized in this study, the use of SSR is not directed at those family or friends who may potentially refer clients or the potential clients himself.
2. Community agency staff members have more detailed knowledge regarding the appropriateness of clients for the various community programs as compared to clients, their families, or friends. Agency staff is apt to refer clients more appropriately than non-agency staff
3. Personal referrals may be motivated by a crisis situation the client is going through. The client may turn to a drug rehabilitation program for help with his crisis. Once the crisis is over he may well drop out of the program. A crisis intervention center in this instance may be just as effective as a drug rehabilitation program. The appropriate focus of treatment by a program with such a client may well be crisis-oriented. Statistically, the client appears as a drop out improperly reflecting an inference of low maintenance for the program. Generally speaking the drug rehabilitation programs

studied here were geared for protracted treatment of clients

4. The client needs support to remain in a drug rehabilitation program. It is anticipated that the client will undergo a crisis, whether internally or externally generated, while participating in a rehabilitation program. It is only to be expected that the client will experience great difficulty in giving up his role as a drug abuser. External, stable, and more objective supports may be more effective when made available to the client from community agency personnel as compared to family, friends, or being alone.

FOOTNOTES

¹Dale H. Bert, C. Hadlai Hull, and Norman Nie, SPSS Social Package for the Social Sciences (New York: McGraw-Hill Book Co., 1970), p. 158.

²Maurice G. Kendall, Rank Correlation Methods (New York: Hafner Publishing Co., 1962), p. 122.

³Quinn McNemar, Psychological Statistics, 3rd ed. (New York: John Wiley and Sons, 1962), p. 144.

CHAPTER V

CONCLUSIONS

The major hypothesis of the study states: The greater the appropriate use of areas of social system relatedness (Facet C) by employing the techniques of SSR (Facet D) to fulfill the role behavior needs (Facet E) of a staff worker (Facet F) of a community agency (Facet G) by a focal drug rehabilitation program staff member or other significant individual (Facet H), the greater the securing of appropriate referrals (Facet I), i.e., the higher the number and maintenance of clients, to a drug rehabilitation program.

Areas of SSR pertain to behavioral strategies such as the use of network linkages in establishing contact with an individual. Techniques of SSR and the fulfillment of role behavior needs relate to inter-personal tactics.

In the methodology for the independent variables, described in Chapter III, Section V, we explained the necessity of dividing SSR into two separate factors. The first factor comprised the direct component of SSR (Indfact I) and the second factor the indirect component of SSR (Indfact II).

It is emphasized that this study is only a first step in exploring the utility of the social system relatedness approach for enhancing inter-agency collaboration. The considerable limitations of the study reflect its imperfect nature. Also, additional avenues for the exploration of SSR are available to the researcher. Further research using alternative methodologies will shed more light upon SSR itself, its utility, and under what conditions it is effective. This study represents only a

beginning step.

The results (Chapter IV) showed Indfact I to be positively and significantly associated both with number of referrals and maintenance of clients in drug programs (Depfact). Indfact II was found to be strongly and inversely associated with number of referrals and was significant. Yet, there was no significant association between Indfact II and maintenance of clients (Depfact).

The association between Indfact I and number of referrals was stronger than the association between Indfact I and Depfact. Seemingly, the direct component of SSR is more useful for securing clients through referrals from community agencies than for maintaining clients in the drug rehabilitation programs studied. Several interpretations are advanced below to explain the greater usefulness of the direct component of SSR for securing appropriate numbers of clients as compared to maintaining them in drug rehabilitation programs.

A staff member of a community agency may well refer a client to a drug rehabilitation program due to a drug program staff member's use of direct SSR with the community agency worker. Once the client is referred to the program, the community agency staff member may or may not keep up his relationship with the client. In addition, the extent of the community agency staff member's influence with the client may change once the client enters the drug program. Changes and crises experienced by the client after entering the drug rehabilitation program may be a stronger determinant affecting the client's continued participation in the program than the influence exerted upon him by the community agency worker to remain in the program. Although both number of referrals and maintenance of clients

are significantly associated with the direct SSR component, the interpretation cited above may explain the stronger association of SSR with number of clients, as compared to SSR and maintenance.

The association between the indirect component of SSR and number of referrals was very strongly inverse and was significant while the association (between Indfact II) with maintenance of clients was almost nil and not significant. We have explained at some length alternate interpretations for the strongly inverse association mentioned above, in Chapter IV, Section II. Briefly, the evidence shows that the indirect component of SSR is used when the staff of a drug rehabilitation program has relatively little frequency of contact with the staff of a community agency and vice versa. The lack of reciprocity in the indirect contact situation may explain the lack of a "quid pro quo" in the form of referrals generated by the community agency staff member to the drug program. The lack of reciprocity in the indirect contact situation may even lead to active non-cooperation on the part of the target community agency staff member with drug program staff. Also, we have not explored the effect of how an individual carries out Indfact II.

We can conclude that indirect SSR seems to be ineffective in maintaining clients in programs and has a negative effect upon securing referrals. The use of indirect SSR, though highly ineffective, may be the only recourse of a drug rehabilitation program in attempting to initiate a relationship for the purpose of securing referrals with a community agency staff with which there is no direct contact. The data indicates that once direct contact exists, use of the indirect component of SSR will be dropped in favor of the direct SSR component, which is effective for securing an

appropriate number of referrals.

The mean frequency of contact between a drug rehabilitation program's staff and a community agency's staff showed a very low and non-significant association with securing numbers of referrals or maintenance of clients in drug programs. On the other hand, the frequency of contact between a drug program staff member and a community agency staff member was positively associated with securing referrals and maintenance of clients in drug programs. This positive association may be due to:

1. The frequency of contact between individuals in a component of SSR
- and 2. SSR culminates in increased contact between individuals. The increased contact, whether it is a component or product of SSR, may well account for securing greater numbers of referrals and enhanced maintenance of clients.

Two additional findings detailed in Chapter IV, Section IV, strengthen our contention as to the utility of the SSR approach: A. The greater the number of referral sources, the greater the number of referrals secured by a drug rehabilitation program, and B. Community agency referrals are more effective than personal referrals in terms of the maintenance of clients in programs. The emphasis placed in the study upon utilizing or developing input sources for securing referrals of clients, as well as the emphasis of community agencies as input sources for clients, is borne out by the data.

Implications of the Study

The subject of interaction between social workers in order to help the client has been a major concern of the social work profession since

the early part of the century. Other helping professionals are concerned as well. The more proliferous the social services and the more specialized they become, the more crucial it has become to find effective ways for agencies to interact with each other for the benefit of the client.

As mentioned in Chapter I, there can be found in the social work and social service literature an abundance of articles calling for effective cooperation, collaboration, and coordination. Social service exchanges at one time were seen as a solution to the problem. Yet social workers and other human service providers find that their interaction with other service-providing individuals consumes a large proportion of their time as well as contributing a large proportion of their job's frustration. Although the inter-agency interaction issues consume much of professional social workers' time, little or nothing is taught about it in schools of social work besides that "it is important." Little distinction is made between quantity and quality of inter-agency contact. A possible reason for this deficiency is that we know little about which behaviors seem to lead to effective inter-agency interaction. Organizational, inter-organizational, and personality factors further complicate the subject. Yet, students are primarily taught, through social work methods, how to "treat" the client.

The approach we have advocated here has attempted to shed as much light as possible on an effective means for interaction (or collaboration since that has been the bias of this study) between community agencies. The findings of this study provide strong evidence in favor of the collaborative approach. The knowledge we gained about "Social System Relatedness" provides a basis for further research, as well as a conceptual

framework which social workers and other service providers can use with other providers. Clients can benefit from the resulting inter-agency collaboration between the staffs of specialized services. We have demonstrated that some components of the SSR approach are useful in securing referrals and maintaining clients in the drug rehabilitation programs studied. The SSR approach is useful in meeting drug program input needs. Hopefully, improved appropriateness of referrals and client maintenance in drug rehabilitation programs can lead to greater program effectiveness for those clients. The client may have a better chance of accomplishing his own rehabilitation goals with the aid of an appropriate referral to the program. He may also benefit from inter-agency staff support for remaining in the program for maximum rehabilitation benefits.

A preliminary basis is provided for teaching social workers and other service providing individuals more specificity regarding how to collaborate with others, and which practical behaviors can enhance collaboration in order to help the client. The level of specificity contained in this study may be of use to social workers in fields very far removed from drug rehabilitation. In any event, this study has attempted to be of benefit to the profession by initially explicating some behaviors and conditions under which collaboration is enhanced for the purpose of helping the client.

Limitations and Implications for Further Research

We have attempted to point out the various limitations of the study as we have described the methodological considerations which forced us continually to narrow the focus of the research, the scope of the data gathered,

and the scope of conclusions and implications we can draw from this study. Nevertheless, a number of limitations of the study have not yet been explicated. Together with the limitations of the study, implications for further research will be outlined below:

1. The small number of programs (five), completed interviews (fifty-nine), and the number of clients (eighty-two) used in the final analysis of the relationship between the dependent and independent variables limit the generalizability of the study beyond the programs studied. A larger number of programs, completed interviews, and data on more clients would provide a sounder basis for claiming the validity of the SSR approach and its generalizability. A larger and more diverse assortment of programs studied could provide greater insight as to the usefulness of SSR components, under what conditions, by whom, and with whom

2. A time lag existed between the period for which we collected data for the dependent variables and the period during which staff were interviewed. Ideally, the data collection period for both the dependent and independent variables should be close together in time in order to claim any association between variables

3. We did not collect any SSR data regarding those community agencies which had a low number of referrals during the period just prior to administering the interview schedule. Low or high SSR scores of the program vis a vis those community agencies might further validate or raise questions as to the acceptance of the study's major hypothesis

4. We have consistently assumed throughout the study that all treatment staff involved with clients do or could use SSR. The SSR approach is based upon maximal use of the network linkages by staff. Nevertheless, some

staff members, with more "boundary spanning roles," may be expected to use more SSR with more people. This focus of future research may provide us with additional insights into SSR and dimensions for enhancing our understanding of inter-agency collaboration

5. The interview schedule focused upon getting a "picture" of the use of SSR with those target individuals at one point in time. A follow-up interview of the same respondents regarding their contact with these same workers from community agencies might help us learn the conditions under which the use of SSR remains the same, deteriorates, improves, or simply changes direction

6. A longer follow-up period for the cohort of clients for whom data was collected could show different trends for the maintenance of clients. A three-month follow-up period is a short one. A longer period than four months for delineating the cohort of clients could diminish the effects of seasonality for some potential or actual referral sources (e.g., schools). Seasonal changes may not reflect accurately the number of referrals with which SSR can be compared

7. A good number of "structural" or difficult-to-change issues may limit the use of SSR. A program, for example, may undergo a crisis and lose much support from the community or other agencies. Legal restrictions may be placed upon certain types of referrals. Some judges may be so completely convinced as to the futility of drug rehabilitation that no SSR could change their attitude regarding referral of clients to drug programs. A drug program which is deemed most ineffective with clients will have great difficulty in meeting such role behavior needs as task attainment of community agency staff

8. We have assumed that drug programs have ample resources in terms of availability of staff and time to use SSR with community agency staff in order to accomplish their program goals. A program director's decision to limit or expand the resource of staff time for using SSR may not reflect a staff member's knowing or liking SSR. Nevertheless, expending few or many staff resources for using SSR to accomplish programmatic goals is a reflection, we feel, upon the ability and success of the program in securing inputs from the environment

9. Elements outlined in Figure I but not used in this study are yet to be researched. As an example, an important issue to be researched may be "articulation of related roles." That is, to what extent does integration and mobilization of a drug program's staff resources for using SSR lead to enhanced inter-agency collaboration in the form of more appropriate referrals (Facet I)? Also, the remaining elements of knowing and liking in action potential (Facet A) might shed additional light on the use of SSR

10. The use of facet theory and the resulting mapping sentence allow us to change the elements of several facets, carry out research very closely akin to that of this study, and further validate or question the conceptual framework used in this study. For example, other programs or services besides drug rehabilitation could be studied. Other techniques of SSR could be substituted and tested for their effectiveness. The validity and generalizability of the conceptual framework could then be tested

11. In the same vein, other inputs besides referrals might be studied. It may well be that a target individual's role behavior needs may be met but he will not reciprocate by referring clients or assist in maintaining clients he referred to the drug program. He may reciprocate in

other ways not measured by this study. The target individual may reciprocate through collaborating with the drug program worker or by meeting the latter's needs which may be different from programmatic needs. Only more research will shed further light upon these issues

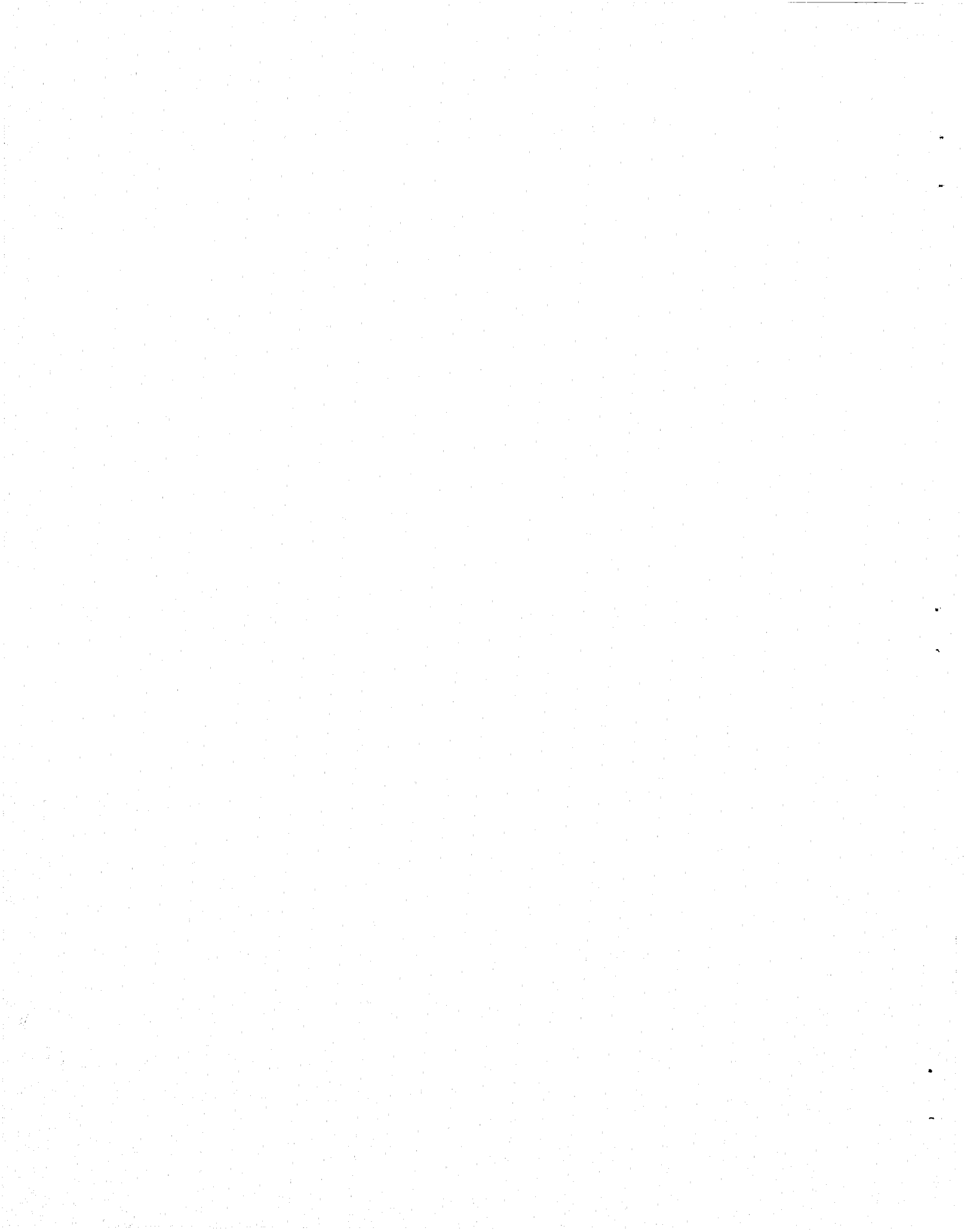
12. The development of a closed questionnaire emphasizing specific behavioral indices may be needed to validate SSR. Although this is a task we found we could not accomplish, a closed specific behavioral oriented questionnaire is desirable

13. We feel we have dealt adequately for now with the effects of court coercion as a mediating variable between SSR and maintenance of clients. Nevertheless, the issue of the divergence in the results of the cross-tabulations controlling for the effects of coercion and the other statistical measures used is yet to be conclusively resolved

14. Further insight into SSR may be gained at this point by attempting to convey the SSR approach to drug rehabilitation program workers, Training in the field for SSR may alert us to issues we have not become aware of during the various stages of the present study. A research-demonstration project may be called for to field test SSR as to its potential for effecting changes in the securing of inputs for drug programs

15. Lastly, SSR may be measuring a quality or ability of staff beyond that of inter-staff interaction for the purpose of securing clients. SSR entails a sensitivity to the needs of others. It deals with the goal orientation of one's behavior. Yet, at the same time, giving to others without expecting an immediate reciprocation of one's behavior is inherent in the SSR approach. One probably cannot practice SSR without respect and awareness of the needs of others. A knowledge of the network linkages and

of the "social system" itself, in which SSR behavior is played out, is indispensable to the approach. SSR is not practiced by all, is certainly used by many, and can probably be learned by many others. The practice of SSR, although yet to be researched, speaks of a potentially effective inter-personal approach beyond that of securing inputs for drug rehabilitation programs. Only further research will shed light as to the conditions for the effective use of SSR



Interview No.

"Inter-Agency Collaboration in Drug Rehabilitation"
Bureau of Drug Rehabilitation
Department of Mental Health and Mental Retardation
Commonwealth of Virginia

Interview Schedule

Name of Respondent
Name of Program

Interviewer
Date

Time Started
Time Completed

INSTRUCTIONS

1. Introduce yourself including - name, member of Virginia's Bureau of Drug Rehabilitation
2. We are studying the contacts between drug rehabilitation programs and other community service agencies for purposes of bringing in referrals to the program from outside agencies. Thus, we are focusing in the interview schedule on the contacts between personnel of drug rehabilitation programs and other community service agencies regarding referrals. By focusing on contacts and learning how one develops and maintains them, we hope to learn how contacts affect the quantity and quality of referrals to a drug rehabilitation program.
3. Through interviewing drug rehabilitation programs' staff members we hope to gain a better understanding of contacts.
4. Therefore, your help is invaluable to us.
5. Our obligation is to submit a report of the overall responses to the interview schedule with the program studied. We trust that the response to the interview schedule will be of direct assistance to your drug program and collectively to other drug rehabilitation programs.
6. We want to assure you of the complete confidentiality of your individual responses; the report will consist of an analysis of the collective responses in your program.
7. Please do not discuss the interview or its content with anyone in the program until after all interviews at the program are completed. We would like everyone to have the same introduction to the material as well as determining that none of the respondents have an advantage or bias regarding the interview.
8. We appreciate your willingness to grant us the interview and give us your time.

SECTION I

DIRECT CONTACTS

Improved program utilization by increasing the number and appropriateness of the people serviced by a drug program is often a very important consideration for the program. Some programs are organized so that certain workers primarily handle the intake of clients, and are therefore responsible for increasing both the number of clients and the number of sources of referral to the program. To increase referrals these workers have considerable contact with outside agencies. However, other staff workers also have contact with the staff of other agencies who can or are referring clients. These contacts although not specifically for intake may affect the sources of referral. Conceivably then, the individual staff members' contacts can influence the number of clients and the number of sources making referrals.

Here we are distinguishing between two types of contacts for securing referrals--contacts for immediate (actual) referrals and contacts for possible referrals in the future (potential). Contact for actual referrals refers to the individuals you do contact regularly to inquire about referrals. Thus, contacts for actual referrals are always, although not always exclusively, about referrals. Contact for potential referrals involves the awareness by the individual that his contacts with the staff of other agencies can be utilized to increase the number of clients and/or the number of referral sources to the program.

Note to interviewer:

Discuss with the respondent his perceptions of the contacts he has with individuals for potential or actual referrals and the meaning these concepts have for him.

General Information

1. How long have you been working in this program?
2. What is your position (title)?
3. How long have you held that position?
4. Which part of the program do you work in?

5. What do you do?

First, I am going to ask you about some of the contacts you have with outside agencies. Some questions are more closely related to your contacts with staff of other agencies for getting potential or actual referrals. Other questions concern the general contacts you have with staff of other agencies.

6. In an average month, how much time do you spend on contacts for potential or actual referrals to your program from non-agency sources? (i.e., doctors, lawyers, families, friends, and self-referrals)
- a. 0
 - b. 1-25%
 - c. 26-50%
 - d. 51-100%

Narrative (Justification for answers, if necessary)

7. In an average month, how much time do you spend on contacts for potential or actual referrals to your program from agency sources?
- a. 0
 - b. 1-25%
 - c. 26-50%
 - d. 51-100%

Narrative (Justification for answer, if necessary)

8. Which agencies do you have contact with in regard to potential or actual referrals to the program?

Agencies

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

g. _____

9. Now for each agency you listed, how often would you say you are in contact?
 Note: List agencies in the same order in question 8 as in question 7.

Agency (correspond- ing to No. 8)	daily	twice a week or more	once a week	every 2 weeks	every month	every 3 mo.	every 6 mo. or mor
a.							
b.							
c.							
d.							
e.							
f.							
g.							

Now, I am going to ask you some questions about specific agencies. These are the agencies--

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

Note to interviewer: Numbers 4, 5, and 6 are for additional agencies if the respondent can not answer the following questions concerning the agencies designated.

10. I would like to know all the names of the staff that you can think of in each of the following agencies just mentioned? i.e., any persons whose names you can think of even though you may have no contact with them.

1. Agency	2. Agency	3. Agency	4. Agency	5. Agency

Note to interviewer: If the respondent can not answer question 9 concerning the three agencies designated above, then have the respondent chose three other agencies which refer clients to the program, and have the respondent use those agencies in answering the following questions. Write the agency names in spaces 4, 5, and 6. Use these new agencies throughout the entire interview.

(First Agency)

Now, I have a series of questions which have to do with your contacts with the individuals from the agencies we just spoke about. Specifically, I am interested in that individual you have the most frequent contact with in each agency.

Let's start with _____ from _____ agency since you said you have the most frequent contact with him/her in that agency.

12. Would you describe your contact with _____ (fill in name and code number of agency) for securing potential or actual referrals or both? (continue writing on the following page if more space required)

Do not write beneath this line

13. Probe for the role behavior needs of the target individual which are satisfied by the respondent's contact with him?

Role Behavior Needs

- | | |
|----------------------------|--------------------|
| 1. control of information | 5. relatedness |
| 2. funding | 6. status |
| 3. power | 7. support |
| 4. professional competency | 8. Task attainment |

Do not write beneath this line

INITIATION OF CONTACT

14. How often?

1	2	3	4	5
Never	Little	Often	Very Often	Can't say why?

Basis for Classification

15. Fulfilling role behavior needs

- | | |
|---|---|
| <ul style="list-style-type: none"> 1. control of information 2. funding 3. power 4. professional competency | <ul style="list-style-type: none"> 5. relatedness 6. status 7. support 8. task attainment |
|---|---|

 Do not write beneath this line

TYPES OF CONTACT

16. Variety of contacts?

1	2	3	4	5
None	Some	Many	Very Many	Can't say why?

Basis for Classification

17. Fulfilling role behavior needs

1. control of information
2. funding
3. power
4. professional competency

5. relatedness
6. status
7. support
8. task attainment

 Do not write beneath this line

RESOURCE ACCESSIBILITY

18. How often?

1	2	3	4	5
Never	Sometimes	Usually	Most of the time	Can't say why?

Basis for Classification

19. Fulfilling role behavior needs

- | | |
|---|---|
| <ul style="list-style-type: none"> 1. control of information 2. funding 3. power 4. professional competency | <ul style="list-style-type: none"> 5. relatedness 6. status 7. support 8. task attainment |
|---|---|

Basis for Classification

 Do not write beneath this line

PROVISION OF EXPERTISE

20. How often does this occur?

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Basis for Classification	Never	Little	Often	Very Often	Can't say why

21. Fulfilling role behavior needs

1. control of information
2. funding
3. power
4. professional competency

5. relatedness
6. status
7. support
8. task attainment

Basis for Classification

 Do not write beneath this line

INSTALLATION OF COGNITIVE CLARITY RE: PROGRAM

22. How often?
(does the respondent provide information regarding his program?)
- | | | | | |
|-------|--------|-------|---------------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Never | Little | Often | Very
Often | Can't say
why? |

Basis for Classification

23. Fulfilling role behavior needs
- | | |
|----------------------------|--------------------|
| 1. control of information | 5. relatedness |
| 2. funding | 6. status |
| 3. power | 7. support |
| 4. professional competency | 8. task attainment |

Basis for Classification

Do not write beneath this line

SECTION II

INDIRECT CONTACTS

Until now we have asked you about your direct contacts with individuals who may refer clients to your program. We will now ask you about some indirect contacts which may benefit your program. The staff of a drug rehabilitation program engages in contacts with workers from that program, staff of community agencies, members of the community, as well as family and friends who are not directly involved in securing referrals.

The contacts may be formal or informal. Formal contacts may take place at staff meetings, conferences, regional meetings, training sessions and the like. Other contacts may be more informal and of a social nature, such as at parties, social gatherings, chance meetings and the like.

Contacts with family, friends and acquaintances, though informal, may be used--just as formal contacts--to influence a relevant individual's opinion about the drug rehabilitation program. And these contacts with a third person may be used eventually or immediately to secure referrals to a drug rehabilitation program.

Note to interviewer: Discuss the respondent's perceptions of how he uses indirect contacts to secure referrals to the program. If necessary, give a few examples of how indirect contacts work (example found in glossary).

Optional

48. Can you give me an example of when you have been able to use your formal and informal contacts to influence a worker into eventually or immediately referring clients to your program?

(First Agency)

We are interested in knowing about your indirect contacts (both inside and outside your agency).

49. Would you describe how you use your formal and informal contacts with others to influence _____
(fill in name and agency code number) into eventually or immediately referring clients to your program?

Note to Interviewer: probe for the various individuals who comprise the respondent's indirect contacts in regard to the target individual cited in the above question. Among all his indirect contacts ask the respondent to identify the person he has the most frequent contact with. Now, probe for what the respondent sees that particular "indirect contact person" providing the target individual, i.e., in terms of role behavior needs. Continue to probe for additional techniques (Keep in mind that the techniques that follow and other techniques the respondent might cite may be used to strengthen the respondent's relationship with the "indirect contact person" as well as with the target individual).

Note to Interviewer: if any or all of the target individuals discussed in Section I do not apply or cannot be used in Section II, have the respondent chose that number of new people from agencies which refer clients needed to answer the questions in Section II. If this change is necessary, please designate where a new target individual has been chosen.

Cite whether or not the respondent is using his "indirect contact person" to get at the target individual or not.

Do not write beneath this line

50. Cite the name of the most frequently contacted "indirect contact person".
51. What position does the "indirect contact person" hold which enables him to influence the target individual?
52. Probe for: the role behavior needs the "indirect contact person" satisfies for the target individual?

Role Behavior Needs

- | | |
|----------------------------|--------------------|
| 1. control of information | 5. relatedness |
| 2. funding | 6. status |
| 3. power | 7. support |
| 4. professional competency | 8. task attainment |

Basis for Classification

Do not write beneath this line

Probe : To what extent the following techniques are utilized by the respondent with the "indirect contact person" cited above?

Initiation of Contact

53. How Often? Never Little Often Very Often Can't say, why?

Basis for Classification

Types of Contact

54. Variety of Contacts? None Some Many Very Many Can't say, why?

Basis for Classification

Resource Accessibility

55. How Often? Never Sometimes Usually Most of the time Can't say, why?

Basis for Classification

Do not write beneath this line

Provision of Expertise

56. How often does
this occur?

NeverLittleOftenVery
OftenCan't say,
why?

Basis for Classification

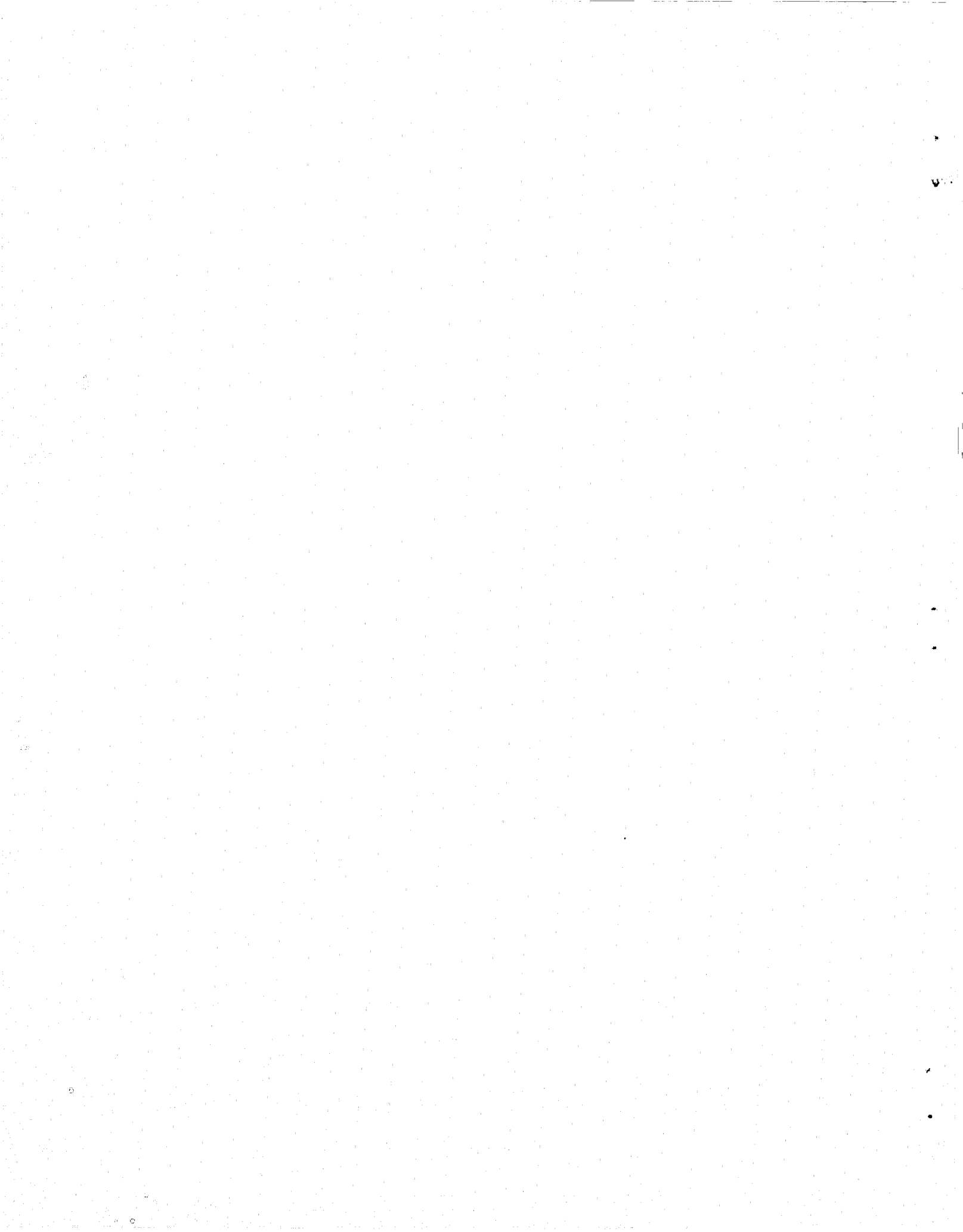
Installation of Cognitive Clarity Re: Program

57. How often? (does
the respondent
provide information
regarding his
program?)

NeverLittleOftenVery
OftenCan't say,
why?

Basis for Classification

Do not write beneath this line



"Inter-Agency Collaboration in Drug Rehabilitation" Project
Bureau of Drug Rehabilitation
Department of Mental Health and Mental Retardation
Commonwealth of Virginia

Interviewing Aides for Administering
the Interview Schedule

Section I

Glossary

1. "T.C." or therapeutic community - a residential live-in facility for drug abusers. They are generally abstinence programs.
2. outreach - part of a program which attempts to secure clients both directly and through agencies for a drug program.
3. methadone programs - drug programs which dispense methadone to their clients, usually day care, clinical atmosphere, with strong supervision by staff over the clients. Program usually includes counseling of clients by the treatment staff.
4. day care - activities and therapy programs for clients during the day.
5. evening care - social and therapeutic activities in the evening, e.g., family, group.
6. storefront - drop in center dealing with crisis intervention and first aid mental health treatment--very short term.
7. crisis intervention - any program in which an individual walks in off the street and receives immediate assistance or referral to appropriate service.
8. intake - the facility or worker specifically detailed to collect basic information on a prospective client and to be involved in the decision about accepting the client into the program--including the component most appropriate for the client and following up on the client's progress until he is involved in the program.
9. hot line - system providing first aid information, and referrals to individuals who are calling because of an immediate crisis. Usually the phones are manned by volunteers.
10. contacts
 - a. direct contacts within the context of the interview schedule - direct communication of any kind between the respondent and the target individual.
 - b. indirect contact relates to contact by the respondent with the "indirect contact person" which may be used to immediately or eventually influence the behavior of the target individual.
 - c. contacts for potential referrals involves the awareness by the individual that his contacts with the staff of other agencies can be utilized to increase the number of clients and/or the number of referral sources to the program.
 - d. contacts for actual referrals refers to the individuals you do contact regularly to inquire about referrals.
 - e. formal contacts involve contacts that occur at staff meetings, conferences, and training sessions with workers from your program, staff of community agencies, and members of the community.
 - f. informal contacts involve those contacts of a social nature with family, friends and acquaintances that occur at parties, social gatherings, and chance meetings.

12. role behavior needs

a. funding

the organization's need for the necessary funds to operate. A program requires funds in order to provide its services.

b. power

the ability to wield coercive force over others. It is the possession of control, authority or influence over others. Power is the ability to directly influence others for one's own ends.

It can involve using your position or personality to get your own way, although others might oppose that course.

c. control of information

communication and information which does not reach an individual in a haphazard, random way but rather is channeled in such a way that it is easily accessible to the target individual.

d. support

giving or assistance, aid, or serving as a prop for another individual-- it is an emotional response that individuals share.

It can include behaviors such as spending time with an individual, expressions of empathy, verbal support or agreement with some position he has taken.

e. task attainment

the achievement or completion of assigned work or "one's job." It involves, then, the achievement of the objectives of one's role.

f. relatedness

being affiliated with other individuals and groups, where there is a degree of contact.

g. professional competence

one's professional skill and specialized knowledge.

h. status

socially ascribed prestige or honor involving deferential and respectful behavior according to one's position.

11. techniques - refers to the specific behaviors used by workers in their contact with staff of other agencies.

a. initiating contact

the behavior of an individual precipitating interaction with personnel of outside agencies. Initiation of contact occurs when an individual opens or begins contact with another.

For the purposes of this project, we are interested in the individual in terms of his initiating contact or beginning interaction with others, primarily others outside his own agency.

b. types of contact

the different types or levels of communication that one individual can utilize with others outside his agency. These different types and levels of communication include: "shooting the bull," face to face, phone, lectures, media.

We are interested in an individual's engagement in different types of contact with one individual. Each type of contact, on multiple levels of communication or at least a number of types, may be used with a given individual.

c. resource accessibility

the ease with which clients, potential clients, or referral makers are structurally able to receive services from a drug rehabilitation program. This is an attempt by the drug rehabilitation program to increase the accessibility and availability of the organization and staff to the clients and referral makers.

We are interested in a drug rehabilitation program's use of certain arrangements or behaviors which facilitate others, both client and personnel of outside agencies, in contacting staff members and receiving those services from the program required. Techniques to use include: staff accessibility, staff availability, efficient intake process, and sharing the patient.

d. provision of expertise

the use of teaching, consulting, and other means by drug program staff to impart to referents in other agencies knowledge that they would need to operate more effectively.

e. installation of cognitive clarity re: program

the description of a program to outside community agencies and the establishment of the division of labor that exists between different agencies. This by necessity presupposes that there has been a clarification of the division of labor on an internal level as well.

Section II

Potential Probing Questions

(to be used if necessary)

The probing questions listed below are potential or optional questions to be used if and when necessary. Since the structure of the probing questions is the same regardless of whether or not they are being asked about direct or indirect contacts, the questions listed below are not differentiated according to the sections in the interview schedule--direct or indirect contacts. In applying the probing questions to the sections on direct and indirect contacts, the only difference occurs in who the question concerns. Probing questions used in the direct contact section of the interview schedule will be concerned only with the respondent and the target individual. However, probing questions concerning indirect contacts involve three different people: the respondent, the "indirect contact person", and the target individual. Those probing questions concerning techniques used in the indirect contact section will be concerned with the contact the respondent has with the "indirect contact person". The probing questions which involve what the target individual gets out of the contact refers to the contact between the "indirect contact person" and the target individual.

Thus, the probing questions can be applied in both sections, although the interviewer must be clear about the people he is referring to.

Initiation of Contact

1. How does the contact occur?
2. Who gets in touch with whom?
3. What do you see _____ getting out of this contact?
4. Put yourself in _____ shoes, what do you think he is getting out of the contact?
 - a. personally
 - b. in times of his role in the agency

Types of Contact

1. What forms does the contact take?
2. What methods of communication do you use with _____?
3. What do you think he is getting out of the contact?
 - a. personally
 - b. in terms of his role in the agency

Resource Accessibility

1. When _____ is trying to get in contact with you, are you accessible?
2. What about when _____ is trying to get in contact with you, are you available?
3. Do you use any special arrangements to make yourself available or more accessible?
4. What does you being available mean to _____?
 - a. personally
 - b. in terms of role in the agency

Provision of Expertise

1. When you are in contact with _____ do you ever act as the consultant? (resource person)
2. When you are in contact with _____ do they come to you for specific information? or technical assistance? (workshops, teaching, consultation - give briefings to other agencies)

3. When this kind of contact is happening, what is in it for _____?
- a. personally
 - b. in terms of role in the agency

Installation of Cognitive Clarity Re: Program

1. In your contacts with _____ do you give him an understanding of what your program is all about?
2. What do you see _____ getting when you provide an understanding of what the program is about?
- a. personally
 - b. in terms of role in the agency
3. What do you see _____ getting out of this understanding of the program?
- a. personally
 - b. in terms of role in agency

Optional Probe

What in general would you say the target individual gets out of contact with the respondent?

Note to interviewer: This question, if used, is to supplement or revise previous responses.

What in general would you say the target individual gets out of contact with the "indirect contact person"?

Note to interviewer: This question, if used, is to supplement or revise previous responses.

Note to interviewer: For the following particular techniques--initiation of contact, types of contact, resource accessibility, provision of expertise, and installation of cognitive clarity--this study is interested in understanding in depth the role behavior needs of the most frequently contacted individual in each agency and how they are fulfilled in contacts with the respondents (i.e., what is the contact person getting out of his relationship with the respondent)

The techniques include:

1. initiation of contact
2. types of contact
3. resource accessibility
4. provision of expertise
5. installation of cognitive clarity re: program

Specifically the role behavior needs include:

1. control of information
2. funding
3. power
4. professional competence
5. relatedness
6. status
7. support
8. task attainment

Example of Indirect Contact
Not to be read to the respondent

A staff member of a drug rehabilitation program such as an intake worker may be trying to secure referrals from another agency. In order to accomplish this goal he may; for example, ask his own director to speak to the staff and/or director of that agency. Conceivably, he may speak to the other agency's director to ask him to "provide a positive atmosphere" among his staff for their referring their clients to his program.

A relationship might be developed and nurtured to be specifically used for securing referrals. The relationship with the "indirect contact person" may also be developed by the respondent independently of such a specific goal, yet the respondent identifies the relationship as having potential for influencing the referral behavior of the target individual. The respondent may or may not have developed and maintained the relationship with the "indirect contact person" exclusively or specifically for influencing the target individual.

"Inter Agency Collaboration in Drug Rehabilitation" Project
Bureau of Drug Rehabilitation
Department of Mental Health and Mental Retardation
Commonwealth of Virginia

Demographic or Programmatic Data
For the Program Director Only

76. Type of Sponsorship

(a) Government

- I. Federal
- II. State
- III. Local

(b) Voluntary

- I. National
- II. State or Regional
- III. Local

77. What is the current budget of the program? Specify the sources and the amount each provides to the program.

78. How long has your program existed locally?

Approximately, since

79. What are the components of the program?
80. What is the population size of the catchment area served by the program?
81. Approximately, what is the number of cases currently enrolled for service in your program? Differentiate, if appropriate, between the number of active and non-active cases.
- a. out patient
 - b. residential
 - c. methadone

82. What is the approximate percentage of clients in your program with the following demographic characteristics?

I	II	III	IV
<u>Sex</u>	<u>Age</u>	<u>Race</u>	<u>Socio-economic Level</u>
Male	Age less than	Black	Poor
Female	12 yrs.	Chicanos	Low Income
	13-18 yrs.	Other White Minority Groups	Middle Income
	19-30 yrs.		High Income
	31-50 yrs.		
	Over 50 yrs.	White	

83. Rank the following categories from hi to lo in terms of the level of coercion:

- client was sentenced directly to the program by the judge.
- client was referred to the program as a condition of probation but it was stated at the time of referral that he would not necessarily be sent to prison if he broke probation.
- client was referred to the program with the knowledge he will definitely go to prison if he doesn't stay in this drug program.
- client was referred to the program with the knowledge that he will have to go to trial if he drops out of the program; referral by Commonwealth Attorney.
- client was referred to the program as a condition of early prison release, in lieu of a longer sentence, i.e., as a condition of parole.
- client was referred to the program through the parent's appeal to the court for an incorrigible child.
- client was not referred from courts.
- no information is available on type of court referral.

84. How many cases did your program serve during the last grant period?

Year Month

85. How many cases do you expect to serve by the end of the current grant period?

Year Month

86. Please list the names of all staff members employed by the program. Include their roles and how long they have been employed.

	<u>NAME</u>	<u>ROLE</u>	<u>LENGTH OF EMPLOYMEN</u>
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

87. Are any of the above staff employed less than full time? Specify.

88. Do you have any paraprofessionals on your staff?

Yes

No

Note to interviewer: If yes, ask the following:

89. What is your basis for categorizing some of your staff as paraprofessional?

90. What percentage of your staff is paraprofessional?

91. What is the number of new staff positions created in the past twelve months?

92. What is the number of new staff positions filled in the past twelve months?

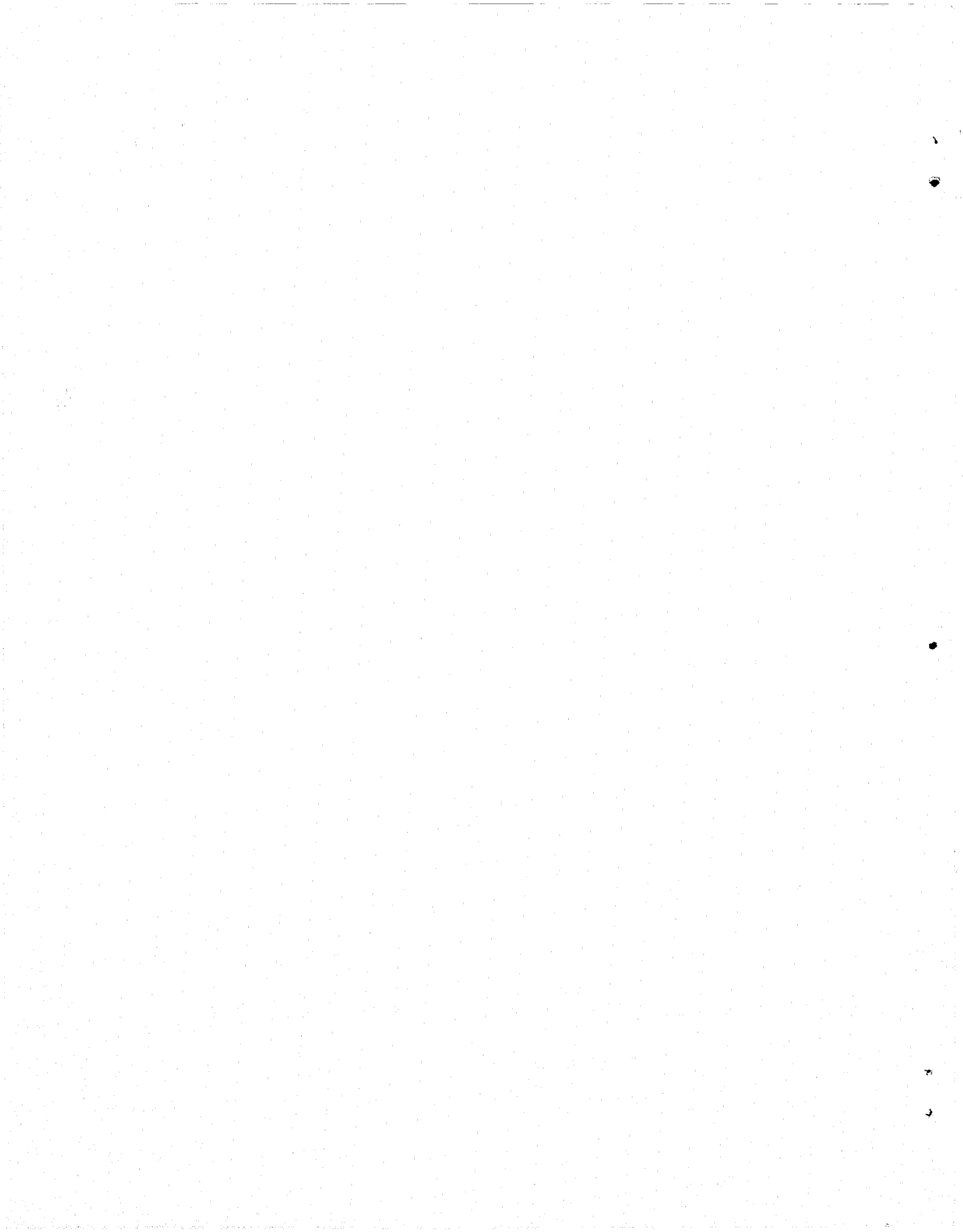
93. Is the program physically accessible to the clients? to the staff?

We would appreciate it very much if you could please provide us with the following:

A copy of your by-laws or constitution

Annual report for the last year

An organizational chart



SELECTED BIBLIOGRAPHY

- Adams, Bert N. "Interaction Theory and the Social Network." Sociometry 30 (1967): 64-78.
- Aiken, Jerald and Hage, Michael. "Organizational Interdependence and Intra-Organizational Structure." American Sociological Review 33 (February 1968): 912-914.
- Antonovsky, Aaron. "Breakdown: A Needed Fourth Step in the Conceptual Armamentarium of Modern Medicine," paper presented at the First International Conference on Social Science and Medicine. Aberdeen, Scotland, 4-6 September 1968.
- Aram, John; Morgan, Cyril; and Esbeck, Edward. "Relation of Collaborative Interpersonal Relationships to Individual Satisfaction and Organizational Performance." Administrative Science Quarterly 16 (September 1971): 289-296.
- Assael, Henry. "Constructive Role of Interorganizational Conflict." Administrative Science Quarterly 14 (December 1969): 573-581.
- Baker, Paul and Stuart, Elizabeth. "Coordination of Local Mental Health and Mental Health Related Services," Sacramento: Department of Mental Health, December, 1965.
- Barnes, J.A. "Class and Committees in A Norwegian Island Parish." Human Relations 7 (February 1954): 39-58.
- Bartow, Philip. "Quid-Pro-Quo: An Interactive Workshop for Comprehensive Health Planning Region 3." Department of Health, Education, and Welfare (February 1972) monograph.
- Bert, Dale H.; Hull, C. Hadlai; and Nie, Norman. SPSS Social Package for the Social Sciences. New York: McGraw-Hill Book Co., 1970.
- Black, Bertram J. and Kase, Harold M. "Interagency Cooperation in Rehabilitation and Mental Health." Social Service Review 37 (March 1973): 28-32.
- Blegen, Hans Morris. "The Systems Approach to the Study of Organizations." Acta Sociologica 11 (1968): 12-30.
- Borus, Jonathan F. "The Community Mental Health Center and the Private Medical Practitioner: A First Step." Psychiatry 34 (August 1971): 274-88.
- Buckley, Walter. Sociology and Modern Systems Theory. New Jersey: Prentice-Hall, 1967.

- Coffey, Hubert S. et al. "Utilization of Applicable Research and Demonstration Results." Final report presented to the Vocational Rehabilitation Administration, Department of Health, Education, and Welfare. (March 1967).
- Cohen, Y.A. "Social Bureaucracy Systems." Current Workers 10 (February 1969): 103-126.
- Dill, William. "The Impact of Environment on Organizational Development." Readings in Organizational Theory: Open Systems Approaches ed. John G. Maurer. New York: Random House, 1971, 81-93.
- Dubey, S.N. "An Analysis of Socio-Cultural Factors in Resistance to Technological Change in Traditional Societies." International Social Work 2 (1968): 1-8.
- Elizur, Dov. Adapting to Innovation. Jerusalem: Jerusalem Academic Press, 1970.
- Emery, F.E. and Trist, E.L. "The Causal Texture of Organizational Environments." Human Relations 18 (February 1965): 21-32.
- Encyclopedia of Social Work, 1971 ed. S.v. "Social Planning and Community Organization," by Irwin Epstein and Jack Rothman.
- Epstein, A.L. "The Network and Urban Social Organization." Rhodes Livingston Journal 29 (1961): 56.
- Etzioni, Amitai. A Sociological Reader on Complex Organizations. New York: Holt, Rinehart, and Winston, 1969.
- Evan, William M. "The Organization-Set: Toward a Theory of Interorganizational Relations." Readings in Organizational Theory: Open Systems Theory. Ed. John G. Maurer. (New York: Random House, 1971): 33-45
- Foa, Uriel G. "New Developments in Facet Design and Analysis." Psychological Review 72 (July 1965): 262-274.
- Furman, Sylvan S. "Obstacles to the Development of Community Mental Health Centers." American Journal of Orthopsychiatry 37 (July 1967): 757-65.
- Gouldner, Alvin W. The Coming of Western Sociology. New York: Basic Books, 1970.
- Greenwood, Ernest. "The Practice of Science and the Science of Practice" in The Planning of Change eds. Warren G. Bennis, Kenneth D. Bennis, and Robert Chin. (New York: Holt, Rinehart, and Winston, 1961): 73-82.

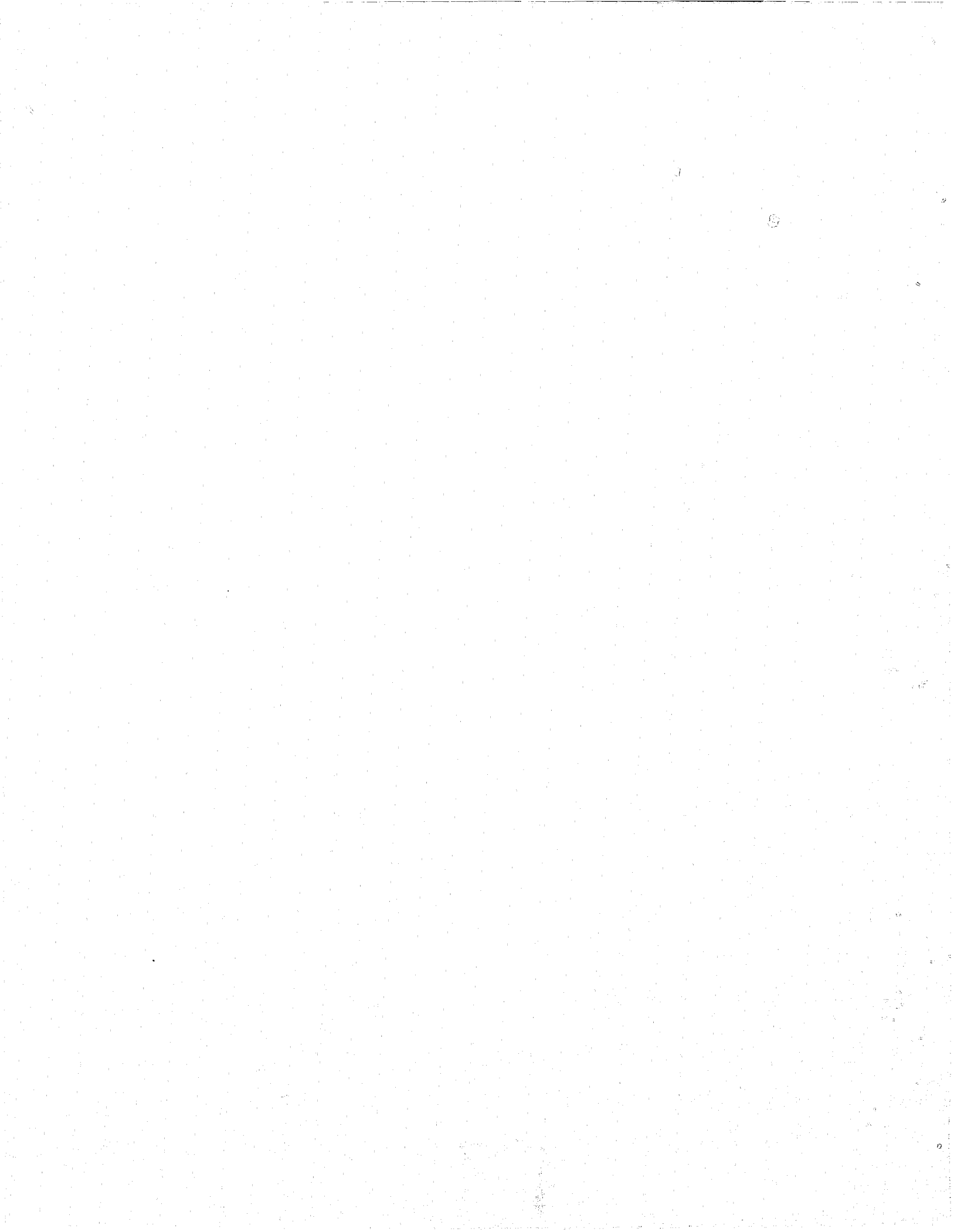
- Gummer, Burton. "A Systems Approach to Inter-Organizational Relations Among Social Welfare Agencies." Annual Meeting of the Pennsylvania Sociological Society, Lehigh University, Bethlehem, Pennsylvania (October 1972).
- Guttman, Louis. "Introduction to Facet Design and Analysis." Proceedings of the 15th International Congress of Psychology, Amsterdam 1959.
- Hall, Calvin and Lindzey, Gardner. Theories of Personality. New York: John Wiley and Sons, 1970.
- Hammer, Muriel. "Influence of Small Social Networks as Factors on Mental Hospitals Admissions." Human Organization 22 (Winter, 1963-1964): 243-251.
- Huizinga, Gerard. Maslow's Need Hierarchy in the Work Situation. Groningen: Wolters-Noordhoff Publishing, 1970.
- Hylton, Lydia F. and Litwak, Eugene. "Interorganizational Analysis: A Hypothesis on Co-ordinating Agencies." Administrative Science Quarterly 6 (March 1962): 395-420.
- Inkeles, Alexander. What is Sociology? New Jersey: Prentice-Hall, 1964.
- International Encyclopedia of the Social Sciences, 1968 ed. S.v. "Social Exchange 4," by Peter M. Blau.
- International Encyclopedia of the Social Sciences, 1968 ed. S.v. "Strategy," by Bernard Brodie.
- Janchill, Mary Paul. "Systems Concepts in Casework Theory and Practice." Social Casework 58 (February 1969): 74-82.
- Kahn, Alfred J. "Institutional Constraints to Interprofessional Practices." Doris Siegel Memorial Colloquium, Intereducational Education Practice. New York, April 1973.
- Kahn, Alfred J. Theory and Practice of Social Planning. New York: Russell Sage Foundation, 1967.
- Kahn, Robert and Katz, Daniel. The Social Psychology of Organizations. New York: John Wiley and Sons, 1966.
- Kendall, Maurice G. Rank Correlation Methods. New York: McGraw-Hill Book Co., 1970.
- Kernberg, Otto et al. "The Application of Facet Theory and Multidimensional Scalogram Analysis to the Quantitative Data of the Psychotherapy Research Project." Part 2 Bulletin of the Menninger Clinic 36 (January-March 1973): 87-178.

- Levine, Sol; Paul, Benjamin; and White, Paul. "Community Interorganizational Problems in Providing Medical Care and Social Services." American Journal of Public Health 53 (August 1963): 1183-1195.
- Levine, Sol and White, Paul E. "Exchange as a Conceptual Framework for the Study of Interorganizational Relationships." Administrative Science Quarterly 5 (March 1961): 583-601.
- McNemar, Quinn. Psychological Statistics, 3rd ed. New York: John Wiley and Sons, 1962.
- Mott, Basil J.F. "Coordination and Inter-organizational Relations in Health." eds. George J. Vlasak and Paul E. White. "Inter-organizational Research in Health: Conference Proceedings," Johns Hopkins University, U.S. Department of Health, Education, and Welfare, Public Health Service, Health Services and Mental Health Administration (January 1970).
- Parnicky, Joseph; Anderson, David; Nako, Charles; and Thomas, William. "Study of Effectiveness of Referrals." Social Casework 42 (December 1961): 494-501.
- Piedmont, Eugene B. "Referrals and Reciprocity: Psychiatrists, General Practitioners, and Clergymen." Journal of Health and Social Behavior 9 (March 1968): 29-41.
- Powell, Thomas J. and Riley, John M. "The Basic Elements of Community Mental Health Education." Community Mental Health Journal 6 (June 1970): 196-203.
- Reid, William. "Interagency Coordination in Delinquency Prevention and Control." Social Service Review 38 (1969): 418-28.
- Reid, William J. "Interorganizational Cooperation: A Review and Critique of Current Theory." eds. George J. Vlasak and Paul E. White. "Inter-organizational Research in Health: Conference Proceedings," Johns Hopkins University, U.S. Department of Health, Education, and Welfare, Public Health Service, Health Services and Mental Health Administration (January 1970).
- Rein, Martin. "Coordination of Social Services." Social Policy: Issues of Choice and Change. New York: Random House, 1970.
- Rettig, Salomon; Jacobson, Frank N. and Pasamanick, Benjamin. "The Motivational Pattern of the Mental Health Professional." Psychiatric Research Report 10 (December 1958): 1-18.
- Rice, A.K. The Enterprise and Its Environment. London: Tavistock Publications, 1963.

- Rome, Howard P. Barriers to the Establishment of Comprehensive Community Mental Health Centers in Community Psychiatry. eds. S.L. Halleck; M. B. Loeb; and M. R. Leigh. (Madison: The University of Wisconsin Press, 1966), p. 48.
- Schwartz, Morris S. and Stanton, Alvin H. "The Management of a Type of Institutional Participation in Mental Illness." Psychiatry 12 (February 1949): 13-22.
- Smelser, Neil and Smelser, William, eds. Personality and Social Systems. (New York: John Wiley and Sons, 1970): 1 - 22.
- Soffen, Joseph. Untitled monograph. School of Social Work, University of Wisconsin, Milwaukee.
- Stukes, Alice M. "Working Together Collaboratively with other Professions." Community Mental Health Journal 1 (Winter 1965): 316-19.
- Susser, Mervyn. Community Psychiatry. New York: Random House, Inc. 1968.
- Terreberry, Shirley. "The Evolution of Organizational Environments," Administrative Science Quarterly 12 (1968): 590-613. Reprinted in Readings in Organization Theory: Open Systems Approaches, ed. John G. Maurer (New York: Random House, 1971)
- Thompson, James D. "Organization and Output Transaction." American Journal of Sociology 68 (November 1962): 309-324.
- Thompson, James D. Organizations in Action. New York: McGraw-Hill, 1967.
- Turk, Herman. "Comparative Urban Structure from an Interorganizational Structure." Administrative Science Quarterly 18 (March 1973): 37-55.
- Visotsky, Harold M. "Role of Governmental Agencies and Hospitals in Community-Centered Treatment of the Mentally Ill." American Journal of Psychiatry 122 (March 1966): 1007-11.
- Vlasak, George J. and White, Paul E. "Inter-organizational Research in Health: Conference Proceedings," Johns Hopkins University, U.S. Department of Health, Education, and Welfare, Public Health Service, Health Services and Mental Health Administration.
- Wagner, George W. "Social Work Practice in Mental Health 1955-69." Abstracts for Social Workers 6 (Fall 1970): 1-14.
- Warren, Roland L. "The Interorganizational Field as a Focus for Investigation." Administrative Science Quarterly 12 (December 1967): 139-153.
- White, Grace. "Is Cooperation Worth the Effort?" presented at the Second Metta Bean lecture in Milwaukee and Madison, Wisconsin, 4-5 March 1958.

Wolkon, George H. "Characteristics of Clients and Continuity of Care into the Community." Community Mental Health Journal 6 (June 1970): 215-21.

Yuchtman, Ephraim and Seashore, Stanley E. "A System Resource Approach to Organizational Effectiveness." American Sociological Review 32 (April 1962): 891-903.



END